Motivation and Vocabulary Learning: Increasing the Effectiveness of Teaching L2 Formulaic Sequences Through Motivational Strategies and Mental Imagery

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Abstract

The primary concern of instructed SLA is how best to improve the efficacy of L2 teaching and learning at both specific and general levels. At specific levels such as vocabulary learning, a large body of literature has focused on examining relative effects of varying cognitive techniques on learning. However, no research has examined the effects of principled explicit instruction combined with incidental exposures relative to the coursebook-based teaching approach in terms of acquisition of formulaic sequences. At general levels, substantial research has provided evidence concerning factors other than cognitive ability such as metacognitive, social or motivational variables that contribute to overall language achievement. However, in the narrow realm of instructed L2 vocabulary learning, only a handful of studies have investigated how motivational dispositions facilitate cognition to lead to better learning. Still, among these studies none was conducted on the learning of formulaic sequences in a classroom setting. This thesis attempted to fill these gaps.

Two studies were carried out at different points of time, on two different samples at similar low proficiency levels in Vietnam. The first study investigated the relative effectiveness of varying (cognitive based) teaching approaches on the learning of formulaic sequences. Sixty-nine formulaic sequences occurring in a coursebook were selected for the study. The participants were 60 university students. Learning was measured by two multiple-choice tests of receptive knowledge of form and meaning. Findings indicated that explicit teaching combined with incidental exposure to formulaic sequences in the coursebook was superior to the traditional coursebook instruction approach. Further, the results from explicit instruction with context sentences did not differ significantly from those of instruction without context.

The second study employed a mixed methods quasi-experimental design to investigate whether the principled integration of motivational strategies and mental imagery (i.e. visionary techniques) could enhance the explicit vocabulary teaching approach that was effectively used in the first study. The findings indicated that deliberate and systematic employment of motivational techniques could facilitate the (effective) cognitive methods in terms of increasing the learning of receptive knowledge of form and meaning of target formulaic sequences, and that the novel visionary techniques were superior to the traditional motivational strategies. The deeper level of engagement associated with mental imagery was corroborated by a delayed posttest.

In short, the findings of the first study presented in this thesis first underscores the superiority of the cognitive approach that used the systematic manipulation of explicit learning mechanisms to foster vocabulary acquisition. More importantly, it is revealed in the second study that the principled integration of motivational influences, especially the visionary techniques, can increase the effectiveness of the systematic explicit vocabulary instruction. Further research is needed though to confirm the findings of this study in different contexts.

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Declaration

I declare that the work presented in this thesis is my own and was conducted by my time as a PhD student at the University of Nottingham.

Parts of this thesis have been published or submitted to peer-reviewed journals:

- Study 1, presented in Chapter 6, was published in TESL Canada Journal (Le-Thi, Rodgers, & Pellicer-Sánchez, 2017)
- Study 2, presented in Chapter 7, has been submitted and is currently under review (Le-Thi, Dörnyei, & Pellicer-Sánchez, under review).

The chapters in this thesis are extended versions of the published papers. The published papers should be referred to for any citations or page references.

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Chapter 1: Introduction

Motivation is critical to mastering an L2 (Dörnyei, 1998, 2018). Not only can it promote or hinder cognition (Pintrich, 2003), but it helps sustain learning efforts over the long and often arduous process of acquiring an L2 (Dörnyei, in press). Concerning specific language skills, little justification is needed for the fact that L2 vocabulary plays an essential part in the process of SLA (cf. e.g. Webb & Nation, 2017), and over the past decade there has been an increased emphasis within vocabulary studies on examining the acquisition of formulaic sequences such as expressions and conventionalised phrases in contrast to the study of individual words (cf. e.g. González-Fernández & Schmitt, 2017; Laufer, 2017; Nation, 2013; Schmitt, 2010).

The main reason for this increased interest in formulaic sequences is that knowledge of formulaic sequences can provide advantages to language learners in a number of ways. First, it may help improve comprehension (Nation, 2013; Schmitt, 2010), as language processing is sensitive to sequence information (Ellis, 2002). Language users that have large amounts of sequences accessible as single units in their mental lexicon (Sinclair, 1991; Wray, 2002), when presented with input, can make use of these single units to process it, thereby comprehending the input quicker. Second, it can contribute to smoothness in communication (Pawley & Syder, 1983; Schmitt, 2010; Wood, 2002). It is claimed that to be fluent in a second language, a large repertoire of formulaic sequences is essential (Biber, Conrad, & Cortes 2003; Nattinger & DeCarrio, 1992; Schmitt & Carter, 2004; Wray, 2002).

However, while some studies show that some learners may have knowledge of formulaic sequences (e.g. Schmitt, Dörnyei, Adolphs, & Durow, 2004; Spöttl & McCarthy, 2004), other research suggests that many learners have a limited command of formulaic sequences (e.g. Durrant & Schmitt, 2009). For these reasons, "instructed SLA should include the teaching of formulaic sequences as a featured component" (Dörnyei, 2009b: 302). However, there appears to be little understanding of how best to teach formulaic language in L2 pedagogy (Coxhead, 2015).

In order to foster the effectiveness of vocabulary learning, a large and growing body of research in applied linguistics have experimented with two primary methods in the past: (a)

increasing the learners' cognitive engagement with the target vocabulary, and (b) using visual aids and imagery to enhance vocabulary acquisition as a form of associative learning.

Despite the increasing amount of research on cognitive methods, there has been a paucity of research utilising *motivational techniques* to enhance the learners' engagement with vocabulary learning (to be reviewed later), even though the use of motivational strategies to promote various aspects of SLA has been a prominent area of applied linguistic investigation over the past two decades (see. e.g. Dörnyei & Ushioda, 2011; Lamb, 2017). This paucity is partly due to the fact that the main strands in vocabulary acquisition research have been cognitive in nature, and partly to motivational psychologists' traditional interest in examining the positive incentives and conditions that create a general motivated mindset rather than zooming in on the specific issue of how motivation unfolds in concrete learning behavioural processes such as the mastery of L2 lexis. As a result, while L2 motivation research has accumulated a great deal of knowledge on how goals, visions and various types of positive incentives can impact on learners' general disposition towards learning an L2, there are only a handful of studies available on how motivational factors affect the various cognitive subprocesses involved in mastering an L2 at the micro-level. This issue has been highlighted by Ema Ushioda (2016) in a recent position paper about the state of the art of L2 motivation research:

> this tendency to adopt a fairly broad perspective on L2 learning has meant that our research has had relatively little to say about how motivation interacts with the specific cognitive, metacognitive and psycholinguistic processes of language learning, or with the acquisition of particular features of the target language. (p. 574)

In the light of the above, the purpose of this thesis is twofold. First, it aims to find out an effective cognitive-based teaching approach to teaching formulaic sequences that can be applied in a classroom setting. Second, it examines whether the addition of motivational elements to this successful teaching approach can facilitate the learning of target formulaic sequences. The structure of the thesis is as follows:

Chapter 2 concerns some fundamental theoretical issues which is the starting point of the study. It discusses the recent definition of Instructed Second Language Acquisition (ISLA), describes the attention mechanisms, discusses the explicit-implicit dichotomy in cognitive science, and finally provides a brief account of the dual coding theory. These cognitive processes

are also looked at in connection with ISLA. The reason for providing these concepts in this chapter is that the empirical part of the thesis grew out of this concern and consideration and in the end focused on only some of the aspects because it was thought that adding motivational components might be more beneficial than further elaborating on the cognitive aspects. Put another way, the genesis of the whole thesis was cognitive, but broadened by adding affects rather than adding cognitive components.

Chapter 3 narrows the discussion to instructed L2 vocabulary learning, mainly elaborating on the explicit aspects of lexical acquisition and the related concepts. It also points out an overlap between explicit learning and incidental learning as well as and their connection with implicit learning in vocabulary acquisition. The chapter also provides a theoretical overview of formulaic language, highlighting the role of frequency-based lists of formulaic sequences in L2 pedagogy. It then provides extensive reviews of empirical studies involving five categories of vocabulary learning: (a) explicit learning of formulaic sequences, (b) explicit learning combined with incidental learning of formulaic sequences, (c) learning of single words with and without sentence contexts, (d) cognitive techniques used to foster vocabulary acquisition, and (e) using imagery in vocabulary learning. It is shown that despite a plethora of research comparing the effects of varying explicit learning techniques, no research has investigated the effects of principled use of explicit teaching relative to the other coursebook-based approaches in terms of improving the learning gains of formulaic sequences in a classroom setting. In addition, no study has compared explicit learning of formulaic sequences with and without sentence contexts. This lays the foundation for the first empirical study of this thesis, which is presented in Chapter 5. Further, although engagement is important in vocabulary learning, there is a paucity of research in classroom settings examining whether the deliberate and systematic use of motivational techniques can facilitate engagement, which in turn leads to better learning of target lexemes. This prompted the second empirical study presented in Chapter 6 of this thesis.

Chapter 4 focuses on L2 motivation, offering an overview of motivational components, both from cognitive theories of motivation in psychology and in L2 learning. It then provides an account of motivational strategies and techniques that are developed (and can be further adapted) for applications in L2 pedagogy. The chapter also presents the construct of vision, its relation with the novel concept of L2 motivational system, as well as with other related concepts such as imagery. Following that, it reviews empirical studies applying motivational strategies and those

examining the use of mental imagery (also termed as visionary techniques). The chapter ends with a review of a handful of studies examining the theoretical aspects of motivation in connection with vocabulary learning. It is shown that there is an absence of research concerning a principled integration of motivational strategies or mental imagery in increasing the effectiveness of the cognitive techniques in vocabulary learning.

Chapter 5 reports the first empirical study, which concerned the principled integration of explicit teaching elements into an EFL course in Vietnam. This study involved 60 low proficiency students who were divided into three groups, two experimental and one control. The findings indicate that principle uses of explicit teaching combined with incidental exposures to the target items in the input was superior to the coursebook vocabulary teaching approach. In addition, explicit learning with sentence contexts did not differ significantly from learning without in terms of increasing receptive knowledge of form and meaning of the target formulaic sequences.

Chapter 6 reports the second empirical study, which employed a mixed methods research. The research examined the deliberate and systematic incorporation of motivational strategies and visionary techniques in enhancing the effectiveness of the successful explicit vocabulary teaching applied in the first study. The findings revealed that both motivational strategies and visionary techniques could mediate cognition in terms of improving engagement, leading to better learning outcomes. Interestingly, visionary techniques were superior to the traditional motivational strategies in this regard.

Chapter 7 concludes the thesis by summarizing the findings, discussing the limitations of the thesis. It also provides the implications for the findings and the directions for the further research.

It is worth noting that because the first study has been published, and the second study has been submitted to publication as self-contained research papers, it was decided that the logical way of presenting would be to include the methodologies presented in Chapter 5 and Chapter 6. As a result, the thesis does not have an independent Method chapter.

Chapter 2: Psychological Processes in Instructed Second Language Acquisition

This chapter first looks at a recent conceptualization of Instructed Second Language Acquisition (ISLA). This because the current thesis concerns L2 pedagogy, with the two quasi-experimental studies being presented in Chapter 5 and 6 being carried out in classroom settings (i.e. the interventions integrated into existing language programmes). It also reviews the attention mechanisms in cognitive science given that attention and consciousness pertain to explicit learning (Baars, 1997), and explicit learning plays a part in ISLA (cf. VanPatten, 2015). In addition, the chapter discusses the explicit-implicit dichotomy and its connection with ISLA. Further, the distinction between such terms as explicit learning, intentional learning, and form-focused learning is provided. Similarly, the difference between implicit learning and explicit learning is discussed. Because learning involves knowledge, accounts on explicit/declarative knowledge and implicit/procedural knowledge are given. The role of explicit learning in relation with implicit learning is further looked at through discussions regarding the implicit-explicit interface, the cooperation between explicit and implicit learning, as well as factors affecting this cooperation. Given that in the second study of this thesis mental imagery is employed as a motivational tool to facilitate the explicit learning of the target formulaic sequences, the final part of this chapter involves the dual coding theory which concerns the role of imagery in learning.

2.1 Instructed Second Language Acquisition

Second language (L2) learners can acquire the target language in *naturalistic* and *instructed* contexts (see, for example, Dörnyei, 2009b; Larsen-Freeman & Long, 1991). The naturalistic learners do not receive systematic instruction of the L2; instead, they pick up the language through random or arbitrary interactions in non-school-related settings such as homes, neighbourhoods, or workplaces. In contrast, instructed learners learn the L2 in an organized fashion, which can take place either in the classroom with the support of university lecturers or school teachers or outside the classroom with the help of private tutors. However, most L2 learners learn the target language in a combination of both natural and instructed settings (Orgeta, 2009).

As the name suggests, Instructed Second Language Acquisition (ISLA) concerns acquisition in instructed contexts. Despite the growing body of work on ISLA (Doughty & Long, 2003; Loewen & Sato, 2017), there is an absence of a widely accepted definition of ISLA. Loewen (2015) has recently defined ISLA as

> a theoretically and empirically based field of academic enquiry that aims to understand how the systematic manipulation of the mechanisms of learning and/or the conditions under which they occur enable or facilitate the development and acquisition of an additional language.

There are three main characteristics of this definition. First, ISLA seeks to provide theoretical and empirical understandings of: a) systematic manipulations in the learners' learning mechanisms (i.e. instruction that impacts learning), and b) systematic manipulations in the conditions whereby the learning mechanisms take place (i.e. instructing conditions that impact learning). Second, the purpose of ISLA is to answer the question of how these manipulations help L2 learners develop and acquire the target language, including linguistic features such as phonemes, morphemes, lexemes, syntactic structures, or pragmatics. Thus, the ultimate aim of these manipulations is to allow for L2 development and acquisition.

Third, this definition ISLA disregards the contexts where the manipulation takes place, meaning that they can occur in or out of classroom; nor does it take into consideration the subjects carrying out the intervention in the learners' learning processes (or mechanisms), implying that they can be teachers, tutors, or learners themselves. However, it is important that the intervention be systematic or organized. Accordingly, aside from L2 teaching and learning in classroom settings (Larsen-Freeman & Long, 1991; Spada, 2005), ISLA also subsumes self-instructed or independent language learning out of classroom contexts (see, for example, Bown, 2006, 2009; Rowsell & Libben, 1994; White, 2008). It should be noted that the latter differs from naturalistic L2 learning in that even though the learning does not take place in the physical school environment, it is done in an organized manner, taking into account the learning processes. In the following, I discuss mechanisms of attention and explicit/implicit learning in cognitive science and relate them to ISLA.

2.2 Attention mechanisms in cognitive science and ISLA

Over a century ago, concerning the concept of attention, William James (1890: 404) stated that "every one knows what attention is". Along with the notion of learning, attention is one of "the most studied concepts in modern experimental psychology" (Mitchell & Le Pelley, 2010: 1). Considering the role of attention in learning, Baars (1997) argue that paying attention is key to learning anything. There are various definitions of attention in cognitive science. For example, in *The Oxford Handbook of Attention* (Nobre & Kastner; 2014), Nobre and Mesulam (2014: 105) refers to attention as "the set of mechanisms that tune psychological and neural processing in order to identify and select relevant events against all the competing distractors". However, there is no widely accepted single definition of attention.

The concept of attention and its mechanisms were initially used to understand ISLA by Schmidt (1990, 2001) through his influential *noticing hypothesis*, which he put as simple as "people learn about the things that they pay attention to and do not learn much the things they do not attend to" (Schmidt, 2010: 721). Drawing upon the work of Posner and Peterson (1990), Posner (1994), and Tomlin and Villa (1994), Schmidt (2001) proposed that attention is not a unitary construct, but refers to a number of mechanisms (i.e. alertness, orientation, detection, inhibition, and facilitation). He put forward several assumptions regarding attention, including attention having limited capacity, the idea that attention is selective, and the role of attention in access to consciousness, action control, and learning. He stated that the concept of attention is important to understand virtually all aspects of SLA. Indeed, the notions of attention, consciousness, and the noticing hypothesis have been important to understand ISLA. Dörnyei (2009b: 133), in accounting for the concept of attention, noted that:

> Through our attention, we can selectively concentrate on one issue while ignoring other things. In an environment of multiple stimuli, we can direct the spotlight of our attention at specific things (e.g. listening to the conversation at the next table) and the spotlight can even slip out of hands and we can catch ourselves 'mind-wandering'.

In addition, Robinson, Mackey, Gass, and Schmidt (2012: 247) have recently argued that not only can attentional mechanisms account for the variations in accuracy, fluency, and complexity of L2 use in varying contexts, but they can explain the effects of learning tasks on learning outcomes. They also noted that instructional strategies and techniques can be employed in the

way that they manipulate learners' attentional mechanisms so that attentional resources are focused on the target language features in input, enhancing the quality of perception and thus the memory of these features.

Over the past twenty years, since Posner and Petersen's (1990) review of the attention construct published in the 1990's volume of the journal *Annual Review of Neuroscience,* changes have been documented with respect to neuroimaging methods for better understandings of brain activity, Petersen and Posner (2012) have expanded and elaborated on their influential framework concerning the attention networks in the human brain (Posner & Petersen, 1990), supplying it with updates derived from current evidence in cognitive science and linking it to other related areas. Accordingly, the attention system of the human brain includes three subsets of networks: alerting, orienting, and executive control. The following elaborates on each subset and then accounts for their relevance in ISLA.

2.2.1 Alerting

Alerting refers to the cognitive mechanism that enables a person to become vigilant and maintain this state during task performance (Posner & Petersen, 1990; Petersen & Posner, 2012). As such, the state of vigilance allows the person to be ready for incoming stimuli. The alertness and its changes during an event are measured by such methods as using a warning signal prior to the occurrence to gauge how the resting state turns into the new alerting state, preparing for input. The vigilance state is also measured by reaction times so as to understand how sustained it is over longer courses of time and how the body temperature and cortisol secretion change. For example, according to Posner (1975: 449), alertness is higher in early morning but reduces over the day, only to increase again over the night time and reach a peak again in early morning. Furthermore, neuroimaging findings (e.g. Sturm & Willmes, 2001) indicate that there are effects of a warning signal on alerting system, involving both right and left cerebral hemisphere mechanisms.

Concerning its role in ISLA, the alerting state allows learners to be ready to deal with L2 input (Tomlin & Villa, 1994: 190), facilitating the rate at which relevant language features are noticed (Schmidt, 2001). In other words, the speed of directing attention to target language features varies in proportion with the degree of student alertness or readiness to learn (Gass, 1997). In ISLA, getting into the optimal state of being prepared to learn in instructed contexts

appears to be subject to a combination of various components of individual differences and learner internal and external factors (i.e. motivation, age, language aptitude, personality, language proficiency, learner educational experience, family background, learning tasks and materials, teachers, learning time, or classroom environment). Nevertheless, alerting mechanisms can be manipulated by utilizing pedagogical strategies and methods in L2 instructed contexts. This is because, as noted earlier, there has been neuroimaging evidence (e.g. Coull et al., 2000, Fan et al., 2005) with respect to the effects of a warning signal on alerting mechanisms. This suggests the implications of employing motivational strategies (Dörnyei, 2001a) (e.g. setting learning goals prior to tasks) or visionary techniques (Dörnyei & Kubanyiova, 2014) (e.g. incorporating the future scenario of falling short of the expectation to become an ideal L2 self in visualization tasks) to enhance alertness and attention in classroom learning.

2.2.2 Orienting

The orienting network involves prioritizing sensory input by selecting a modality (i.e. visual or non-visual) or location (Petersen & Posner, 2012: 3). Measured through fMRI (functional magnetic resonance imaging), Corbetta and Shulman (2002) found two brain systems involved in orienting to external stimuli.

There have been findings (e.g. Driver et al., 2004) that there is a large overlap between the brain areas involving in orienting to visual stimuli and those relating to orienting to other input modalities. Specifically, when a person directs to a selected external stimulus such as a person or a thing, common areas in the brain are involved in the orienting processes regardless of whether the stimulus is visually salient or not. Furthermore, there is a possibility that not only the visual but also the non-visual features of that input are processed by the orienting network of the attentional mechanisms. According to Petersen and Posner (2012), this is a surprising finding in neuroimaging science, as they put it:

> Although attention operates on sensory-specific modalities according to the incoming target, the sources of this effect appear to be common. There are also important synergies between modalities. In many cases, orienting to a location will provide priority not only to the expected modality but also to information present at the same location from other modalities..., indicating how closely the sensory systems are integrated within the orienting network. (p. 6)

Implications from these findings can be drawn to understand and intervene ISLA. In effect, there have been widespread classroom practices and substantial research on computer-assisted language learning (CALL) (cf. Beatty, 2013; Golonka et al., 2014; Warschauer & Healey, 1998), which employ multimedia in L2 instructed contexts. In CALL techniques (cf. Egbert, Paulus, & Nakamichi, 2002; Gruba, 2004), language features presented through a combination of multiple modes of sensory input (e.g. imagery, colour, sound, and text) can be simultaneously processed by the integrated systems related to the orienting network.

2.2.3 Executive control

This mechanism was termed as *target detection* in Posner and Petersen (1990). Due to new findings in the neuroimaging science concerning the involvement of a wider processing network in this mechanism, Petersen and Posner (2012) renamed this process as *executive control*. Accordingly, the executive control network refers to two major processes: target detection and top-down regulation. The former is the primary attentional process which can be related to consciousness in a particular way. The moment of the target being detected may decelerate the detection of another target because this process interferes the working of the system. This attests to the limited capacity of attention. The process is also referred to as focal attention, involving a range of neural connections from the midline cortex and the anterior cingulate cortex, which can be the entry to consciousness (Dehaene & Changeux, 2011). Although the notion of *consciousness* in cognitive science is complicated (Dörnyei, 2009b), and can be disassociated with the concept of *awareness* in the literature (cf. Shiffrin, 1997), consciousness discussed in this thesis can be understood as awareness, referring to the ability to produce internal presentations of external experiences, to report these experiences to others, and to understand them (Schmidt, 1990: 131-133).

Concerning the relation of the detection mechanism to L2 learning, Schmidt (2001) and Tomlin and Villa (1994) noted that detection is the essential condition for additional processing so acquisition of new knowledge can occur. To facilitate the detection process, the roles of alerting and orientating mechanisms are important. According to Schmidt (2001: 18), there are two modes of detection: detection without awareness and detection with noticing and awareness. While the former means that upon L2 input being presented learners, they are not aware of what being committed to the brain, the latter means that they notice and have conscious perception of what being registered, and they can discern, report, and comprehend it.

Evidence from ISLA (cf. Gass, 1997; VanPatten, 1990) shows that in some cases, on being presented with multiple language elements in input, an L2 learner can learn an element (i.e. a verb or a grammatical point) without his or her knowledge or awareness of what being learned. This phenomenon can be explained by the mechanism of detection without awareness. However, it appears that L2 learners can only unconsciously process or register linguistic elements such as words or grammatical forms familiar to them. That is, they have previously encountered the forms and/or the meanings of these language features, or the language forms share some common characteristics with the one(s) the learners have noticed, paid attention to, or had some knowledge of. As pointed out by Schmidt (2001), although unconscious processing is evident as to familiar language elements, conscious processing is required as to ingraining new language points into the brain. Accordingly, to facilitate the detection and thus development of new language items in instructed settings, it is necessary learners be aware of and notice these items.

Furthermore, the rate of target detection can be manipulated by raising awareness of the target language features. There have been studies on teaching techniques so as to increase the focal attention and awareness of target L2 features in input. For example, ISLA has emphasized the role of form-focused instruction (cf. Ellis, 2001; Laufer & Girsai, 2008; Long, 1991, 1998; Nation, 2013; Spada & Lightbown, 2008; VanPatten, 1990). Specifically, computer-based or paper-based activities such as textual enhancement, glossing, dictionary use, mnemonic techniques, rehearsal and rote learning, semantic and structural elaboration, teacher explanations of lexical items or grammatical rules, word cards, pictorial annotations, vocabulary exercises, or error correction exercises have been investigated, compared, and employed in instructed contexts in addition to meaning-focused activities.

In respect to the top-down regulation, Posner and Petersen (1990) suggested that activity of the brain areas related to focal attention was stronger for the targets than for the non-targets, for the conflict-related experimental tasks than for the non-conflict-related, and for the error-related tasks than for the correct-related. They argued in favour of the relevance of this behaviour of the brain activity to the production of top-down regulation and its connection to executive control. Furthermore, Bush et al. (2000) also proposed the involvement of the executive control in top-down regulation of both cognition and emotion. In the same vein, Schmidt (2001) put forward that once the target has been detected, relevant information can be further processed

through the facilitation mechanism whereas the processing of irrelevant information can be inhibited through the inhibition mechanism. Recent neuroimaging findings by Bidet-Caulet, Mikyska, and Knight (2010) have shown the activity of these two distinct mechanisms being reflected through the attention-mediated top-down control in the brain.

Petersen and Posner (2012) summarized that there are five networks involving in attention mechanisms: one alerting network, two orienting networks, and two executive networks. They suggested how these networks are related to self-regulation and to the idea that the efficiency of the attention mechanisms involves both genes and environmental influences.

2.2.4 Self-regulation

Self-regulation is a concept widely used in developmental and educational psychology. According to Petersen and Posner (2012), self-regulation is the ability to regulate and control one's thoughts, feelings, and behaviours. Findings from anatomical studies (e.g. Beckmann, Johansen-Berg, & Rushworth, 2009) suggest the presence of brain areas that are related to cognitive mechanisms and those that involve emotion-related mechanisms. Self-regulation pertains to the capability of manipulating and controlling these mechanisms. In educational psychology, self-regulation is also termed as self-regulated learning, referring to "the processes whereby learners personally activate and sustain cognitions, affects, and behaviours that are systematically oriented toward the attainment of personal goals" (Zimmerman & Schunk, 2011: 1). In this sense, to accelerate the achievement of academic goals, including those of L2 learning, strategies and techniques must manipulate in particular ways that trigger learners to regulate their own cognitive, affective, and behavioural processes so their attentional resources are directed to achieving these goals. As noted earlier, ISLA involves learning processes being manipulated in a systematic way in or out of classroom, with or without human instructors. That is, the intervention in learning can be through Internet-based online courses or individual learning accompanied by instruction manuals or self-prepared learning plans and materials so as to obtain certain learning goals. Accordingly, self-regulatory learning processes in ISLA can be intervened in or out of classroom settings. In effect, a variety of pedagogical models, strategies, and techniques (e.g. Dörnyei, 2001a, 2005; Oxford, 2011, 2016) have been investigated in order to intervene the mechanisms of self-regulation and attention in learner learning. The following elaborates a bit further on the theoretical frameworks related to self-regulation of motivation in ISLA.

In ISLA, the taxonomy of motivational strategies developed by Dörnyei (2001a) included self-regulatory strategies aside from other strategies that are based on psychological processes involving L2 learning, offering strategic, systematic, and practical suggestions and guidelines for teaching practices. The framework includes over 100 motivational techniques subsumed into four main phases: (1) creating basic motivational conditions, (2) generating initial motivation, (3) maintaining and protecting motivation, and (4) encouraging positive retrospective self-evaluation.

The component of self-regulation in the third phase of the framework is divided into learner autonomy and self-motivating learner strategies. To support learner autonomy, two specific techniques are prioritized. The first is to increasingly involve learners in organizing their own learning process such as allowing them to make their own learning choices, carry out learning projects, or self-assess their learning. The second is to change the role of the teacher in order that he/she becomes a supporter who facilitates the learners on the way of finding the meanings of their active learning efforts instead of being the one who imparts knowledge to the passive learner subjects. Furthermore, the self-motivating learner strategies suggest specific guidelines as to the way of "getting learners to take personal control of the motivational conditions and experiences that shape their own commitment to learning" (Dörnyei, 2001a: 109). Based on the work by Kuhl (1987) and Corno and Kanfer (1993) regarding action control, the self-motivating strategies in ISLA include the approaches to committing to learning goals, monitoring concentration and cancelling procrastination, getting rid of boredom and adding excitement to learning tasks, and inhibiting disruptive emotions and managing distractors from the surrounding environment (Dörnyei, 2001a: 110-115).

L2 motivation scholars have investigated the role of self-regulatory strategies in L2 learning. For example, Kormos and Csizér (2014) investigated the influence of motivational factors and self-regulatory strategies on autonomous learning behavior. They found that self-regulatory strategies of managing time and boredom as well as proactivity in seeking out learning opportunities tended to be important in increasing the autonomous use of traditional learning resources such as coursebooks. In contrast, satiation control and time management were not found to be associated with independent use of modern resources such as web-based applications. They also found the self-regulatory strategy of opportunity control to have the strongest link with the independent use of both traditional and modern learning resources. Csizér

and Tankó (2015) investigated self-regulatory control strategy use in academic writing and its relationships with other motivational variables. They found that self-regulatory strategy use was associated with motivated learning behaviour, self-efficacy, and a reduced level of writing anxiety. However, despite the learners' motivated learning behaviors, only a third of them tended to be able and willing to apply self-regulatory strategies in their writing practices.

In brief, self-regulation is relatively similar to the concept of attention in three main ways. First, they both concern the process of controlling, inhibiting, and ignoring irrelevant stimuli in order to concentrate attentional resources on processing relevant things. Second, they can be manipulated; that is, external factors or stimuli can influence their processes. Third, their working mechanisms can be with or without awareness.

2.2.5 Efficiency of attention networks and self-regulation

Evidence from cognitive science has shown that both environmental influences and genes are involved in the efficiency of attention networks and self-regulation abilities. Berry et al. (2014) found that early child-care experiences interacted with a common variant of a particular gene (i.e. DRD4 genotype) to predict effective attention and self-regulation abilities in prekindergarten children. Similarly, the combined influence of environmental factors and genetics appear to affect behaviour in adults (e.g. Larsen et al., 2010). Furthermore, Schlomer et al. (2015) have recently found that their intervention was effective in terms of controlling the undesirable impact of the combination between maternal hostility and genes on behavioural problems in adolescence. These findings indicate that although attention and self regulation are related to individual differences, their mechanisms can be manipulated in a way that results in desirable changes in behaviours.

The manipulability of attention and self-regulation processes has been confirmed in ISLA. Specifically, research (e.g. Boers et al., 2006; VanPatten & Oikkenon, 1996) has been carried out in real instructed (primarily classroom-based) settings with the participants being the L2 students having their personal goals of acquiring the target L2. In these studies, self-regulation and attention mechanisms of the learners have been manipulated by means that the instruction techniques allow them to personally activate and sustain cognitive behaviours so they are systematically directed towards achieving classroom (and also their personal) goals.

Evidence suggests the efficacy of the instruction intervention in terms of enhancing learning of target language features.

Motivation has been used as a mediating tool to increase attention, engagement and self-regulation in L2 learning. There is evidence on the positive impact of motivational teaching practices on motivated learning behaviours, which in turn influences attention, engagement and learning outcomes in ISLA. Findings from classroom observations combined with questionnaire instruments and/or language tests (e.g. Alrabai, 2014; Guilloteaux & Dörnyei 2008; Moskovsky et al. 2013; Papi & Abdollahzadeh 2012; Wong, 2014) have suggested associations between motivational teaching strategies and L2 learning. These findings in ISLA indicate that self-regulated learning behaviours as to both cognition and motivation can be influenced in instructed contexts so positive changes in behaviours and learning can occur. This also confirms the argument by Zimmerman and Schunk (2011: 1) that "Because self-regulated persons must be proactive in order to set goals and engage in a self-regulatory cycle, supportive motivational beliefs are also essential."

In conclusion, given a growing body of evidence on interactions between attention and psychological domains such as memory, decision-making, emotion, or motivation in cognitive science (cf. Nobre & Kastner, 2014), the concepts of attention and self-regulation are of significance in ISLA. The success or lack of success of learning strategies and techniques in ISLA can be partly explained from the perspective of the mechanisms of attention and self-regulation. Similarly, theoretical taxonomies and learning strategies or techniques have been and can be further developed based on the idea that they can optimize the working of attention and self-regulation mechanisms. Furthermore, intervention research has provided and needs to further supply the ISLA literature with evidence on strategies and techniques that can well utilize these cerebral processes to induce changes in learning behaviours and thus learning outcomes.

2.3 Explicit-implicit dichotomy in ISLA

Explicit-implicit dichotomy is related to the concepts of learning, memory, and knowledge in cognitive psychology and in ISLA (cf. DeKeyser, 2003; Dörnyei, 2009b). Due to their relevance to the purpose of this thesis, this section only discusses explicit-implicit learning and knowledge. As the distinction between explicit and implicit learning is considered to be "important for understanding how people acquire knowledge" (Gomez, 1997: 154), to facilitate the

development and acquisition of an L2 language, it is necessary to understand the mechanisms of explicit and implicit learning and their related concepts (cf. DeKeyser, 2003).

2.3.1 Explicit, intentional, and form-focused learning

The concept of explicit learning has been defined in a number of ways. Dörnyei (2009b) referred to explicit learning as a learning process "characterized by the learner's conscious and deliberate attempt to master some material or solve a problem" (p. 136). According to Ellis (2008: 3), "Explicit learning is a more conscious operation where the individual attends to particular aspects of the stimulus array and volunteers and tests hypotheses in a search for structure". He also analogized explicit learning to learning the fundamental skills of designing an airplane, stating that "We learn these [language] abilities explicitly like aircraft designers learn aerodynamics" (N. Ellis, 1994: 1). Reber (1976) referred explicit learning to a process "whereby various mnemonics, heuristics, and strategies are engaged to induce a representational system" (p. 93). It can be drawn from these accounts that explicit learning is a learning process whereby learners have consciousness of what they are learning, directing attention resources to it, and making efforts to acquire one or several aspects of its knowledge. The consciousness referred to here concerning explicit learning is, as noted earlier, synonymous to awareness. In this respect, explicit learners of an L2 item, for example, have a mental representation of that item, report it to others, know what knowledge aspect they are trying to acquire, allocate focal attention to it, and exert efforts to acquire that aspect.

Intentional learning

Regarding terminological varieties in L2, the term explicit learning, albeit used in learning of other language aspects, is often referred to as *intentional learning* or deliberate learning, in vocabulary research (cf. Nation, 2001, 2013; Schmitt, 2000, 2010). However, Hulstijn (2003: 356) noted a distinction between intentional learning and explicit learning by suggesting that while former lends itself to the latter, it also involves learners having deliberate intentions to commit the target lexical items to memory. In addition, explicit learning also refers to various types of form-focused learning in both vocabulary and grammar acquisition (e.g. Laufer, 2006; Lightbown & Spada, 1990; Loewen, 2011; Long & Robinson, 1998; VanPatten, 1988). This is because there appears to be consensus that attention to language form concerns explicit learning (cf. DeKeyer, 2003: 318). However, on reading the literature, this may not be the case because

there exists a term called *incidental focus on form* (cf. R. Ellis, Basturkmen, & Loewen, 2001, 2002). The following section will discuss form-focused learning types.

Form-focused learning

According to Long (1991), there are two major types of form-focused language learning: *focus on formS* and *focus on form*. In the former, target language features such as grammar points are selected prior to a learning procedure to be the learning objective, and the learning procedure takes place in a systematic way. In the latter, learners' the prior objective is to focus on meaning such as reading comprehension, but during the process of meaning-focused learning their attention is drawn to other specific language features (e.g. the vocabulary items in the reading text). This will be slightly elaborated in Chapter 3 regarding vocabulary acquisition.

To further categorize the focus-on-form type, R. Ellis et al. (2001, 2002) distinguished two main categories: *planned focus on form* and *incidental focus on form*. In the former, the prior objective is dual; that is, the focus is on both form and meaning (e.g. learning lexical items and comprehending a reading text). However, learners' attention is not drawn to the focus-on-form purpose; instead, their attention is directed to the meaning-focused activity. In the incidental focus-on-form condition, the prior objective is to focus on meaning (e.g. listening to a story), but focus-on-form learning (e.g. teacher explaining the meaning of unknown words) occurs when needs arise. R. Ellis et al. also proposed a variety of other types of focus-on-form related learning in connection with communicative language teaching. As noted earlier, one possible issue though is that there may be difficulties in attempting to connect the terms incidental focus-on-form and planned focus-on-form to explicit-implicit learning mechanisms. However, R. Ellis et al. did not elaborate on this. In the following, I will discuss the distinctions between implicit and incidental learning before attempting to categorize these terms so they will be subsumed into only two umbrella terms of explicit and implicit learning. It is also noteworthy that in classroom contexts, the term 'instruction' or 'teaching' (e.g. explicit teaching or focus-on-form instruction) is also used interchangeably with 'learning'.

2.3.2 Implicit and incidental learning

Reber (1976) proposed the mechanism of implicit learning as opposed to explicit learning based on his classic artificial-grammar experiments. In the experiments, the participants were presented with strings of letters which were arranged in a particular underlying rule (i.e. pattern) that the

participants were not made aware of. They later did a task of classifying the novel strings as to whether or not these strings followed the rule. The findings showed that the participants' performance was above chance, indicating implicit learning. He referred to implicit learning as a process of getting hold of rules or patterns by attending to cues of frequency. Ellis (2008: 3) defined implicit learning as "acquisition of knowledge about the underlying structure of a complex stimulus environment by a process that takes place naturally, simply, and without consciousness operations".

Properties of implicit learning

Dörnyei (2009b: 138) summarized five primary properties of implicit learning. First, it involves a bottom-up process. This means that learners gradually learn language features such as complicated rules underlying a phenomenon through a construction process of becoming increasingly attuned to it. Second, learners do not make conscious efforts to learn the target materials. Third, it occurs automatically, and learners cannot control it. Fourth, there is an absence of awareness of learning, meaning that learners have no knowledge that it is taking place. Fifth, there is an absence of awareness of the result. In other words, they are unaware of the end product of the learning process, and thus cannot answer such question as "What have you learned?".

Similarities and differences between implicit and incidental learning

With regard to terminologies, although implicit learning seems to resemble *incidental learning* in ISLA, the former is similar to and dissimilar from the latter in several ways. Incidental learning refers to learning without any deliberate intentions to learn (Schmidt, 1994), involving "learning of one stimulus aspect while paying attention to another stimulus aspect" (Hulstijn, 2003: 354). Thus, the common attribute of both terms is that learners have no intentions to learn the target language features prior to the learning process. On the other hand, as summarized in Table 2.2 there are a number of major distinctions between the two. Despite this, in some cases one becomes the other and vice versa. Specifically, if no awareness, attention, and efforts are involved in the learning process of a particular language aspect (i.e. vocabulary form-meaning link), incidental learning of that knowledge aspect can be considered as implicit learning. By the same token, if learning (without awareness) of a certain language rule or grammar point (i.e. suffixes or relative clauses) takes place during a meaning-focused activity such as reading

comprehension, implicit learning can become incidental learning. In other words, upon taking learning tasks into careful consideration, implicit learning is different from incidental learning in some cases while similar in others.

Table 2.2: Differences between the implicit learning and incidental learning in ISLA

Implicit learning	Incidental learning
• Not having awareness of the target language features being and having been learned. • Not having attention and efforts to learn the target language features. • Learning is a bottom-up mechanism, involving a process of understanding the underlying rules or structures of how a complicated thing is constructed in the way it is. • Mainly used in connection with learning of rules or patterns of language features in use, such as morphology (e.g. prefixes or suffixes), vocabulary (e.g. collocations or semantic constraints) and grammar, but can be used regarding learning other language aspects or features.	• Tending to have awareness of the target language features being and having been learned. • Tending to involve attention and efforts to learn the target language features. • Learning one thing is byproduct of learning and paying attention to another thing. • Mainly used in connection with vocabulary learning (e.g. receptive or productive knowledge) through meaning-focused activities such as reading, but can be used regarding learning other language aspects or features.

Issues of implicit learning

Implicit learning displays several issues when it comes to its implications in L2 acquisition (cf. Dörnyei, 2009b: 139). First, the learning rate is low. Evidence from a meta-analysis by Norris and Ortega (2000) showed that in both laboratory and classroom treatment conditions, the performances of explicit learning of rules were overwhelmingly superior to those of implicit

learning. Based on DeKeyser's (1995) findings from an experiment using mere exposures to pairs of sentences and pictures, DeKeyser (2003) stated that "even after exposure to thousands of relevant examples, the performance of the implicit group was essentially random" (p. 319). Similarly, evidence from vocabulary research suggests that intentional learning of vocabulary is more effective than incidental learning (Laufer, 2005; Schmitt, 2008). Second, there are restrictions in terms of what cannot be learned through the implicit learning mechanism. This is because implicit learning may not be applicable to skills that involve high a degree of cognition such as problem solving (cf. Dörnyei, 2009b). This can also be the case for instructed L2 learning when it comes to novel and complicated language forms.

Third, implicit learning is age- and context-dependent. That is, in case learners are adults in the contexts of limited exposure to L2 and where learning is highly structured, the odds in favour of implicit learning are very low. Muñoz (2006) found that older EFL learners outperformed younger ones in a number of language tests despite the fact that prior to the tests they had the same amounts of classroom time. Similarly, in these contexts adults learn more than children with the explicit approach although the opposite is true with the implicit approach (von Elek & Oskarsson, 1973). Also, Hulstijn (2002) argued that in spite of huge amounts of exposure, many L2 learners fall short of reaching nativelikeness; their performances are strongly influenced by L1 interferences or age variables. N. Ellis (2008: 8) also accounted for this phenomenon that "Transfer, learned attention and automatization provide some reasons why implicit learning does not work for L2 as it does for L1".

Types under explicit and implicit learning dichotomy

As presented in Table 2.3, the terms explicit and implicit learning in SLA encompass a number of other terms which again overlap one another. As noted earlier, among other properties, explicit learning includes the types that involve learner awareness of target language features during and after learning and with/without prior intentions for learning these features. In contrast, implicit learning is related to those that are devoid of learner awareness of target features during and after learning. In an attempt to organize the varying terms used in the literature such that they are under only two umbrella terms of explicit-implicit learning, I would propose in Table 2.3 that there are two types of focus on form in connection with these explicit-implicit learning mechanisms: *planned/incidental focus on form (incidental learning) with*

learner awareness and *planned focus on form (incidental learning) without learner awareness*. In the former, while dealing with the meaning-focus input such as reading a story, learners are aware of and pay attention to the forms of the target language features thanks to glosses, pictorial annotations, and/or textual enhancement (i.e. boldfacing or highlighting the target language features) accompanying the story text. In the latter, learners are not aware that they are learning the target language features; they only attend to dealing with the meaning-focused input, and the focus-on-form plan for these features to be incidentally learned without learner awareness is on the side of teachers or material designers. There is no incidental focus on form without learner awareness in this type.

Also, as opposed to the former type, no focus-on-form techniques are employed to draw learners' attention to the target features. It noteworthy again in Table 2.3 that under the umbrella term explicit learning, intentional/deliberate learning is similar to focus-on-formS or planned focus on form with learner awareness, but they are often used in studies on vocabulary learning (as opposed to rules learning). Under the umbrella term implicit learning, implicit learning is different from planned focus on form without learner awareness in that (as noted earlier) in the latter, target language features are planned by teachers or materials designers for learners to learn implicitly while this is not the case for the former.

Table 2.3: Summary of types of explicit and implicit learning in ISLA

Explicit learning	Implicit learning
• Intentional/deliberate learning • Focus on formS • Planned/incidental focus on form (incidental learning) with learner awareness	• Implicit learning • Planned focus on form (incidental learning) without learner awareness

2.3.3 Explicit/declarative versus implicit/procedural knowledge

According to Dörnyei (2009b: 142), "Explicit-implicit knowledge refers to the outcome of the learning process". Explicit knowledge can be coined as declarative knowledge while implicit procedural, depending on whether they are considered from the perspective of explicit-implicit

learning or skill learning (see also Anderson, 1992 and Anderson et al., 2004 for ACT and ACT-R theories), respectively.

Explicit-implicit knowledge has several relatively contrasting characteristics. First, explicit knowledge is verbalizable (Dörnyei, 2009b; R. Ellis, 2009). That is, it involves awareness and can be consciously retrieved from memory and explained to others. For example, an L2 learner is able to explain a meaning of a phrasal verb or point out an incorrect use of a collocation and explain why it is incorrect. On the contrary, implicit knowledge is non-explicit, tacit, and intuitive. For example, a child can fluently use the plural form of a noun in his/her L1 but fails to explain the underlying rule thereof. Second, explicit knowledge is accessed through an offline system (i.e. controlled processing as opposed to real-time processing). Specifically, it is available when attentional resources are employed to recall it. Therefore, in L2 learning many learners tend to fail to spontaneously recall their explicit L2 knowledge such as vocabulary knowledge of form and meaning in order to use this vocabulary in real-time conversations. In contrast, implicit knowledge can be automatically accessible through rapid online processing. Thus, high-proficiency L2 learners can use language features automatically, unconsciously, and effortlessly due to the fact that this knowledge has been internally ingrained and become procedural. Third, as noted earlier as to the issues of implicit learning, while explicit knowledge can be acquired across wider ranges of conditions such as age or contexts, the opportunities for implicit knowledge to be acquired are virtually limited to children and those receiving large amounts of exposure to the target L2.

In brief, while implicit/procedural knowledge is a desirable end product of a learning process, explicit learning/knowledge is more attainable in ISLA. Given that an explicit learning process tends to result in declarative knowledge (R. Ellis, 2009), it is important to understand the implicit-explicit interface, including the role of explicit learning in connection with procedural knowledge and the combination between the two learning mechanisms in ISLA.

2.3.4 The implicit-explicit interface

Although often considered in separation, explicit learning does not take place independently of implicit learning to master real-life tasks (Dörnyei, 2009b). In language learning, even at some points of early L1 learning children are often drawn to some kind of explicit form-focused learning of letters and words such as letter counting and word naming. At the same time and later

they are implicitly exposed to large amounts of language use and communications whereby these letters and words are used. Subsequently they are able to use these language units and the L1 automatically. In ISLA, explicit learning of specific language features in various modes of form-focused activities is, albeit to varying degrees, incorporated with implicit learning in the forms of meaning-focused tasks. Further practices and exposures in and out of the classroom may enable learners to become fluent in using these language features and then the target L2. The concept of fluency or becoming fluent in L2 learning can be referred to as 'automatization' in SLA (Dörnyei, 2009b; Robinson, 2011; Segalowitz & Hulstijn, 2005).

Automatization

Automatization has been defined in number of ways (see Dörnyei, 2009b; Segalowitz, 2010). For example, Segalowitz and Hulstijn (2005: 371) described automatization as "absence of attentional control in the execution of a cognitive ability". According to N. Ellis (2005), the automatizing process needs to occur rapidly, beyond the control of the explicit mechanism. Indeed, the term automatization was derived from skill acquisition theory, the influential versions thereof are ACT and ACT-R theories developed by Anderson (1983, 1996). Skill acquisition theory and declarative/procedural model in the ACT and ACT-R theories have been used to guide SLA research (cf. Dörnyei, 2009b; McLaughlin, 1987; Ortega, 2009). In the light of these theories, L2 learning is a gradual process, transforming performance from controlled to automatic.

Practice plays an essential part in the transformation of explicit knowledge into implicit knowledge. For example, learners learn a number of grammar points in multiple controlled-practice conditions until they can use these points automatically without thinking about using them. In other words, practice allows controlled performances of the items to be withdrawn, giving room to their automatic performances (Anderson, 1996). In this way, the explicit/declarative knowledge of the grammar points is transformed into its implicit/procedural knowledge. The same applies to multiple other language units, ultimately allowing L2 fluency to take place. This process is called proceduralization or automatization in ISLA, which pertains to the three positions held in the literature as regards implicit-explicit interface.

Non-interface position

This position holds that implicit and explicit knowledge is stored in different brain areas and thus processed in a distinct manner and with little interaction with each other (see also Dörnyei, 2009b; Gass & Mackey, 2007). In this way, there is no automatization or proceduralization; explicit knowledge cannot be transformed into implicit knowledge. This position lends itself to the input hypothesis proposed by Krashen (e.g.1982), which prioritizes the role of implicit learning through comprehensible input and denies the part that explicit learning can play in L2 acquisition. It is also argued that it is impossible for learning to become acquisition; instead, conscious learning is only used to monitor (i.e. edit or correct) the accuracy of language output (cf. DeKeyser, 2010).

According to the input hypothesis, in ISLA language features such as grammatical rules or lexical items should not be explicitly taught or learned; learners including adults should be only exposed to the input comprehensible to them, through which the language features are unconsciously picked up. This hypothesis has interested both researchers and practitioners probably because it suggests an interesting scenario that one can still learn an L2 without having to consciously pay attention to committing language forms to memory, and thus learning tends to be less effortful. Unfortunately, the input hypothesis or non-interface position has been criticized over the last decades due to the lack of strong theoretical and empirical grounds, as noted earlier regarding the role of attention and consciousness in learning and the issues of implicit learning.

Weak-interface position

Proponents of this position maintain that although implicit and explicit knowledge is stored in distinct brain areas, there is interaction between them. Due to this, automatization can only take place provided certain conditions are met. Put another way, under the right circumstances the latter can become the former (R. Ellis, 1993). Specifically, noticing the target language features while exposed to and interacting in meaningful contexts can facilitate the development of implicit knowledge (cf. Robinson et al., 2012). Thus, incidental focus on form (see section 2.3.1) is an implication of this weak-interface position in ISLA. With this way of learning, learners focus on meaningful messages but are still drawn to specific language features by techniques such as text enhancement or recasts. Furthermore, explicit knowledge can be used to correct implicit knowledge (N. Ellis, 2005, 2008). For example, having automatically used an incorrect

verb tense in a conversation, an L2 learner realizes the incorrectness thanks to his/her consciously retrieving explicit knowledge of verb tenses and speaks again to correct it.

Strong-interface position

The argument of this position is that explicit knowledge can be transformed into implicit knowledge through practice (see also Dörnyei, 2009; Robinson et al., 2012). Put differently, L2 acquisition is similar to skill acquisition whereby proceduralization or automatization can occur as long as there are sufficient amounts of practice (regardless of types), and thus L2 learning is effortful. DeKeyser (2003: 323) argued in favour of this position, stating that "there is no evidence in second language acquisition literature that explicit learning cannot lead to automatized procedural knowledge, only a dearth of evidence that it can". Similarly, N. Ellis (2011: 44) stated that "Formulas, drill, and declarative pedagogical grammar rules can all contribute to the conscious creation of utterances whose subsequent usage promotes implicit learning and proceduralization".

However, when it comes to ISLA, while supporting other types of practice, some experts cast doubt on the benefits of focus-on-forms or decontextualized practice. They suggest exclusion of teaching practices that involve focus on forms and lending support to task-based learning with an additional component of focus-on-form and contextualized practice (e.g. Long, 2009). The reason they put forward is that focus-on-forms or decontextualized learning does not necessarily facilitate acquisition as effectively as real-life tasks do (Long & Robinson, 1998). However, DeKeyser (2010) argued against this rejection of focus-on-forms teaching, warning teaching practices not to "throw out the baby with the bathwater" because for L2 beginners, focus-on-forms are necessary. He argued that "Such learning contexts are certainly desirable, but it is doubtful to what extent they can be created in early stages of foreign language learning, when the linguistic tools at the learners' disposal for both production and comprehension are still quite limited" (p. 159).

In sum, while there is strong evidence to argue against the non-interface position in ISLA, little empirical research has suggested specific conditions whereby explicit knowledge is transformed into procedural knowledge. Similarly, although repeated practice in ISLA may result in automatization, there is paucity of research as to what kinds of practice are more effective to what kinds of learners (considering their factors of individual differences such as

different ages or proficiency levels) in terms of developing implicit knowledge. The main reason for these may be that it is difficult to measure the changes in procedural knowledge within the (often limited) timeframes of experimental designs. Nevertheless, there has been a consensus that both implicit and explicit learning components are required in L2 pedagogy (Dörnyei, 2009b: 171). Among others, this is due to the reasons that implicit learning is non-optimal for L2 acquisition (N. Ellis, 2011: 40), and that the distinct but interconnected systems of implicit and explicit learning can complement each other. As N. Ellis (2011: 39) summarized: "explicit knowledge and implicit knowledge of language are distinct and dissociated, they involve different types of representation, they are substantiated in separate parts of the brain, and yet they can come into mutual influence in processing". Given that both implicit and explicit learning are incorporated into L2 pedagogy, it is important to understand in what ways they interact and support each other.

2.3.5 The cooperation of explicit and implicit learning

There are a number of ways implicit and explicit language learning mechanisms can cooperate and support each other, allowing for better understandings and interventions in ISLA. The following is based on those suggested by Dörnyei (2009b). First, explicit knowledge can be fine-tuned by implicit processing. In other words, explicit learning including rote learning "results in knowledge that is symbolic in nature" (R. Ellis, 2009: 3), and this knowledge can be improved by implicit processing. Specifically, as noted earlier as to attention mechanisms, once the new language features have been consciously detected and registered as linguistic representations in the brain, they are only partly learned or the learned knowledge of these items is not fully correct. For example, if these language features are lexical items, chances are that only the receptive knowledge of form has been registered as a result of explicit learning, and the knowledge of how the items being used is not quite correct. Subsequent encounters of these items in contexts without consciousness enable the knowledge about them to be more compete and accurate.

Second, explicit practice of some language points creates implicit learning opportunities of other related points thereof. For example, Gass (1997) described studies suggesting that L2 learners who are taught on one relative clause type perform well both on that type and on other types of relative clauses that are more complicated. This can be inferred that the declarative knowledge of the explicitly learned relative clause allows for implicit learning of the other

relative clause types because they have certain characteristics in common. Thus, upon being presented the more complicated types in the test, these types can be unconsciously detected by the orienting process of the attention mechanism, leading to the better performance although they have not been explicitly learned prior to the test. This implicit learning involves an automatic processing mechanism, occurring rapidly without learners' awareness. Third, explicit knowledge allows for conscious self-correction of erroneous implicit assumptions, which can be caused by L1 transfer. Explicit learning helps develop metalinguistic knowledge, which can be used to monitor implicit processing by, for instance, consciously self-correcting errors made during implicit processing (cf. Paradis, 2004).An example of this has been noted earlier regarding a learner's employment of consciousness to self-correct a past tense error automatically produced during a conversation. Further practice similar to this results in not only fluency but also accuracy.

Finally, explicit mechanisms help mitigate the limitations of the implicit system. Dörnyei (2009b) summarizes two main points why this is the case. One is that in case of the absence of implicit knowledge, some language learners are capable of drawing on explicit knowledge such that they are able to use it spontaneously in the way others use procedural knowledge. That is, these students can quickly and consciously search and retrieve the explicit language knowledge in working memory in order to use it in real-time conversations (DeKeyser & Juffs, 2005). Among others, one possible reason may be that these are highly motivated learners who desire to use the L2 despite their time constraints not allowing them to have prolonged practice to proceduralize their explicit knowledge. The other is that the explicit system can make up for the impaired implicit system. This is because although learners tend to rely on their implicit system for language use, they can resort to the metalinguistic knowledge in the explicit system in case of impairment of the implicit system (Paradis, 2004). For example, children inflicted by specific language impairment (SLI) failed to use complex sentences (Hirschman, 2000). Nevertheless, after over one year of metalinguistic training, they performed to the normal levels. In this way, neurological deficits in connection with implicit mechanisms can be improved by metalinguistic training.

In short, there is widespread consensus that to develop or acquire L2 knowledge, implicit learning is not sufficient due to such issues as learned attention and L1 transfer, and thus that the

role of consciousness and attention in explicit learning is crucial. As summarized by N. Ellis (2011: 45):

> The interface between explicit and implicit learning is dynamic: It happens transitionally during conscious processing, but the influence upon implicit cognition endures thereafter. The various roles of consciousness in SLA include learners noticing negative evidence; their attending to language form, their perception focused by social scaffolding or explicit instruction; their voluntary use of pedagogical grammatical descriptions and analogical reasoning; their reflective induction of meta-linguistic insights about language; and their consciously guided practice that results, eventually, in unconscious, automatic skill. Consciousness creates access: its contents are broadcast throughout the brain to the vast array of our unconscious sources of knowledge, and by these means, consciousness is the interface.

Given that the focus of applied linguistics should be on how "to maximize explicit learning and the automatization of its product" (DeKeyser & Juffs, 2005: 445), opinions are now divided as to which types of explicit teaching should be employed in instructed contexts, or more specifically whether focus-on-formS instruction should be incorporated into or abandoned from L2 pedagogy. Furthermore, to facilitate optimal combination of implicit and explicit learning mechanisms in ISLA, Lightbown and Spada (2006: 180) pointed out a number of issues, including the balance between form-focused instruction and meaning-focused instruction, linguistic features lending themselves well to explicit instruction, linguistic features that can be implicitly acquired, learner characteristics sensitive and insensitive to metalinguisitic information, the appropriate time to draw learners' attention to form during a learning activity.

2.3.6 Factors affecting the explicit-implicit cooperation

Although explicit and implicit mechanisms can be combined in ways to optimize learning opportunities, the success of the combination is contingent on a variety of learner external and learner internal factors (cf. Dörnyei, 2009b; Lightbown & Spada, 2006; Schmidt, 2010,) as follows:

<u>Learner external factors</u>

- input characteristics (e.g. computer-based or paper-based reading texts or frequency of lexical items; lengths of texts);

- L2-L1 similarities and differences;
- peers (e.g. personalities, language ability, attention, or motivation);
- teachers (e.g. personalities, age, or motivation);
- family influences;
- time (e.g. duration available for learning or time learning occurring);
- classroom environment (e.g. class size, equipment, table arrangement).

Learner internal factors

- age (e.g. children or adults);
- personalities;
- language aptitude;
- language proficiency levels;
- prior educational experience learning styles and strategies;
- motivation.

Intervening learning mechanisms in order to develop learners' fluency and accuracy is not straightforward because varying factors may come to play to affect L2 development or acquisition. Although cognitive mechanisms such as attention, consciousness, or implicit and explicit processes are important to learning, affective factors and other conditions may interact with these cognitive processes to result in learning success or failure.

2.4 Dual coding theory

Apart from the attention mechanisms and the explicit/implicit processes that are widely used to explain learning, dual coding theory (DCT) (Paivio, 1986, 2007) can account for mental mechanisms fundamental to L2 acquisition, retention, and use. As stated by Clark and Paivio (1991), the theory

> is an empirically well-founded characterization of the mental processes that underline human behavior and experience. DCT explains psychological phenomena by the collective action of nonverbal and verbal systems that are specialized for the processing of imagery and linguistic information, respectively. DCT theoretical mechanisms and associated empirical phenomena are relevant to various aspects of human cognition, as well as emotion, motor skills, and other psychological domains" (p. 150).

Structural assumptions of the dual coding theory holds that in the brain there are the two defining representational systems, the *imagens* and the *logogens*. The former includes mental representations of nonverbal items such as specific objects and events and involves conscious imagery. Imagens, as put by Paivio and Sadoski (2011), "come in different modalities - visual, auditory, haptic, and motor" (p. 199). In contrast, locogens include verbal representations of abstract properties (e.g. orthographical and phonological forms) of language units of varied lengths, ranging from phonemes to formulaic sequences, sentences, or longer discourses. Paivio and Sadoski (2011) also distinguish locogens and imagens in terms of their meaningfulness:

> Modality-specific logogen have no meaning in the semantic sense that characterizes the standard views of linguistic lexical representations. They are directly "meaningful" only in that, when activated, they have some degree of familiarity or recognizability. Imagens, however, are intrinsically meaningful in that the conscious images they activate resemble the perceived objects and scenes they represent. (p. 199-200)

Although these two representational systems are independent in terms of functions, they are linked to each other through the *referential connections*, which allow inter-system processing. There are also *associative connections* within each system, which allow intra-system processing. Paivio and Sadoski (2011) clearly describe how these systems function:

> Referential connections between concrete-word locogens and imagens permit objects to be named and names to activate images that represent world knowledge. Associative connections between locogens (whether concrete or abstract) and between imagens allow for within-system associative processing that defines associative meaning as measured, for example, by word association tests and analogous nonverbal procedures. (p. 200)

Further, the internal mental representations, which are formed from nonverbal and verbal experiences, typically exist in the imagens and logogens in the dormant state; however thanks to the referential and the associative connections they can be activated by external stimuli (Paivio, 2007). An external nonverbal stimulus such as a picture can activate mental representations in the imagens, in the logogens, or in both systems. This is also the case for a verbal stimulus such as word or a sequence.

With respect to emotional or motivational aspects, people may have positive or negative experiences with objects or events, and these nonverbal things may give rise to their emotional or

motivational reactions. These reactions are thus closely related to nonverbal representations in the dual coding model (Paivio, 2013). Although presented only on the nonverbal aspects (Paivio, 2007), these emotional memories can be activated through the connecting pathways by either verbal or nonverbal stimuli (Paivio, 2010).

In the light of the above, part of ISLA involving cognition and motivation can be explained by the theoretical mechanisms of dual coding theory. The theory is referred to in the second study of this thesis which involves imagery as a motivational tool to faciliate cognition and thus learning outcomes.

2.5 Conclusion

This chapter began with a discussion of the definition of ISLA offered by Loewen (2015; see also 2017). The discussion dealt with several key issues related to the roles, functions, contexts, and subjects involved in ISLA. Following this, I provided an account on attention mechanisms in cognitive science and explained how they are relevant to ISLA. As the concept of attention is related to self-regulation in ISLA, distinctions between the two were also given in this section. In addition, I dealt with the mechanisms of explicit and implicit learning, mainly in ISLA, distinguishing between the former with intentional learning and with form-focused learning, and between the latter with incidental learning. I also attempted to clarify the overlap between the terms and suggested how they can be grouped under only two umbrella terms of explicit and implicit learning for language features. In this section, implicit-explicit interface, the cooperation of explicit and implicit learning and the factors affecting this cooperation were also provided. Finally, I presented a brief account of the dual coding theory that can be used to explain L2 learning.

Chapter 3: Instructed L2 Vocabulary Learning

In this chapter, the frameworks for learning and teaching L2 formulaic language are discussed in the light of theories for learning and teaching L2 vocabulary. This is because formulaic sequences are "lexical items exactly like other lexical items such as words" (Schmitt & Carter, 2004: 4), and thus vocabulary can be thought in terms of formulaic language (Schmitt, 2000), and studies in formulaic language are taken as part of vocabulary research (Read, 2004; Schmitt, 2010). Furthermore, similar to SLA (see Chapter 2), L2 vocabulary acquisition involves "natural" vocabulary acquisition whereby vocabulary is implicitly learned in natural contexts (Nagy & Scott, 2000) and instructed vocabulary acquisition (Laufer, 2005; Schmitt, 2008) whereby explicit learning plays an important part in the process.

This chapter reviews issues related to explicit vocabulary learning and teaching. Specifically, it first looks at explicit vocabulary learning and the related concepts and approaches before considering formulaic language and its relevant issues in L2 pedagogy. These first two sections concern both the first and the second studies of the current thesis, providing the theoretical background and motivation regarding why, what, and how to teach so as to develop knowledge of formulaic language for L2 learners in instructed contexts. The next two sections are directly related to the first study, providing reviews of previous intervention studies in connection with explicit learning of formulaic sequences as well as studies on contextualized and decontextualized learning of words. The last two sections are concerned with the second study, summarizing research that has utilized cognitive methods and imagery to manipulate attention and engagement to foster vocabulary acquisition.

3.1 Explicit vocabulary learning

This section first discusses terminological uses in L2 vocabulary learning, pointing out an overlap between explicit learning and incidental learning, and deciding on the terminological choices for the thesis. Following this, it describes the role of important explicit learning in vocabulary acquisition and factors facilitating this learning approach.

3.1.1 Terminologies in vocabulary learning

A variety of terms have been used to describe vocabulary learning, among which are three main categorizations: explicit versus implicit learning, focus on formS versus focus on form, and intentional (or deliberate) versus incidental learning.

Explicit versus implicit vocabulary learning

From the perspective of cognitive science, N. Ellis (1994) used the terms explicit and implicit learning to underscore the role of consciousness or awareness in vocabulary acquisition. According to him, while explicit learning involves conscious processes, implicit learning involves unconscious processes in vocabulary learning. However, in a discussion on explicit and implicit vocabulary learning Dóczi and Kormos (2016) argue that "implicit learning should not be seen as an entirely unconscious process" (p. 122). They attribute this to the fact that a certain degree of attention might involve in the process of implicit learning without learners' awareness. For example, a child may come across a new L2 word while playing a video game. The exposure to the word tends to induce a certain amount of attention to its orthographic and phonological features without his or her awareness, and some aspects of the word's knowledge can be acquired.

As discussed in Chapter 2, the terms explicit and implicit learning are also used to understand the acquisition of other L2 language features. It is worth noting, however, that to describe vocabulary acquisition, the literature indicates that the term implicit learning is less likely to be used than explicit learning (see the use the latter term in e.g. Schmitt, 2010; Webb & Kagimoto, 2009). One reason might be that having originated from artificial grammar tasks by Reber (1967) and characterized by a number of properties, including being a bottom-up process (see Section 2.3.2), implicit learning is more relevant to the learning of rule-based features of morphology and syntax than to that of form-meaning link of lexemes in instructed L2 contexts. Another reason could be that despite consciousness being considered to be the core issue in L2 pedagogy (Schmidt, 1994), it is hard to understand the presence or absence of consciousness during vocabulary processing without the vocabulary being made aware (through techniques such as glossing or textual enhancement) (see Chapter 2 for *consciousness*). It should be noted, though, that this does not necessarily mean that implicit learning of vocabulary is not possible.

Focus-on-formS versus focus-on-form in vocabulary learning

The use of these terms are related to task-based learning (cf. R. Ellis, 2001; Long, 1998), and thus the emphasis of adopting these terms is on whether the target vocabulary is used in a communicative or meaning-focused manner. As noted in Chapter 2, the terms *focus on form* and *focus on formS* were originally used to describe the learning of linguistic rules (e.g. DeKeyser, 1998; Long, 1991). Laufer (2006) employed these terms to understand vocabulary learning, stating that focus on form "attends to lexical items (single words and multi-word units) within a communicative task environment, since these lexical items are necessary for the completion of a communicative or authentic language task" (p. 150). In contrast, she described that in focus on formS lexical items are taught and practiced in tasks that are neither communicative nor authentic. Accordingly, the former approach takes vocabulary learning as an aid for completion of tasks (such as reading), and the latter views vocabulary learning as the main learning focus. In both types of focus on formS and focus on form, L2 learners to some extent pay attention to linguistic elements, being conscious of them, and hence vocabulary learning is explicit. Based on R. Ellis et al. (2001) as discussed in Chapter 2 regarding learning rule-based features, I propose that to understand instructed vocabulary learning, focus on form can be further divided into *planned focus on form* (i.e. learning lexical items during a meaning-focused task such as reading with target items being selected to study prior to the task) and *incidental focus on form* (i.e. learning lexical items during a meaning-focused task with the items not being selected prior to the task, but explained or looked up when encountered during the task).

Intentional versus incidental vocabulary learning

Intentional and incidental learning are used to highlight, respectively, the presence or lack of deliberate attempt to learn target vocabulary (Hulstijn, 2001; Nation, 2001; Schmitt, 2000). Intentional learning is also coined as deliberate learning (Nation, 2001, 2013). Hulstijn (2013: 2632) defined incidental learning as an approach to "the acquisition of a word or expression without conscious intention to commit the element to memory, such as 'picking up' an unknown word from listening to someone or from reading a text". Put another way, in incidental learning, L2 learners do not have an obvious and deliberate intention to learn particular lexical items; rather, they learn through encountering them during dealing with meaning-focused tasks. As noted in Chapter 2, incidental learning of vocabulary thus can take place with (i.e. target items being made aware) or without (i.e. target items not being made aware) learner awareness (or

consciousness) of the target items being learned (see also Dóczi & Kormos, 2016 for a discussion on the distinction between intentional and incidental vocabulary learning).

In the light of the above, intentional or deliberate learning can be used interchangeably with focus on formS in vocabulary learning. On the contrary, incidental learning whereby L2 learners are aware of and pay attention to vocabulary items being and having been learned is synonymous to focus on form (including both planned and incidental focus-on-form types). In contrast, incidental learning without learner awareness of and attention to lexical items being or having been learned is synonymous to implicit learning. I propose conceptualizing the former as *incidental learning with awareness*, and the latter *incidental learning without awareness* in vocabulary acquisition. The purpose of this further terminological division is to clarify confusion in the use of the terms explicit learning and incidental learning in the vocabulary literature. That is, Webb and Nation (2017) have recently used the term deliberate learning to indicate explicit learning, and incidental learning to indicate implicit learning, stating that the later "is how words are typically learned in the L1" (p. 2). In this way, they put incidental learning with awareness into the category of deliberate learning. This use is in conflict with that of Laufer and Rozovski-Roitblat (2011) who named focus on formS and focus on form (explicit learning) as incidental learning. With the aforementioned division, I would propose that while incidental learning without awareness, in Webb and Nation's words, "is how words are typically learned in the L1", incidental learning with awareness is a commonplace approach to how words are learned in an L2. The overlap is further discussed in the following section before the terminological choice as to vocabulary learning for this thesis is decided.

3.1.2 An overlap between explicit learning and incidental vocabulary learning

In the literature, explicit learning tends to be used interchangeably with intentional or deliberate learning as to vocabulary acquisition. In this way, explicit learning and incidental learning are considered to be two distinct approaches. However, taking the aforementioned explicit learning definition by N. Ellis (1994) and incidental learning definition by Hulstijn (2013) into consideration, there may be an overlap between them. This is because there is an obvious involvement of consciousness (or awareness) in one type of incidental learning which I proposed earlier (and also in Chapter 2) (i.e. incidental learning with awareness). In effect, given current technology this vocabulary learning type is quite commonplace, having been and can be further

investigated in instructed vocabulary acquisition. Specifically, technological advances have made it possible for L2 learners to read texts with electronic devices (i.e. tablets, smart phones or Kindle) whereby built-in electronic dictionaries allow instant access to one meaning of a new lexical item when reading. Upon encountering a new item, individual L2 readers-learners can get access to the meaning by a single touch at the screen where the new vocabulary is located and then continue reading, focusing on the meaning in the text. Another example is reading glossed texts (i.e. the texts whereby the translations are given on the margins or at the end of each page). Given the availability of such learning materials, while learners can learn vocabulary explicitly by briefly looking at the translations given, the focus is still on the meaning. In this way, vocabulary learning is both explicit and incidental.

This overlap between explicit learning and incidental learning of vocabulary is presented in Figure 3.1. Thus, from the cognitive perspective it should be correct to consider incidental learning with awareness as either explicit learning or incidental learning. For example, as noted earlier, Laufer and Rozovski-Roitblat (2011) named it as incidental learning. In the present thesis, it will also be referred to as incidental learning.

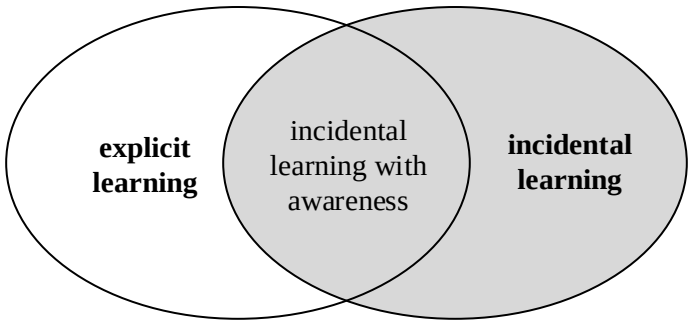


Figure 3.1: An overlap between explicit learning and incidental learning of vocabulary

One may argue that given the overlap, other terms may serve as better options than explicit learning when it comes to vocabulary acquisition. Also, the similar terms focus on formS and focus on form tend to cause confusion (Sheen, 2002: 304). Thus, intentional (or deliberate) and incidental learning may be ideal terminological choices so a clear distinction between two types of vocabulary learning approaches can be drawn. While this can be a sound argument, vocabulary acquisition involves cognitive processing, and thus its understanding is unlikely to be separated from the concepts of consciousness, attention, and explicit/implicit mechanisms of cognitive science. In addition, given that explicit learning is closely linked to consciousness, and

that “The ‘consciousness’ vs. ‘unconsciousness’ controversy is a core issue in both second and foreign language pedagogy and applied linguistics theory” (Schmidt, 1994: 237), the term explicit learning appears to still be a terminological choice regarding L2 vocabulary acquisition. Nevertheless, different terms can be used contingent on different research purposes.

Despite the overlap with incidental learning, in the present thesis *explicit learning* will be used to refer to *only* intentional/deliberate learning or focus on formS of vocabulary. One reason for the choice is that this is consistent with the use of this term in the current literature (e.g. Schmitt, 2010; Webb, 2008). Activities for explicit learning are various, including word cards, word games, decontextualized learning, glossing, dictation, dictionary lookups, typographical enhancement, pictorial elucidations, keyword methods, semantic or structural elaborations, rehearsal and rote learning, teacher explanation, PowerPoint presentations, vocabulary exercises, guessing meaning from context, translating, using corpora, or sentence writing using target words. Explicit learning also includes reading a text whereby the focus is on learning the vocabulary therein, and the text serves as a tool for this vocabulary learning (cf. Webb & Nation, 2017). With these learning strategies, learners direct their attention to lexical items not for using or understanding specific meaning, but to gain knowledge about the items as part of the language system (Nation, 1995-1996: 11). Another reason for opting for the term explicit learning is related to the current thesis’s endeavour to understand and explain vocabulary acquisition from cognitive and affective perspectives. Also, the two quasi-experimental studies of the thesis attempted to manipulate attention mechanisms, explicit/implicit learning, emotions, and motivation so as to develop explicit/declarative and implicit/procedural knowledge of target formulaic sequences. The term *incidental learning* will be used to refer to both incidental learning with awareness (i.e. planned focus on form and incidental focus on form) and incidental learning without awareness. Specifically, incidental learning can occur by picking up vocabulary through varying forms of meaning-focused activities such as reading and/or listening to texts, watching TV programmes or movies, communicative tasks, or writing short dialogues or compositions to communicate certain meaning. The term incidental learning is selected because it covers a wider range of L2 vocabulary learning through meaning-focused input in instructed contexts than the term implicit learning or focus on form.

3.1.3 The important role of explicit vocabulary learning

N. Ellis (2005: 305) claims that explicit learning is necessary in the acquisition of new language features because it can expedite second language acquisition. He points out that the conscious processing of explicit learning allows learners to establish and consolidate the form-function link of novel language items. Subsequently, the frequent usage of these items, which involves implicit processing, adds them to the language system. Similarly, Dörnyei (2009) argued that "new associations are best learnt explicitly and implicit learning comes into its own when turning the strengths of the pre-existing representations and integrating them in the broader cognitive system" (p. 159). This is in line with the strong position of the explicit-implicit interface discussed in the Chapter 2 of the current thesis. As to vocabulary learning in ISLA, many researchers (e.g. Cobb & Horst, 2004; Laufer, 2005) concur that naturalistic usage-based learning is insufficient for L2 learners to acquire lexemes. It has been therefore agreed that along with metalinguistic teaching approaches (i.e. the approaches that involve learners in thinking and using in the target language), explicit learning needs to be undertaken in addition to incidental learning for vocabulary acquisition to occur (Elgort & Nation, 2010; Hulstijin, 2013; Schmitt, 2008).

Explicit learning allows learners not only to focus on the aspects of lexical knowledge they want to acquire, but to control the repetition and the processing of the items they want to learn. Thus, it is efficient because it saves time and effort (Nation, 2013: 444). To support explicit learning, Nation and Webb (2010) argued that "criticisms of deliberate, decontextualized learning are not supported by research" (p. 30). Empirical findings (e.g. Elgort, 2011; Laufer, 2005; Laufer & Girsai, 2008; Peters, 2007; Webb, 2005, 2007a) corroborate these assumptions by suggesting that explicit learning leads to substantial gains of target vocabulary, that it is superior to incidental learning regarding acquisition of form-meaning connections, and that the effectiveness of this type of learning is durable. Therefore, to encourage the integration of explicit instruction into classroom settings, Nation (2001, 2007, 2013) introduced the notion of *the four strands* in vocabulary learning, and in language learning in general whereby the role of explicit learning is equally important as other strands of meaning-focused input, meaning-focused output, and fluency development.

3.1.4 Factors facilitating explicit vocabulary learning

As noted in the introduction chapter, the focus of this thesis is on fostering the effectiveness of explicit teaching. It is therefore important to consider primary forces at play regarding explicit learning. The following summarizes the conditions contributing to explicit vocabulary learning which are based on Schmitt (2010) and Webb and Nation (2017).

Attention and noticing

When encountering a new language item for the first time, learners need to attend to it in order to learn it effectively. This factor is derived from Schmidt's (1995, 2001) *noticing hypothesis*, which highlights the role of consciousness and attention in the acquisition of a second language. This claim is also held by other researchers (Baars, 1997; Dörnyei, 2009b; Logan, Taylor, & Etherton, 1999) who state that conscious exposures generally lead to more knowledge. The *noticing hypothesis* also suggests that among the many features of a target language item, what is noticed will be learned. In other words, one learns what one pays attention to. Schmitt (2010: 28) suggests that increased attention and noticing help facilitate vocabulary learning.

Engagement

The acquisition of a lexical item is proportionate to the degree of *engagement* a learner undertakes (Schmitt, 2008). Differently put, the more attention, time, analysis, and processing a learner expends on a novel lexical item, the more likely (s)he is to learn it (Schmitt, 2010: 28). Webb and Nation (2017) use a different term, i.e. *elaboration*, stating that it is one of the conditions involving the quality of attention that facilitate vocabulary learning. These notions are indeed related to Craik and Lockhart's (1972) depth of processing hypothesis and Laufer and Hulstijn's (2001) involvement load hypothesis. These will be further discussed in Section 3.5 as to the cognitive methods to increase the effectiveness of L2 vocabulary acquisition. As discussed in Chapter 2 with regard to attention mechanisms, attention may disassociate with engagement in that the latter involves further and deeper processing of the target (such as relating, analyzing, visualizing, comparing, or using) once the mechanism of executive control of the attention system has detected it.

Using L1 translation

Learning a new lexical unit can be easier if its meaning is written in the learners' first language than in the second language. The reason might be that the first language allows far more ease of understanding than the definition given in second language.Too much information from L2 explanation may distract learning, making it more burdensome at the beginning (Nation, 2013: 447). The study by Laufer and Shmueli (1997) indicated that the learners learned words with L1 translation better than with L2 explanation, and the difference was consistent regardless of whether they learned the words in lists, sentences or extended contexts.

Retrieval

Retrieval refers to the process of recovering the information previously stored in memory (Brown & Craik, 2000). It is claimed that having to retrieve the meaning of a lexical item is superior to seeing it and its meaning at the same time (Baddeley et al., 1984). Also, retrieval assumes 'the testing effect' (Karpicke & Roediger, 2008) that can be conducive to learning. Nation (2013) stated that "if there is a delay between the presentation of a word form and its meaning, learners have an opportunity to make an effort to guess or recall the meaning, and presumably this extra effort will result in faster and longer-retained in learning" (p. 451). He also emphasizes the importance of making learners aware of how retrieval might benefit them in learning.

Learning receptively and then productively

Learners learn a lexical item receptively when seeing its form to recall the meaning, and learning productively is when seeing its meaning to recall the form. To explain for this learning direction, Nation (2013: 458) proposes two reasons. First, at the beginning stage of learning, learners need to establish the basic knowledge of form and meaning of the lexical item before other knowledge is provided. It seems easier to recall the meaning of a lexical unit than to recall its form from the given meaning. Second, if the lexical units are to be learned for receptive purposes, i.e. listening or reading, then receptive learning is best. If they are to be learned for productive uses, i.e. writing or speaking, then productive learning is optimal. The ability to use language items correctly at the initial learning stage is difficult, so it is better for learners to learn to understand them in the language input first.

Spaced repetition

Repetition plays an essential role in vocabulary learning (Nation, 2013; Schmitt, 2008). Also, it is one of the strategies for learning to produce vocabulary in a second language (Ellis & Beaton 1993). Regarding its role in the acquisition of formulaic sequences, N. Ellis (2001) claims that when learners are repeatedly exposed to sequences, chunks or structural patterns, they can remember these items better. Repetition helps learners learn a vocabulary item well because it adds to the quality and the strength of the lexical knowledge of that item (Nation, 2013).

Repetition can be spaced or massed. While massed repetition means spending an extended period of time paying continuous attention to language items, spaced repetition involves spreading the total amount of time to study them. For example, the target language items might be studied for ten minutes today, another ten minutes next week, ten minutes a week later, and finally ten minutes in the last week. The total study time is forty minutes, but it distributes across four times, ten minutes each, instead of only one time of forty minutes. Research evidence (e.g. Baddeley, 1990; Dempster, 1987; Kornell, 2009; Lindsay & Gaskell, 2010; Nakata, 2016) indicates that spaced repetition leads to better learning than massed repetition. Again, there are two types of spacing, namely equal and expanding (Roediger, Zaromb, & Butler, 2009). While the former refers to the spreading of time evenly between intervals (e.g. 7, 7, and 7 days), the latter refers to the increased spreading of time between intervals (e.g. 4, 7, and 10 days).

3.2 Formulaic sequences

3.2.1 Definition and types

Formulaic language has been described under varying names, such as *sentence stems* (Pawley & Syder, 1983), *lexical phrases* (Nattinger & DeCarrico, 1992), *chunks* (N. Ellis, 1996), *multiword items* (Nation, 2013). Wray (2002) and Schmitt and Carter (2004) agreed on the term *formulaic sequences*. Wray defines a formulaic sequence as:

> a sequence, continuous or discontinuous, of words or other meaning elements, which is, or appears to be, prefabricated: that is, stored and retrieved whole from memory at the time of use, rather than being subject to generation or analysis by the language grammar (p.9).

Although this definition does not address some issues of formulaic language, such as semantic transparency (i.e. whether the meaning of a formulaic sequence is the sum of meanings of its components), semantic prosody (i.e. the meaning of a formulaic sequence is formed based on its adjacent collocates) or frequency of occurrence (i.e. how often individual components co-occur in a corpus), it suggests continuity (i.e. whether a formulaic sequence is fixed or whether it has slots for other words to fill in), and psychological consideration (i.e. how a formulaic sequence is stored and retrieved from memory) of a formulaic sequence (cf. N. Ellis, Frey, & Jalkanen, 2009; Schmitt & Carter, 2004). Also, this definition is considered to be quite open (N. Ellis, 2012) because it covers various types of formulaic language.

Formulaic sequences are differently categorized in different methods (e.g. Paquot & Granger, 2012). Garnier (2016) identified six main types: lexical phrases (e.g. *Would you mind*), lexical bundles (e.g. *It appears that*), phrasal expressions (e.g. *when it comes to*), idioms (e.g. *the last straw*); collocations (e.g. *allocate resources*), and phrasal verbs (e.g. *take on*) (see Garnier, 2016, for details on these types of formulaic sequences). It should be noted that although these types of formulaic language differ greatly in semantic transparency, syntactic structure, frequency of occurrence, length, function, register, and so forth (Siyanova, 2010), there is much overlap between them (Garnier, 2016). For example, the Phrase List (Martinez & Schmitt, 2012) includes many lexical bundles (e.g. *for instance*), lexical phrases (e.g. *likely to*), and phrasal verbs (e.g. *take up*).

Following Schmitt's (2010) recommendation, in the present study, the term *formulaic language* will be used as blanket term to cover all kinds of word combinations whereas the term *formulaic sequences* will refer to its individual instances. The focus of this thesis is on the formulaic sequences in the Phrase List by Martinez and Schmitt (2012).

3.2.2 Advantages for L2 learners of knowing formulaic language

As mentioned in the introduction, knowledge of formulaic sequences has value for language learners. To begin with, formulaic language contributes to the smoothness in communication (Pawley & Syder, 1983; Schmitt, 2013). In fact, it is claimed that to be fluent and natural in the use of a second language, large knowledge of formulaic sequences in that language is essential (Biber, Conrad, & Cortes 2003; Nattinger & DeCarrio, 1992; Schmitt & Carter, 2004; Wray, 2002). This is probably because when formulaic language is stored in the memory as single

units, it may be cognitively relatively undemanding for second language learners to retrieve them (Dörnyei, 2009b: 194). In other words, with its own semantic entry, formulaic language requires less decoding than individual words in communications, enabling communicators to better interact with others socially, minimizing the risk of misunderstanding (Wray, 2012: 232). In comparison with grammar, Widdowson (1989) proposes that to communicate well, the knowledge of formulaic language is more important than that of grammatical rules. The idea that formulaicity promotes fluency is supported by substantial empirical research (e.g. Eyckmans, 2007; Hsu & Chiu, 2008; Schmitt, Jiang & Grabe, 2011; Wood, 2006).

Furthermore, knowledge of formulaic sequences may help expedite comprehension (Nation, 2013). The reason for this could be that language processing is sensitive to sequence information (N. Ellis, 2002). Language users tend to look for opportunities to link form to meaning at the multiword level, and only break formulaic sequences down when necessary (Sinclair, 1987), thereby allowing quicker understanding. This processing advantage of formulaic sequences is corroborated by a large number of empirical studies (e.g. Conklin & Schmitt 2008; Jiang & Nekrasova, 2007; Libben & Titone, 2009; Siyanova-Chantura, Conklin, & Schmitt, 2011; Siyanova-Chantura, Conklin & van Hueven, 2011; Tremblay & Baayen, 2010).

Evidence also suggests positive correlations between knowledge of formulaic sequences and language proficiency, which can be the result of improved communicating and comprehending abilities. For example, the correlation was up to r=.60 for spoken scores in Stengers *et al.*'s (2010, 2011) studies. Similarly, learners' collocational knowledge correlated with the results of TOEFL tests in Bonk's (2001) study. Koosha and Jafarpour (2006) reported a positive correlation between learners' knowledge of collocations and their overall scores in the Michigan Test of English Language Proficiency. On these accounts, it appears that a large repertoire of formulaic sequences contribute substantially to success in L2 learning.

3.2.3 Knowledge of formulaic sequences

According to Nation and Webb (2011), there are three main aspects of knowledge of formulaic sequences, i.e. form, meaning, and use, as presented in Table 3.1. In this way, learning an L2 formulaic sequence involves learning to recognize or recall multiple aspects of how it is formed, what it means, and how it is used. Considering the acquisition of formulaic sequences in instructed L2 contexts, it is important to take into account these knowledge aspects. From the

cognitive perspective, if a learner is able to use the sequence fluently without thinking about any of these knowledge aspects, (s)he has acquired the implicit knowledge of the sequence. According to Hulstijn (2001: 259), this involves knowledge of *automatic use* of vocabulary in which learners use vocabulary quickly, unintentionally, and unconsciously without being cued or controlled. If an L2 learner has not been able to use the sequence automatically but can recognize or recall one or several aspects of knowledge of a target formulaic sequence, (s)he has acquired part of explicit knowledge of this sequence. In the quasi-experimental studies of the current thesis, receptive knowledge of form and meaning of target formulaic sequences is measured through multiple-choice tests.

Table 3.1: Aspects of knowledge of a formulaic sequence (FS) (Adapted from Webb and Nation, 2011: 190, R= receptive knowledge, P = productive knowledge)

FORM	Spoken	[R] What does the FS sound like? [P] How is the FS pronounced?
	Written	[R] What does the FS look like? [P] How is the FS written and spelled?
	Word parts	[R] What words are recognizable in this FS? [P] What words are needed to express the meaning?
MEANING	Form and meaning	[R] What meaning does this FS signal? [P] What FS can be used to express this meaning?
	Concept and referents	[R] What is included in the concept? [P] What items can the concept refer to?
	Associations	[R] What other words or FS does this make us think of? [P] What other words or FS could we use instead of this one?
USE	Grammatical functions	[R] In what patterns does the FS occur? [P] In what patterns must we use this FS?
	Collocations	[R] What words, FSs or types of FSs occur with this one? [P] What words, FSs, of types of words must we use with this one?
	Constraints on use (register, frequency,	[R] Where, when, and how often would we expect to meet this FS?

	etc.)	[P] Where, when, and how often can we use this FS?

3.2.4 L2 learners' knowledge of formulaic language

Although some studies show that L2 learners know many formulaic sequences (e.g. Schmitt, Dörnyei, Adolphs, & Durow, 2004; Spöttl & McCarthy, 2004), substantial research suggests that they have a limited knowledge of formulaic language. For example, when surveyed on knowledge of the form and meaning of collocations, learners in EFL contexts were shown to know only 33% (Macis & Schmitt, 2016), or 56.6% (González-Fernández & Schmitt, 2015) of those tested. Although advanced learners may have good receptive knowledge of formulaic sequences, they do not use them effectively (Bardovi-Harlig, 2009; Siyanova & Schmitt, 2008). Instead, they tend to overuse, underuse, or misuse them (Paquot & Granger, 2012). For example, L2 learners either rely on a narrow range of high-frequency items (Durrant & Schmitt, 2009), turn to using non-native-like patterns translated from their first language (Laufer & Waldman, 2011; Yamashita & Jiang, 2010), or only use a small number of familiar items that they feel safe and confident using (Granger, 1998).

There are two main reasons that might explain this phenomenon. First, there are inadequate opportunities for explicit learning of formulaic sequences. Given that explicit learning of lexical items requires attention and efforts, it is highly unlikely that many learners spend much time learning formulaic language out of classroom. Similarly, chances are that they do not learn much of this language in classroom because formulaic sequences such as collocations are not normally taught (Schmitt & Carter, 2004). Even if other formulaic sequences are explicitly instructed, single sessions of teaching before comprehension tasks may be not only ineffective but also counterproductive in some cases (Schmitt, 2008). For example, Bishop (2004) found that formulaic sequences were not learned despite they were highlighted and looked up in a reading text. Similarly, explicit learning of vocabulary before a comprehension task can distract the overall understanding of the passage (Chang & Read, 2006). These may prompt teachers to shy away from teaching them explicitly in language classes. Second, there is little chance for incidental learning of formulaic sequences to occur in and outside classroom settings. Over the course of a language program, L2 learners are likely to meet a new item in context once or twice. Outside the classroom, most learners use their mother tongues to communicate with their peers, parents, or colleagues, who do not speak the L2. Thus, chances to

incidentally reencounter the formulaic sequence they have already met in classroom are minimal. Although the acquisition of a word depends on a number of other factors such as its morphology, the interest of the learner, the salience of the word in the text, whether it is recognizable as a cognate, or whether the context clues are available or rich (Huckin & Coady, 1999: 185), learners generally need 5 to 16 exposures to acquire a word (Nation, 1990). The same may hold true for a formulaic sequence.

3.2.5 Frequency-based lists of formulaic language in L2 pedagogy

As formulaic sequences are essential in language acquisition and language performance, they are worth teaching (Nattinger & DeCarrico, 1992: 32). However, one issue concerning ISLA is what sequences to teach given that they are widespread in language use. For example, Pawley and Syder (1983) assumed that there could be several hundreds of thousands of formulaic sequences in the English language. Erman and Warren (2000) suggest that formulaic sequences account for 52-58% of the English language analyzed. In different study procedures and criteria, Foster (2001) estimated a figure of 32%. This learning burden may dishearten many second language learners. In the same way, curriculum designers may be unsure of the extent of formulaic language to be included in language programs. Hence, the number of items to learn needs to be limited to make learning and teaching goals attainable. To address this concern, it is believed that well-made lists of formulaic language are useful for teachers and language program designers to work from (Nation, 2013). In response to this need, frequency-based lists such as the collocation list (Shin & Nation, 2008), Academic Formulas List (AFL) (Simpson-Vlach & Ellis, 2010), the PHRASal Expression List (PHRASE List) (Martinez & Schmitt, 2012), or the Phrasal Verb Pedagogical List (PHaVE List) (Garnier & Schmitt, 2014) have been created.

To identify the items for these lists, the researchers relied on three main approaches: form-based approach, meaning-based approach, and storage-based approach. The form-based approach takes into consideration the following criteria: adjacency (i.e. whether the words in each formulaic sequence occur right next to each other, such as *on balance* vs. *offer__ a job*), grammatical well-formedness (i.e. whether the formulaic sequence is a complete grammatical unit, such as *now and then* vs. *from the perspective of*), grammatical variation (i.e. whether the words in the formulaic sequence occur in a fixed grammatical form, such as *on the contrary* vs. *does him a favor*), and lexical variation (i.e. whether the words in the formulaic sequence include

some substitutable words of related or similar meaning, such as *twice a day* vs. *on the other hand*) (see Nation & Webb, 2011, for further details on this approach).

The meaning-based approach considers how obviously the meanings of the parts are related to the meaning of the whole formulaic sequence. The criteria include compositionality (i.e. whether the meanings of constituents make up the whole meaning of the formulaic sequence) and figurativeness (i.e. whether the formulaic sequence is interpreted in a figurative meaning or a literal meaning). This approach categorizes three types of formulaic sequences: core idioms (i.e. the meaning of the whole is not apparently related to the meaning of the constituents), figuratives (the meaning of the whole is figuratively interpreted), and laterals (the meaning of the whole can be related to the meanings of the constituents) (see Grant & Bauer, 2004, for the classifications of formulaic sequences according to these criteria). The storage-based approach is concerned with whether formulaic sequences are stored in memory as whole units. This approach is established because some formulaic sequences cannot be well explained by the form-based or the meaning-based approach. For example, Nation (2013) illustrated that the formulaic sequence *pull someone's leg* can be in a number of forms such as *you're pulling my leg, my leg was being pulled,* or *just giving your leg a gentle tug*. In this case, the idea that a formulaic sequence is stored as a fixed unit in mental lexicon needs consideration.

The items on the list were decided based on both computer-based processing and human judging. Specifically, the researchers analyzed corpus data to identify recurring sequences with their information of frequency of occurrence in the corpus, and then, from their wealth of experience in the language, and following the aforementioned approaches and criteria, they decided items to be included in the lists. From this way of analysis, the lists of useful formulaic sequences were created, with the items ranging from several hundreds to several thousands, making it possible for the lists to be used in classroom settings. Learning from these lists may allow learners to get the most return from their learning efforts. For one thing, learners are sensitive to the frequency of formulaic sequences (Arnon & Snider, 2010; Vilkaite, 2016), and thus they need to learn items that they will soon reencounter in texts before learning those that are less frequent (Nation, 2013: 486). For another thing, the fact that the items are judged by experienced instructors to be worth teaching (Simpson-Vlach & Ellis, 2010) make these lists more pedagogically relevant.

3.2.6 The Phrase List

Martinez and Schmitt (2012) compiled the PHRASE List with the purpose that the formulaic sequences in the list would be included in learning materials, such as ESL/ESL textbooks, or in vocabulary tests to teach and assess receptive knowledge. They used three criteria: frequency of occurrence, meaningfulness, and relative non-compositionality. The list represents two main points, among others. First, it includes items that may cause trouble for learners at a receptive level (i.e. learners who are learning primarily to read and listen to the language before using it at a productive level). In other words, it comprises items that learners 'think they know but they do not' (Laufer, 1989: 11). To make the items seem familiar with the target learners, nearly 98% of the words in the list are from the first 2,000 English words. Despite this coverage, the formulaic sequences on the list might be difficult for learners at this level to understand because they are relatively non-compositional. For example, learners may know every single word in the item *when it comes to*, but this doesn't necessarily mean that they understand the meaning of the whole sequence. To address this purpose, the minimum frequency cut-off for the items was decided at 787 occurences in the British National Corpus. This figure is equivalent to the cut-off point for the most frequent 5,000 word families in the British National Corpus. Furthermore, although many of these items that have several meaning senses (i.e. polysemous items), only those with less compositional senses are included. The frequency of each of these polysemous items is based on its least compositional sense.

Second, the formulaic sequences in the list can be processed in the same way as single words are. This was addressed with the researchers relying on the criteria that there is likely to be the presence of a one-word equivalent in L1 or L2 for the sequence (e.g. *with respect to* is equivalent to *regarding*, *used to* is equivalent to *costumava* in Portuguese). One argument in favor of this idea is that even though a one-word equivalent cannot be found in the language, it can be found in another language, and therefore it appears evident that the formulaic sequence represents a single morpheme (Zgusta, 1967). Furthermore, most of the 505 formulaic sequences in the list are adjacent items rather than nonadjacent ones (e.g. *make sense* vs. *make* an interesting *point*). Because the facilitative effect appears larger for adjacent sequences than for nonadjacent ones (Vikaite, 2016), the former may be processed faster than the latter. Thus, learning of the items on the list might be similar to that of single words.

By virtue of these two criteria, the PHRASE List was used in the present thesis. For one thing, the list was targeted at the learners who are similar to those participating in the present study. They were low-intermediate learners whose vocabulary level was generally below, but approaching 2000 word families. At this level, they may know individual words in the formulaic sequences, but are unlikely to know the sequences. The instruction of items from this list for these learners thus served the research purpose. Furthermore, the research was carried out over a regular language program in Vietnam, which used a textbook by Pearson for communicative purposes. The learners were first-year engineering learners taking this program as a language preparatory course. From pedagogical perspective, this meets the expectation that the PHRASE List would be integrated into learning materials, vocabulary tests, and learning syllabuses (Martinez & Schmitt, 2012: 299). For another thing, the formulaic sequences on the list were assumed to be processed as if they were single words. This seems appropriate for the purpose of the present study, which investigated the degree of effectiveness of language-focused teaching of formulaic sequences, and to compare the difference between teaching in a sentence-context condition and a decontextualized condition.

Approaches to teaching formulaic sequences can be based on evidence from vocabulary learning research because they are considered as a type of lexeme (Schmitt & Carter, 2004). Nation and Newton (1997) offer a useful distinction between two main approaches to vocabulary teaching in traditional language classes: direct and indirect. In the former approach, teachers pay direct attention to teaching new items through activities such as doing vocabulary exercises (e.g. matching words with definitions), vocabulary testing, and rote learning. Through direct teaching in the classroom, explicit learning may occur. In the latter, vocabulary items are introduced as part of the input. Instruction can include vocabulary learning in meaning-based activities such as information gaps, group work, listening, or reading activities. In this way, target vocabulary can be incidentally learned. Nation and Newton also note that in language classes, these are not two alternative approaches, but they may be complementary to each other. These two teaching approaches lead to two different learning modes: incidental and explicit (Schmitt, 2000). Indirect teaching may lead to incidental learning of vocabulary, by which lexical items are learned as a byproduct of meaning-focused activities such as reading, listening, or speaking. Direct teaching leads to explicit learning of vocabulary, with learners deliberately directing their attention towards lexical items (Schmitt, 2000). Explicit learning from direct instruction includes activities

such as learning from word cards, using translation, using dictionaries, teacher explanation, or doing exercises (Nation, 2013).

Encountering a word many times in input can lead to incidental learning of that word (Nagy & Anderson, 1984). Substantial research has suggested the effects of frequency of occurrence on incidental learning from reading (e.g. Pellicer-Sánchez, 2016; Pellicer-Sánchez & Schmitt, 2010; Waring & Takaki, 2003; Webb, 2007a), and listening (e.g. van Zeeland & Schmitt, 2013; Vidal, 2011). There is also potential for incidental learning of vocabulary from watching movies (Webb & Rodgers, 2009a) or television programs (Webb & Rodgers, 2009b). Overall, findings suggest words encountered from three to six times in short contexts (i.e. sentences or passages) may be learned significantly better than those encountered once or twice. However, eight to 10 encounters may be needed for some aspects of word knowledge to be incidentally learned from longer reading texts such as grade readers or authentic novels.

Research also suggests that explicit activities can foster the learning of words (e.g. Laufer & Girsai, 2008; Peters, 2012; Webb, 2005, 2007b). Explicit learning of words in isolation or after meaning-focused tasks tends to be more effective than explicit learning integrated into meaning-focused tasks (Laufer; 2006; Laufer & Rozovski-Roitblat, 2011). This may be because in the former, words can be treated as the objects of study while in the latter, they can be regarded as tools for task performance (Laufer, 2006). Furthermore, repetition and retrieval are linked to explicit learning of words. For example, Peters (2014) found five repetitions superior to one for recall of word form. Nakata (2016) found that five and seven retrieval times were significantly more effective than once and three times in terms of form and meaning recall. Overall, according to Schmitt (2008), although explicit learning of words tends to be more effective than incidental learning in terms of the extent and rate of learning, retention and production, explicit teaching of vocabulary does not appear to be a major component of language classes.

Despite the considerable empirical evidence for the incidental learning of single word items, so far very few studies have explored the effectiveness of different modes of exposure for the incidental learning of formulaic sequences. Durrant and Schmitt (2010) provided evidence for the incidental learning of collocations encountered once or twice in sentence contexts. Items encountered twice were learned better than those encountered once in a form recall test. Webb,

Newton and Chang (2013) suggested positive effects of reading-while-listening on the incidental learning of collocations. Learners learned form and meaning of the target items when encountering them 5, 10, and 15 times from reading-while-listening to a grade reader. Pellicer-Sánchez (2015) also found significant incidental learning of adjective-pseudoword collocations appearing four and eight times in a short story.

Previous research has also shown the possibility of learning formulaic sequences explicitly. Teaching 30 idioms over six weeks, Alali and Schmitt (2012) found that the participants could recognize the form and meaning of almost all idioms taught, but could recall only 8% of them. Zyzik (2011) found significant learning in both recognition and production tasks after teaching 38 Spanish idioms over ten sessions. To teach 65 formulaic sequences over ten weekly sessions, AlHassan and Wood (2015) devoted 80% of class time to presentation and practice and 20% to uncontrolled production. They unsurprisingly found that the participants could use significantly higher numbers of formulaic sequences in their writing posttest than in the pretest. Research has also suggested that frequency of exposure also seems to have an effect on the explicit learning of formulaic sequences. For example, Peters (2014) and Webb and Kagimoto (2009) found significantly better learning when explicit encounters increased.

3.3 Intervention studies involving explicit learning of formulaic sequences

The studies reviewed in this section are divided into two categories: a) those examining only explicit learning techniques and b) interventions investigating the effectiveness of an explicit learning component incorporated with incidental learning in "a real classroom setting" (cf. DeKeyser, 2003: 324).

It is noteworthy that research findings have shown that formulaic sequences with the following features appear to be easier to learn. First, they are alliterative, i.e. formulaic sequences whose components having the similar sounds, such as *fatally flawed,* (e.g. Boers, Lindstromberge, & Eyckmans, 2012; Lindstromberg & Boers, 2008). Second, they are easily visualized (e.g. Condon, 2008; Steinel, Hulstijn & Steinel, 2007; Szczepaniak & Lew; 2011). That is, there can be mental representations or pictures to illustrate target sequences. For example, learners may have a mental image for the idiom *elephant in the room*. Third, they are congruent, i.e. formulaic sequences which have literal translation equivalents (see, for example, Peters, 2015). However, these advantageous qualities seem limited to a certain number or to a

particular type of formulaic sequences such as idioms. The two intervention studies of the present thesis did not take into account such unique features of formulaic sequences. Rather, they were concerned with a general range of formulaic sequences such as *when it comes to*, examining explicit teaching types incorporated into language programmes whereby an incidental component was also included. Intervention studies on formulaic language of the above features are thus not reviewed in this section.

3.3.1 Studies on explicit learning of formulaic sequences

Table 3.1 presents an overview of research investigating the explicit learning of formulaic sequences using instructional techniques such as presentation and practice (Alali & Schmitt, 2012; AlHassan & Wood, 2015), or dictionary use (Dziemianko, 2010; Laufer, 2010). As can be seen, overall these techniques are conducive to the retention of the knowledge of formulaic language measured, and the retention appears durable. Except for the findings by Laufer (2010) on using dictionaries, all studies reported on significant immediate gains in the knowledge of formulaic sequences measured. All of the studies that used delayed posttests suggested durable gains, for at least one of the measures employed.

Table 3.2: Overview of studies on explicit learning of formulaic sequences

Authors	Learners' level	No. of target items	Type of formulaic sequences	No. of intervention sessions	Intervention time (minutes)	Types of test	Significant immediate gains	Significant delayed gains
Chan & Liou (2005)	NA	36	Collocations	5	NA	Form-meaning link	Yes	Yes
Webb & Kagimoto (2009)	Intermediate	24	Collocations	1	90	Form-meaning link	Yes	NA
Durrant & Schmitt (2010)	Upper intermediate	10	Collocations	1	7-15	Form-meaning link	Yes	NA
Dziemianko (2010)	Upper-intermediate & advanced	13	Collocations	1	NA	Form-meaning link	Yes	Yes
Laufer (2011)	Intermediate	30	Collocations	1	90	Form-meaning link	No	NA
Zyzik (2011)	Upper-intermediate	38	Idioms	10	150	Form-meaning link	Yes	NA
Alali & Schmitt (2012)	Intermediate	30	Idioms	3	30	Form and meaning recall, form recognition	Yes	Yes

						Meaning recognition	Yes	No
Sonbul & Schmitt (2013)	Native	5	Collocations	1	NA	Form-meaning link,	Yes	Yes
						Reaction times	No	No
AlHassan & Wood (2015)	From low-intermediate to advanced	65	Collocations and other formulaic sequences	10	900	Essay writing	Yes	Yes
Stengers, Deconinck, Boers, & Eyckmans (2016)	Advanced	25	Idioms	1	25	Form-meaning link	Yes	Yes

Note: NA = not available

As shown from Table 3.2, it appears that low proficiency learners were not the focus of the majority of the above studies. Given that learners' language proficiency is correlated with their vocabulary levels (Stæhr, 2009), the lower a learner's language proficiency has, the lower the vocabulary level he or she has. In practice, explicit instruction of vocabulary is normally used for low-proficiency learners rather than high-proficiency ones. Hence, high-frequency vocabulary should be the unit of instruction for low-proficiency learners (Schmitt & Schmitt, 2014). However, as Table 3.2 suggests, to date only one study (AlHassan & Wood, 2015) has been found to involve a mix of low-intermediate and advanced ESL learners, and another three studies (Aladi & Schmitt, 2012; Laufer, 2011; Webb & Kagimoto, 2009) have included intermediate learners. This gap in the literature thus needs to be filled.

Six out of ten studies investigated a particular technique of explicit learning. For example, Webb and Kagimoto (2009) examined learning formulaic sequences in receptive and productive conditions. Despite allowing researchers to strictly control factors that may affect learning, these studies were conducted within the time frame of a single session, and in lab-based conditions. This might be subject to the objections concerning contextual validity (Durrant & Schmitt, 2010).

Four studies were carried out as long interventions in classroom settings. These studies compared the effectiveness of a range of explicit teaching techniques across several intervention sessions. For example, Zyzik (2011) compared two ways of grouping idioms: the idioms thematically categorized and the idioms sharing the same main verb. The treatment lasted ten weeks with a range of explicit learning activities. In each fifteen-minute lesson, the learners followed three activities: reviewing the idioms learned in the previous session in the form of active recall, inductively learning 3-4 new items from short contexts, and doing exercises to reinforce items they had learned. Nonetheless, these four studies required the creation of new learning materials for the research purposes, and the explicit learning approach employed was the only component of the language programmes. In practice, explicit learning of L2 vocabulary is often not the only component of a language programme. Nor is it likely to be separated from incidental learning in the form of activities involving meaning-focused input, meaning-focused output, or fluency development (cf. Nation, 2013).

Although the findings from these studies are informative and worthwhile, research findings taking pedagogical practicality into account would be a useful addition to the field. That is, it might be important to provide the field with evidence as to how teaching interventions (which utilize the same or similar materials in use in the language programmes whereby the interventions takes place) has improved current teaching practices.

3.3.2 Studies on explicit learning incorporated with incidental learning in regular classroom settings

As mentioned in the previous section, many of the research findings suggest the effectiveness of an explicit learning approach on learning formulaic sequences. However, to my knowledge, only four studies have been carried out on the incorporation of explicit learning with meaning-focused input for extended periods of time (from ten weeks to eight months) in classroom contexts. Table 3.2 provides an overview of these studies.

As can be seen, there are contradicting findings on the effects of this strategy on gains of the knowledge of formulaic language across the four studies. However, the variation in the effectiveness seems dependent not only on the techniques employed but also on a number of factors such as learners' pre-existing knowledge of target items, learners' proficiency levels, study designs or test types.

Jones and Haywood (2004) used academic texts which were adapted to increase the occurrences of target multiword items. The treatment included reading and writing components with a variety of explicit learning activities such as items being classified into groups, investigated for usage patterns with concordance lines or corpus extracts, discussed for functions in context and usefulness in writing, reviewed with gap-fill exercises, and used in learners' writing tasks. There were 74 formulaic sequences selected on frequency basis and they were learned in the regular activities during the trimester. To assess the effects of the treatment, a three-component measure was used. The first was a text to examine the ratio of highlighted formulaic sequences and single words. The second was a C-test, in which learners had to fill in the gap the missing letters of target formulaic sequences in context (test of form and meaning recall). The third was an end-of-course essay to measure productive knowledge (test of automatic use). Despite the fact that subjects highlighted more items than their comparison group did, their C-test scores showed an increase from 1.7 to 1.85 items. However, it is unknown whether this

improvement was statistically significant because statistical tests were not used due to the small number of learners. The end-of-course essay revealed no evidence of use of more formulaic sequences than that of their control peers, indicating that the treatment was not effective in terms of retention of target formulaic sequences.

Table 3.3: Overview of studies on the combination of explicit and incidental learning over extended periods of time in the classroom context

Authors	Duration of study	Number of target items	Gains in tests of form and meaning recognition	Gains in tests of form and meaning recall	Gains in tests of automatic use
Jones & Haywood (2004)	Ten weeks	74	NA	NA	No
Schmitt *et al.* (2004)	Three months	20	Yes	Yes	NA
Boers *et al.* (2006)	Eight months	NA	NA	NA	Yes
Stengers *et al.* (2010)	Eight months	NA	NA	NA	No

Note: NA = not available

In Schmitt *et al*. (2004), target items were selected based on three criteria, namely degree of frequency, connection with academic discourse, and usefulness to learners. In this study, in addition to learners being exposed to target sequences in the reading materials, they received deliberate language-focused instruction from the teachers in a variety of ways without being aware of the target items. The study was carried out on intermediate learners during a period of ten weeks of an actual ESL course. To measure the knowledge of formulaic sequences gained, multiple tests including a Vocabulary Levels Test (Schmitt, Schmitt, & Clapham 2001), a C-test with context, and a multiple-choice test with context (test of form and meaning recognition) were

used. Although the study suffered a ceiling effect when learners already knew many target items before the experiment, significant gains between pretest and posttest scores were found with productive scores showing the greatest improvement. Boers *et al.* (2006) asked advanced EFL learners to listen to audios or videos for comprehension, and then do several gap-fill exercises created based on the transcripts. This was meant to draw learners' attention to formulaic sequences. Other explicit learning activities involved highlighting or underlining formulaic sequences in the reading texts or transcripts provided. Learners were consistently guided to follow these activities during 22 teaching hours spreading over a period of eight months. Learning gains were measured by a two-section spoken task whereby learners were first asked to reflect on an article they had just read and then discussed on a familiar topic. Results showed a significant difference in the number of formulaic sequences used by the treatment group compared to the group who had not been drawn attention to the formulaic sequences. Unfortunately, the significant gains were likely to be due to the fact that learners, who had been familiarized with attention to formulaic sequences, may have used rehearsal tactics to remember them and thereby performed better than the control group did. Stengers *et al.* (2010) repeated this experiment with new advanced EFL subjects who were given an L1 text in Spanish to read and then asked to reflect the text's contents in spoken English. The pretest-posttest gains showed no significant difference between those who had been used to being attentive to formulaic sequences those who had not.

It should be noted, though, that there are a number of outstanding issues concerning the aforementioned studies. First, Schmitt *et al.* (2004) acknowledged the limitation that the study did not have a control group. It is thus unclear whether the gains in the tests of form-meaning recognition and recall were attributed to the teachers' instruction and the learners' exposure to the target formulaic sequences during the programme. Second, the other aspects of knowledge of formulaic language that may have been learned were not tested (Webb, 2005) in these studies. To be precise, half of the studies (Boers *et al*., 2006; Stengers *et al.*, 2010) only measured the knowledge of automatic use. Similarly, none of the studies measured the knowledge of form-meaning link. Third, there was a concern over whether the test design favored the treatment group, which may have contributed to the improvement of the test scores (Boers & Linstromberg, 2012) in Boers *et al*. The replication of this study by Stengers *et al.* reported no significant gains in the learners' test scores. Fourth, none of these studies used a delayed posttest

to measure the long-term gains. It is thus unknown whether the gains of formulaic language in Schmitt *et al.* were durable. Fifth, from the perspective of practical implementation, the study of Jones & Haywood (2004) involved manipulation of learning materials, i.e. adapting the texts for learning to occur. While designing new materials for particular research purposes may be necessary, it would also seem useful to consider ways to make use of existing learning materials that could lead to the similar effectiveness. Sixth, although formulaic language appears essential, it is only one of the many features and skills of the language that needs to be attended to over a language program. In this respect, it seems pedagogically beneficial if studies take into consideration the estimated proportion of time to be expended on explicit learning of formulaic language in comparison with the total course time. However, this was not mentioned in these studies. Finally, it is uncertain whether the learners who received the explicit instruction learned significantly more formulaic sequences than those who only encountered them in the learning materials or the tasks in the classroom. It could be argued that this direct comparison was not the focus of these studies. Thus, this pedagogically-oriented information tends to be a significant contribution to the growing body of research on formulaic language.

3.4 Contextualized learning of words

While research suggests that explicit learning is effective for the acquisition of vocabulary, a further issue is whether explicit learning with sentence context is better than without. On one hand, it is argued that vocabulary should be taught in context because when a new word is naturally associated with other words in that context, it may be easier to be learned (Taylor, 1983). Similarly, when learning a word with a sentence, learners can learn other aspects of knowledge such as its part of speech or the places it usually occurs in a sentence (Webb, 2007b). On the other hand, learning words without context may be less demanding and more effective because the form-meaning link is straightforward (Seibert, 1930) and the words become the focus of study (Laufer, 2006).

However, research has presented inconsistent conclusions regarding the differences in learning words with and without context. In an early study, Seibert (1930) had one group read aloud a list of twelve words with translations while the other read them with context sentences. The recall tests were in both sentence-context and no-context conditions. The results suggested that learning the words in isolation was better than with context. Similar results were found by

Golonka *et al.* (2015). Their learners were presented with 60 target words learned across six sessions. They found that in the immediate posttest, learning words with no context was better than with sentence context. Other studies have failed to observe a difference between the learning of words with or without context. For example, Pickering (1982) presented 20 words and their translations to one group, but with sentence context to the other. The participants learning words in isolation took a decontextualized test of form and meaning recall while the other was given a similar test but with context sentences. The findings indicated no differences in learning words in the two conditions. In a study by Dempster (1987), one group learned 38 words in isolation, another learned each word with one sentence, and a third group learned with three sentences. The results from a decontextualized meaning recall test revealed no differences in learning across the three conditions. Similarly, in Laufer and Shmueli's study (1997), one group studied 20 target words with either L1 definitions, L2 definitions, or synonyms, a second group studied the same materials but read the sentence context, and a third group studied the words with more extended contexts. A decontextualized form and meaning recognition test was used and the results revealed no significant differences in learning. Webb (2007b) used 20 nonsense words matched with L1 meanings of 20 low frequency English words as target items. Each group was given a list of word pairs either with or without sentences. All target words in the sentences were in bold and underlined. Findings suggested no differences in learning between the two groups. The potential advantage of learning words in sentence contexts seems to be modulated by learners' level of proficiency. Griffin (1992) asked two groups of learners to study lists of 20 target words in with or without sentence context. Learning in both groups was measured by a test of form-meaning link. The findings suggested that for advanced learners, learning with sentence context was more effective than without, while for low-proficiency learners no difference was found. Table 3.4 provides a summary of these studies.

Table 3.4: Overview of studies comparing explicit learning of single words in sentence-context (C) and no-context (N) conditions

Authors	No. of target items	No. of Intervention session	Type of test	Learners' level	Immediate posttest	Delayed posttest
Seibert	12	1	Form-meaning link	NA	C < N	C < N

(1930)						
Pickering (1982)	20	1	Form-meaning link	NA	C = N	NA
Dempster (1987)	38	1	Form-meaning link	NA	C = N	NA
Griffin (1992)	20	1	Form-meaning link	Advanced	C > N	C > N
				Lower proficiency	C = N	C = N
Laufer & Shmueli (1997)	20	1	Form-meaning link	NA	C = N	C = N
Webb (2007b)	20	1	Orthography, form-meaning link, controlled production, sentence use, automatic use	Intermediate	C = N	NA
Golonka *et al.* (2015)	60	6	Vocabulary Knowledge Scale	Intermediate	C < N	C = N

Note: C > N = sentence-context learning is better than decontextualized learning; C = N = sentence context learning is not different from decontextualized learning; C < N = decontextualized learning is better than sentence – context learning; NA = not available.

There were a number of issues regarding these studies. First, the long-term effectiveness of the experiments seemed undetermined in most of the studies. Specifically, apart from the study by Seibert (1930) and Laufer and Shmueli (1997), which reported on the durable gains of the treatments, four studies did not use delayed posttests and two studies reported a significant drop in gains. Second, except for the study by Golonka *et al.* (2015), which used the presentation and practice procedure, most of the studies followed the approach of list learning, in which learners were given paired associate word lists, with or without sentence contexts and asked to study them within a short period of time (i.e. around 30 seconds for each word). This technique does

not involve much direct instruction from the teacher (Oxford & Crookall, 1990). Within the context of classroom practice, vocabulary learning activities that involve more teacher instruction are needed (Folse, 2010). Third, within the approximately 30 seconds given to learn each new word, it seemed uncertain whether the learner spent this short time to read the extra sentence that followed or they made use of the time only to remember the form-meaning link of the word. In other words, in the list learning activities, there was not much attempt to control whether learners attended to reading, processing and making use of the sentence contexts within the time given. Unless the sentence contexts were, to some extent, read, analyzed, or processed by the learners, it seems hard to determine whether they were conducive to learning or not. If it was the case that learners barely read, analyzed or processed the sentence contexts, it is not surprising that there were no differences between learning words in isolation and learning them with the sentence contexts. In fact, it is claimed that once the context sentences are read, some degree of syntactic and semantic processing will occur because in this way, learners may treat the task of learning words with context sentences as a semantic task (Griffin, 1992: 106). Third, except for Webb's (2007b) study, it was not clear in other studies whether the sentences selected for the treatment were simplified to the extent that suit the learners' language proficiency so that they had little trouble understanding the contexts and thereby taking advantage of them. Finally, apart from the only study by Golonka *et al.* (2015), none of these studies was a long-term intervention in a regular classroom setting.

Furthermore, in addition to the conflicting evidence for the role of context in vocabulary learning provided by the aforementioned studies, they all investigated single words. Thus, the effect of context on the learning of formulaic sequences is still unknown. It can be hypothesized that learning formulaic sequences with context sentences would be better than without. Presenting formulaic sequences in sentence contexts could help learners to understand the semantic constraints of their use. Formulaic sequences vary in their degree of fixedness. Although some are fixed groups of words (e.g. *on the other hand*), others have slots in which different words can be filled (e.g. *take __ for granted*). The words that can fill these slots are often limited to those with particular meaning senses (Schmitt, 2010). For example, the formulaic sequence *manage to* __ is used to mean to "succeed in doing or dealing with something, especially something difficult" (Cambridge Dictionary, n.d.). The verb that can be used in the slot should convey a degree of achievement. Therefore, it sounds natural to say *She*

managed to overcome the challenges, but strange to say *She managed to fail the exam*. The use of sentence contexts in the teaching of formulaic sequences, could help learners to understand these constraints. However, empirical evidence is yet to support this hypothesis.

3.5 Cognitive methods to increase the effectiveness of L2 vocabulary acquisition

To enhance vocabulary acquisition, varying vocabulary learning strategies (cf. Gu & Johnson, 1996; Schmitt, 1997; Segler, Pain, & Sorace, 2002), involving attention, perception, memory, and/or thinking (i.e. cognitive processing) of the target items, have been investigated. In the following, I review the cognitive methods of vocabulary acquisition in the light of the Involvement Load Hypothesis by Laufer and Hulstijn (2001) and the notion of *engagement* by Schmitt (2008).

3.5.1 Involvement Load Hypothesis in vocabulary learning

One explanation why a lexical item is learned better than other lexemes may be that a greater amount of attention and engagement is devoted to the former than to the latter (Laufer, 2017; Schmitt, 2008). This argument is also related to the level-of-processing hypothesis by Craik and Lockhart (1972), which holds that a decisive factor for new information to be remembered is how shallow or deep it is processed in the beginning. That is, to retain new information, not only does level of attention matter, but the quality of attention is important as well.

The challenge in the introduction of depth of processing into vocabulary teaching and research though is how to observe, manipulate, and measure the degree of attention and engagement (Laufer, 2017: 350). In an attempt to address this, Laufer and Hulstijn (2001) proposed the Involvement Load Hypothesis, a construct of involvement consisting of three components. The first is *need*, which indicates the wish to use a lexical item to complete a language task (i.e. the need to look up a word in a dictionary to complete an essay writing task). The need can either be externally imposed or intrinsically driven. The second is *search*, meaning to attempt to find a lexical item (e.g. by asking a teacher) to comprehend a text or to express a certain meaning. The third component is *evaluation*, which refers to the comparison of a target item with other items to ascertain that it best fits the context being considered. The comparison is through either doing a vocabulary exercise or writing an original sentence or a composition. Each component has three degrees of prominence (0 = absence, 1 = moderate presence, 2 = strong presence), indicating the increasing levels of strength of attention or involvement required

to complete a vocabulary learning task. The combination of the components forms the *involvement load*, which can be quantified through the *involvement index*. Thus, in a task of learning several lexical items, the minimum level of involvement index for an item can be zero (the learner pays no attention to learning that item), and the maximum six (the learner is strongly engaged with an item by using them). The hypothesis assumes that a vocabulary learning task which has a higher involvement load is more effective than that with a lower involvement load.

Research evidence has confirmed the assumption of the Involvement Load Hypothesis. For example, Hulstijn and Laufer (2001) compared the learning gains of three groups of advanced EFL students who did three tasks of different involvement indexes. The first group did a reading comprehension task in which ten target words were highlighted and L1 glosses were given (involvement index = 1). The second group did the same reading comprehension task, but the ten target words were deleted from the text and given in a separate list with their L1 translations and L2 explanations to be filled in the gaps (involvement index = 2). The third group wrote a composition using the ten target words given with their explanations and examples (involvement index = 3). They found that the third group with the highest degree of involvement load learned the most as to the knowledge of meaning of the target items whereas the first group with the lowest involvement load learned the least. Partial (Kim, 2008) and conceptual (Keating, 2008) replications of Hulstijn and Laufer (2001) indicated that the Involvement Load Hypothesis was confirmed in different L2 contexts. Kim (2008) found that the hypothesis was also predictively valuable for two different proficiency levels. Similarly, a meta-analysis of L2 studies on vocabulary learning tasks by Huang, Willson and Eslami (2012) lent support to the hypothesis by suggesting that the degree of involvement load in a vocabulary learning task was associated with the vocabulary learning gains. The findings from these studies suggest that the degree of engagement with a lexical item matters in the acquisition of that item.

3.5.2 Engagement in vocabulary learning

The Involvement Load Hypothesis indicates that the amount of engagement with lexical items is important to learning. Furthermore, there seems to be consensus in L2 vocabulary research that the success rate at which learners can learn a lexical item tends to link with how much the learners are stimulated to engage with that item in a vocabulary learning task (Boers, 2013; Hulstijn & Laufer, 2001; Schmitt, 2008). However, the Involvement Load Hypothesis is

developed on the basis of incidental vocabulary learning (i.e. vocabulary is picked up as byproduct of meaning-focused tasks such as reading or listening) contexts, and thus it does not take into account variety of learning strategies that learners may use in explicit vocabulary learning (i.e. lexical items is the direct focus of a learning procedure) (Laufer, 2017: 351).

To predict vocabulary learning, Schmitt (2008) proposed using the notion of *engagement*, referring to the degree of involvement in lexical items through exposure, attention, manipulation, and time allocated to the items. Accordingly, engagement may include involvement in various incidental and explicit vocabulary learning conditions, as well as a wide range of vocabulary strategies (cf. Nation, 2001; Gu & Johnson, 1996; Schmitt, 1997; Segler, Pain, & Sorace, 2002). In this sense, it seems that every vocabulary learning approach or strategy requires a degree of engagement, albeit varying across approaches or strategies. Since this sort of engagement involves a certain amount of attention, perception, memory, or thinking of the to-be-learned items, I suggest that this notion of engagement in vocabulary learning can be alternatively referred to as *cognitive engagement*.

Substantial research suggests that engaging with lexical items by repeated incidental exposures to the items in reading and/or listening texts can lead to learning of these items (e.g. Horst, Cobb, & Meara, 1998; Pellicer-Sánchez, 2016; Pellicer-Sánchez & Schmitt, 2010; van Zeeland & Schmitt, 2013; Vidal, 2011; Webb, Newton, & Chang, 2013). In these studies, the students read or/and listen to separate sentences, passages, short stories, or authentic novels in which the target items are embedded in the manner that they are encountered many times during the reading or/and listening procedures, leading to learning. Overall, the more an item is incidentally encountered, the more likely it is learned. Lexical items can be partially learned from eight to 10 times of incidental encounters from reading (cf. Pellicer-Sánchez, 2016). As regards explicit exposures, Peters (2014) found five exposures to be superior to once as to recall of word form. The main reason for learning from frequency of exposure is that frequency is one of the three primary factors (i.e. frequency, recency, and context) affecting cognition (Anderson, 2000). The memory of a thing becomes stronger when it is more frequently experienced (N. Ellis, 2002).

Stimulating cognitive engagement by tasks that encourage attention to target items can be effective in terms of increasing learning gains of lexical items. For example, typographic

enhancement (i.e. highlighting, underlining, or bolding target items in texts) may have positive effects on the recognition of target items (Boers et al., 2016). Similarly, the combination of typographic enhancement and input flood (i.e. increased exposures to the items) appears to be more effective than input flood alone (Sonbul & Schmitt, 2013; Szudarski & Carter, 2016). Also, decontextualized learning from a wordlist may be superior to learning words from reading a text and using a dictionary because when learned in isolation, the words could be treated as objects of study instead of being tools for text comprehension (Laufer, 2006). Studying words in decontextualized conditions with a computer software program or word cards, whereby attention is paid to each item at a time, can be more conducive to learning than using a wordlist (Nakata, 2008).

Furthermore, semantic elaboration (e.g. Atkinson & Raugh, 1975; Ellis & Beaton, 1993; Barcroft, 2009) such as the mnemonic keyword method and structural elaboration (e.g. Barcroft, 2002; Laufer & Girsai, 2008; Boers, Lindstromberg, Eyckmans, 2014; Eyckmans, Boers, & Lindstromberg, 2016; Lindstromberg & Boers, 2008) play a role in fostering attention and engagement with vocabulary, leading to the retention of target items. There are two stages in the keyword method. First, learners link a new target L2 word with a third party, which can be a person, an object, or a situation having the sound pattern in L1 similar to the meaning of the target word. This third party is the keyword, an L1 word. Second, the learners associate the keyword with the meaning of the target word by putting them both in a mental image. The interactive image of the keyword and the meaning of the target L2 may conduce to the ease of recalling of the meaning of the target word because the target word has a similar sound as the keyword. In the structural elaboration, learners may pay attention to the composition of a target item by counting the letters of the word (Barcroft, 2002), comparing the lexical composition of the L2 item with that of the L1 item (Laufer & Girsai, 2008), or attending to patterns of alliteration (e.g. high heels) and assonance (e.g. light a fire). The findings regarding the role of attention to learning support the Noticing Hypothesis by Schmidt (1990, 2001, 2012), which he puts that "people learn about the things they attend to and do not learn much about the things they do not attend to" (Schmidt, 2010: 722).

Rather than promoting frequency of exposure or attention to lexical items, tasks that require learners to work with the lexical items tend to be important to promote engagement and learning. For example, Webb (2005) compared a task of reading each target word in three

glossed sentences with a task of writing a sentence using the word. He found that although the reading task was more effective when the same amount of time was allocated for both tasks, the writing task was superior when more time was allocated for it to be completed. Laufer and Rozovski-Roibtlat (2014) compared the three tasks of reading and summarizing the texts in L1, reading with a dictionary and answering comprehension questions, and reading followed by vocabulary-focused exercises. They found reading with exercises to be the most effective, irrespective of frequency of encounters and aspects of word knowledge. Pellicer-Sánchez (2015) carried out two separate experiments. In the first, the participants read passages and encountered target words incidentally. In the second, the participants did vocabulary-focused exercises. She found that although the participants in both conditions could recognize target words faster in a lexical decision task, only those who learned the target items explicitly by doing exercises could process the items automatically.

In sum, previously reviewed studies indicate that the more L2 learners are exposed to target items, pay attention to them, and engage in learning them, the better they can learn the items. In other words, attention and engagement are central to vocabulary learning.

3.6 Conclusion

This chapter has looked at instructed L2 vocabulary learning relevant to the current thesis; that is, the issues concerning explicit vocabulary learning and teaching were discussed through the chapter. It began by looking at main terminologies used to describe vocabulary learning before the differences between explicit learning and incidental learning were considered. Following this, the focus was on reviewing studies investigating the explicit learning of formulaic sequences, both those carried out in laboratory-like conditions, investigating only explicit learning and those conducted in combination with incidental learning in classroom settings. Next, the studies involving contextualized and decontextualized vocabulary learning were examined. The chapter ended by briefly reviewing intervention studies aiming at manipulating learners' attention and engagement to develop L2 vocabulary knowledge.

Chapter 4: Motivation, Imagery and Instructed SLA

This chapter first discusses key motivational issues relevant to L2 education, which involve cognitive theories of motivation in psychology and motivational constructs in L2 learning. It also provides an account of motivational strategies developed by Dörnyei (2001) from a synthesis of traditional motivational concepts prior to the novel construct of the L2 Motivational Self System (L2MSS). Arguments in favour of the application of motivational techniques (including motivational strategies and other principled motivational techniques other than cognitive/learning strategies) in L2 pedagogy are provided. These concern the fact that motivation may be malleable, subjected to contextual factors, and that motivated behaviours may be conductive to the learning of specific language features. Further, the distinction between motivation and engagement is discussed given that both concern effort intensity and achievement outcomes, which may give rise to the confusion between the two concepts in L2 learning. The next section involves a discussion of the vision construct and the related concepts, followed by reviews of intervention studies regarding the use of motivational strategies and vision in L2 teaching. It is shown that vision is closely connected to the two novel L2 motivational concepts, the L2MSS and Directed Motivational Currents, and that visionary techniques are *developed* from the vision construct. This chapter ends by a review of a limited amount of research concerning motivation in vocabulary learning.

4.1 Motivation and L2 education

Motivation is a concept used to explain the direction, intensity and persistence of human behaviour, seeking answers to the question why people behave the way they do (Dörnyei, 2005; Brophy, 2013). In educational settings, as noted in the introduction, motivation may "facilitate or constrain cognition and learning" (Pintrich, 2003: 103). Given the importance of motivation in education, research in SLA has sought to have a better understanding of its role in L2 learning (Dörnyei, 1994; Tremblay & Gardner, 1995). Regarding the critical role of motivation in L2 acquisition, Dörnyei (2018) states as follows:

> Motivation is a particularly important dimension of sustained learning activities such as mastering a foreign language or second language (L2), because it provides the primary impetus to initiate L2 learning and, later on, the driving force to sustain the lengthy and often tedious learning process. Without sufficient motivation, even individuals with the

> most remarkable abilities cannot accomplish long-term goals; nor are appropriate curricular and good teaching enough to ensure student achievement on their own. (p. 1)

The pioneering attempts to identify the link between motivation and L2 learning were made by Canadian social psychologist Robert Gardner and his associates (e.g. Gardner, 1985). The idea of conducting a series of investigations on this link derived in part from the fact that Gardner and Lambert (1959) found in the literature that while L2 achievement was mainly attributed to the ability to learn languages or language aptitude. However, when correlations between levels of aptitude and L2 grades were carried out, considerable variability in various contexts was found despite the validity of the tests administered. Put another way, those with similar levels of aptitude had different L2 grades. This indicated the critical role of factors other than aptitude in L2 achievement, and they assumed that motivation was involved.

Since then, there has been a plethora of research of theoretical and practical concerns regarding L2 motivation. Review studies and summaries (e.g. Gardner, 1985; Dörnyei, 1998; Dörnyei, in press; Dörnyei & Ushioda, 2011; Dörnyei & Ryan, 2015; Boo, Dörnyei, & Ryan, 2015; Lamb, 2017) have provided a systematic understanding how L2 motivation research plays out over time. From a pedagogical perspective, the literature of the L2 motivation research has offered insights regarding the following main areas: (a) key motivational components relevant to L2 education, (b) ways to improve motivation and/or learning in instructed SLA contexts, and (c) engagement and suistained motivation.

4.1.1 Key motivational components relevant to L2 education

In this section, I will focus on summarizing key cognitive theories of motivation and L2 motivational constructs. I will highlight the motivational components that form these constructs because the main purpose of the second study is to examine the effects of a combination of motivational components (rather than of a particular motivational construct) on learning formulaic sequences in an educational setting. Further, in a large number of L2 motivational studies, the focus of investigation has either been on one motivational component of a particular construct (e.g. Fushino, 2010) or on a group of components derived from different motivational theories (e.g. Alrabai, 2016). Each of the motivation-related constructs can consist from one to several motivational components.

In this respect, a motivational component in this thesis will refer to a reason, a condition or a factor - such as *linguistic self-confidence* - that affects L2 learners' motivational dispositions; it is a constituent or sub-constituent of a motivational theory, model, or construct used in L2 research. Motivational components have varied considerably since the construct of integrative motivation by Gardner and his colleagues, subsuming those from constructs in fields of psychology, neuroscience and SLA. Three reasons (see Dörnyei & Ushioda, 2011) can account for the inclusion of components from the other fields. First, the theories of motivation were shaped by the cognitive revolution in the 20th century, which foregrounded a plethora of developmental orientations to form a variety of cognitive theories of motivation. Second, motivation concerns human behaviours, which are so complicated that linear approaches to motivation may be insufficient to capture their nature. This prompted the adoption of dynamic perspectives to motivation, involving parallel developments of theories across fields of psychology and SLA. Third, mental processes help shape motivation, but these processes vary considerably, resulting in the development of different ranges of cognitive models and constructs of motivation.

It should be noted that motivational components do not constitute a fixed set of items; rather they are subject to changes. This is because motivational constructs tend to emerge from new evidence offered from empirical studies (Dörnyei, 2001b: 62). Because motivation is viewed from different angles, motivational components of different names can indicate a similar idea.

Motivational components from cognitive theories of motivation in psychology

To understand human behaviours, a wide range of motivation-related theories have been developed and applied in subfields of psychology such as developmental and educational psychology (cf. e.g. Eccles & Wigfield, 2002; Gollwitzer & Bargh, 1996; Ryan, 2012). In effect, the multidisciplinary scientific field of psychology offers the most ample theoretical and empirical evidence concerning the direction and intensity of human behaviour. A number of prominent cognitive theories of motivation have been integrated into L2 motivation research (cf. Dörnyei & Ushioda, 2011).

Expectancy-value theory

Atkinson (1957) hypothesized that the strength of achievement motivation (i.e. a disposition to strive for success) is a function of three factors: *motive*, *expectancy* and *incentive*. Accordingly, when the motive (i.e. the need for achieving success or avoiding failure) is strong, the expectancy (i.e. the expected probability for success) is high, and the *value* of the incentive is perceived to be good, one tends to decide to engage and persist in performing a task. He also argued in terms of the relation between motivation and task difficulty that "Motivation to achieve is strongest when uncertainty regarding the outcome is greatest" (p. 363), indicating an inverse relation between incentive (value) and expectancy of success. Although later there are a variety of definitions regarding the components of expectancy-value theory developed based on Atkinson's perspective (cf. e.g. Higgins, 1989), I will focus on summarizing expectancy-value theory and its components by Eccles and her colleagues (e.g. Eccles, 2009; Wigfield & Eccles, 2000), which was drawn in part on Atkinson's idea.

Consistent with Atkinson's original model, the modern expectancy-value theory by Eccles and her colleagues includes two main components - *expectancy* and *value* – which are assumed to directly influence task involvement (Eccles, 2009), or specifically task choice and performance (Wigfield, Tonks, & Klauda, 2009). The expectancy component indicates expectances for success, referring to individuals' beliefs about the accomplishment of the tasks they will perform. The value component is task-specific and subjective (hence also termed as 'subjective task value'), consisting of four subcomponents:

- *intrinsic value* (also termed as 'interest value', see Conley, 2012), referring to the enjoyment individuals derive from performing tasks.
- *utility value*, meaning the usefulness of tasks or how they are congruent with individuals' future plans.
- *attainment value*, referring to the importance that individuals attribute to tasks.
- *cost value* – what individuals have to trade off so as to do tasks.

The components of expectancy-value theory have recently been examined in both general educational research (e.g. Conley, 2012; Lauermann, Tsai, & Eccles, 2017) and L2 learning research (e.g. Fushino, 2010; Mori & Gobel, 2006) that involve educational or learning choice, motivation or achievement.

Self-efficacy theory

Self-efficacy theory was developed by the social psychologist Albert Bandura (e.g. Bandura, 1997), referring to individuals' beliefs in their capacities to perform a specific task. Thus, it has a single motivational component, which appears similar to the component of expectancies for success in the expectancy-value theory because both refer to the notion 'beliefs'. However, self-efficacy theory differs from expectancy for success in that the former emphasizes the beliefs in personal ability while the latter underscores outcomes and the instrumental value of outcomes of tasks (Bandura & Locke, 2003: 92). Bandura (1993: 118) argued regarding the connection between self-efficacy and motivation that individuals' beliefs in their efficacy influence their thoughts, feelings, self-motivation, and behaviour; this effect can be generated through four main processes, including cognitive, motivational, affective, and decisional processes. This means that whether one has a sense of efficacy affects whether one thinks positively or negatively in the presence of a challenge, how one self-regulates emotional states, self-motivates, and perseveres upon encountering obstacles so as to overcome that challenge (Bandura, 2012: 13).

Evidence has indicated the influence of self-efficacy on learning motivation and achievement. Compared to those who embrace self-doubt, those who believe in their own efficacy in task performances participate more enthusiastically, exert more effort, persist in learning in the face of setbacks, and gain higher achievement (cf. Schunk & Pajares, 2005: 15-6). Self-efficacy was also used in early L2 research to understand L2 motivation (e.g. Dörnyei, 1994a). Evidence also indicated the links between self-efficacy and language achievement (e.g. Mills, Pajares, & Herron, 2007; Tremblay & Gardner, 1995) and learning strategies use (e.g. Kim, Wang, Ahn, & Bong, 2015). While Piniel and Csizér (2015) found a decrease in writing self-efficacy of students over a language semester, Kormos and Nijakowska (2017) found positive changes in the self-efficacy of language teachers regarding the use of inclusive educational practices with dyslexic learners after they took part in a massive open online course.

Similar to other motivational components, self-efficacy is situated, context-bound, and domain-specific, as argued by Bandura (2012) that "people's beliefs in their capacities vary across activity domains and situational conditions rather than manifest uniformly across tasks and contexts in the likeness of a general trait" (p. 13). In this way, Bandura posited that self-

efficacy can be developed through mastery experiences, social modeling, social persuasion, and maintaining good physical and emotional states (see Bandura, 2012 for a more detailed discussion of self-efficacy development).

Attribution theory

The origin of the attribution theory dated back to the late 1950s concerning the phenomenological approach to understanding human behaviour (Wilson, Damiani, & Shelton, 2002). The theory was later developed by Bernard Weiner (e.g. Weiner, 1985). According to (Weiner, 2012), attribution theory concerns what individuals perceive as the determinants of successes or failures of the events that have occurred; these determinants influence their emotions in different directions and degrees, contributing to the changes in their behaviour towards the future events. In this way, the relations between cause and emotion are "at the heart of the attribution approach to the study of affect" (p. 358). Weiner (2010) proposed that the causes for successes or failures of the past tasks can be attributed to (a) internal causes – which include *ability* and *effort*, (b) external causes – which include *task difficulty* and *luck*, and (c) other causes. Effort and task difficulty are unstable and controllable while ability and luck are stable and uncontrollable.

Regarding the attribution-emotion connection, he proposed a subset of five affective linkages (Weiner, 2012: 33-4). First, successes that are attributed to internal causes such as high aptitude are associated with pride. Second, failures that are caused by internal controllable determinants such as insufficient effort are linked with the feelings of guilt and regret. Third, failures that are determined by internal uncontrollable causes such as low aptitude are in connection with the feelings of shame and humiliation. Fourth, failures that are attributed to stable causes such as uncooperative peers or unfair teachers are related to the feeling of hopelessness. Failures that are determined by unstable causes such as bad luck involve the feeling of hope. In this light, past failures that are attributed to stable and uncontrollable factors (which learners cannot change), such as low ability, appear more detrimental to future achievement behaviour than failures that are caused by unstable and controllable factors that learners can change, such as effort (cf. e.g. Dörnyei & Ushioda, 2011: 15).

In early L2 research, Dörnyei (1990, 1994a) and Tremblay and Gardner (1995) incorporated the attribution perspective into their conceptualizations of L2 motivation. The

theory has aslo been applied to improve academic motivation and performance by means of understanding and intervening perceived beliefs to shift the attributions of academic failures to lack of effort rather than to low ability. As such, learners may perceive failures as unstable and controllable so as to continue to exert effort in the future academic endeavours and improve performance (see e.g. Wilson, Damiani, & Shelton, 2002). Further, different ways of achievement attribution were found among those who have different levels of self-efficacy. Specifically, Hsieh and Kang (2010) found that school English learners in Korea with higher levels of self-efficacy attributed their language outcomes to more internal and personal controllable factors than those with perceived lower self-efficacy levels.

Achievement goal theory

There are two primary goal theories involving motivation and learning: achievement goal theory and goal setting theory (Dörnyei & Ushioda, 2011). Achievement goal theory refers to the main purpose why individuals engage in learning tasks (cf. Bong, 2004; Eccles & Wigfield, 2002; Elliott & Dweck, 1988; Pintrich, 2000a; Senko, Hulleman, & Harackiewicz, 2011). Achievement goals include two main types as follows:

- *Mastery goals*, also termed as 'task goals', 'task-involved goals', or 'learning goals'. Learners who are mastery-goal oriented engage in learning tasks in order to improve their competence; learning is on their terms and for their own advancement and growth. In this way, they focus on the tasks' contents when learning. They view ability as a controllable factor, and thus can be developed provided that extra effort is expended. Success is measured through self-defined standards, such as a subjective sense of accomplishment. In this way, learners with mastery goals should invite challenge and find it easier to confront adversity.
- *Performance goals*, also termed as 'ego-involved goals'. Those who are performance-goal oriented learn the tasks with the main purpose of demonstrating ability, obtaining high grades to outdo other learners. Learning is considered to be merely a means to achieve another goal, with the later allowing for public recognition. Learners pursuing performance goals tend to view ability as an unmalleable attribute. Success is measured through the evidence demonstrating that they have outperformed other learners. In this regard, they are inclined to opt for the tasks that they are confident doing instead of

embracing challenging ones. Performance goals consist of two subtypes*: performance-approach* goals and *performance-avoidance* goals. With the former, learners have a strong aspiration to demonstrate that their ability is superior to others while with the later they focus on avoiding showing that they have low ability relative to others.

In the light of the above, the mastery goals appear to give rise to feelings of competence and well-being. Ample evidence in the field of education revealed the superiority of mastery goals over performance goals across a range of motivational and learning strategies use measures. However, when it comes to academic achievement, mastery goal-oriented learners are not consistently better than performance goal-oriented learners. For example, Hulleman, Schrager, Bodmann, and Harackiewicz's (2010) meta-analysis found that mastery goals tended to predict achievement of challenge-seeking-purpose tasks, but not of learning or master-purpose tasks. In this light, a *multiple goal perspective* is proposed (e.g. Pintrich, 2000b), which concerns three assumptions, as summarized by Senko et al. (2011):

> Performance goals may provide some benefits more reliably than mastery goals, students can adopt both mastery and performance goals simultaneously, and students can reap the benefits of each goal by pursuing both. (p. 30)

However this new perspective has met with a number of criticisms regarding the issues of performance goals (see Senko et al., 2011 for further details regarding these criticisms).

Goal-setting theory

While achievement goal theory focuses on the underlying purposes of the human agencies carrying out the goals, goal-setting theory (e.g. Locke & Latham, 1990, 2002) concentrates on the effectiveness of setting goals on performance. Differently put, goal-setting theory concerns how different characteristics and conditions of goals affect subsequent performance differently, as stated by Locke and Latham (2002) that the purpose of the theory is to explain "the relationship between conscious performance goals and level of task performance" (p. 705). One condition for goals to motivate action and exert effects is that they are *specific and difficult*. Individuals tend to expend greater effort and persist longer on challenging tasks that have clear purposes and than easy ones with vague end-states. The effects of difficult and specific goals are also facilitated by following mediators (Locke & Latham, 2002, 2006):

- *Task complexity*. Goal performance depends on whether individuals have needed knowledge and skills regarding goal-related tasks. Goals motivate individuals to either make use of their existing ability and skills or to acquire new capabilities to deal with tasks. Task characteristics are likely to be moderating conditions of goal performance.
- *Goal commitment*. This mediator is enhanced by high levels of self-efficacy. With the beliefs that ones are capable of carrying out tasks, their commitment to goals is likely to be enhanced. In addition, specific and difficult goals combined with self-efficacy can facilitate the effects of other motivating factors such as incentives or autonomy. Further, viewing goals as important can increase goal commitment and engagement.
- *Feedback*. This is a critical mediator of goal effects given that people need feedback to track their progress on the way of reaching the goals. Different feedback contributes to goal performance differently.
- *Situational constraints*. Goal performance depends on whether situations facilitate or constraint it. For example, the absence of sufficient resources to carry out tasks clearly adversely affects performance. Thus it is necessary that task overload be low.

Locke and Latham (2002, 2006) also emphasize that goal setting theory concerns both individuals and groups, but group goals can incur more complexity than personal goals because there may be goal conflicts among the group members.

Because goal-setting theory was developed in industrial/organizational psychology (Locke & Latham, 2006), it could be argued that there are at least two issues when it comes to the application of the theory in other applied domains such as education or L2 learning. First, goals in industrial or organizational areas (such as producing ten machines that work well under unfavourable weather) tend to be specific and concrete; the future physical and emotional incentives derived from goal completion are thus quite tangible, thereby facilitating goal effects. However, this incentive-related characteristic may not be present in the educational realm if goals merely involve acquisition of certain amounts of knowledge. Second, feedback on industrial products is accurate (e.g. faulty product protocols cannot operate) while feedback in education (e.g. a low progress test grade) may not precisely and directly contribute to the learning goals of acquiring an amount of knowledge.

The motivational components concerning goal theories have been included in a range of L2 research domains such as conceptualization of L2 motivation (e.g. Dörnyei, 1994a; Dörnyei & Csizér, 1998; Kormos, Kiddle & Csizér, 2011, Oxford & Shearin, 1994). Bong (2004) found strong correlations in achievement goal orientations across different disciplines, including L2 learning. In addition, the concepts of possible selves by Markus and Nurius (1986), as well as the L2 ideal self, L2 ought-to self, or vision in the L2 self motivational system developed by Dörnyei (e.g. 2005, 2009b) help understand goal-related motivation from a holistic perspective rather than the prevailing idea that academic goals are mainly related to academic tasks and knowledge acquisition (e.g. Taraban, Kerr, & Rynearson, 2004).

Self-determination theory

Self-determination theory was developed by Deci and Ryan (e.g. 2000) based on research on how extrinsic rewards impact intrinsic motivation (Deci & Ryan, 2012: 417). The theory thus involves at its heart the intrinsic/extrinsic motivation dichotomy. Although the theory applies to a range of domains such as health or sports, in this section I will refer to its conceptualization mainly in connection with the areas of education and L2 learning.

While *intrinsic motivation* refers to engaging in an activity because it is inherently rewarding and enjoyable, *extrinsic motivation* refers to engaging in an activity in order to have separate external outcomes such as obtaining rewards, gaining instrumental or practical values such as skills or grades, or avoiding punishment. Intrinsic motivation is argued to be essential to learning and achievement, as stated by Ryan and Deci (2000a):

> an important phenomena for education – a natural wellspring of learning and achievement that can be systematically catalyzed or undermined by parent and teacher practices. (p. 55)

An activity may be mainly intrinsically enjoyable, primarily extrinsically appealing, or both. Adding certain extrinsic elements into a mainly intrinsically rewarding activity may undermine its intrinsic value, thereby having negative effects on the performance outcomes. This postulation was proved through a series of tightly controlled laboratory studies in the field of social psychology during 1990s (cf. Deci & Ryan, 2012). Thus, Ryan and Deci (2000) stated that in order to improve outcomes, factors or conditions concerning intrinsic motivation should be fostered and those related to external motivation should be limited. In terms of the former, one

prominent condition can be that basic psychological needs are satisfied. They conceptualized that the basic psychological needs include three components: *autonomy*, *competence*, and *relatedness*.

To restrain the negative effects that external motives may have on intrinsic values of activities, external motives should be limited. However, in practice not all activities or tasks - especially educationally relevant ones - are inherently enjoyable; individuals take part in learning for a variety of instrumental purposes, such as to pass exams or to acquire skills needed for their future pursuits. Although these tasks are carried out on grounds of the extrinsic motives, not all of these motives do harm to the outcomes. Hence, Ryan and Deci (e.g. 2000) categorize extrinsic motivation into four types, which lie in the middle of a continuum, at the far left of which lies *amotivation*, and intrinsic motivation is at the far right of the continuum.

The first type of extrinsic motivation is *external regulation*, which is controlling and thus individuals behave in certain ways so as to meet external requirements (e.g. learning an L2 to satisfy parents). According to Ryan and Deci (2000: 62), this type of extrinsic motivation can adversely affect the intrinsic value of an activity present in that activity. The second type is *introjected regulation*, which is still quite controlling because people engage in actions in order to avoid guilt or to obtain pride (e.g. learning an L2 to demonstrate ability). The third is *identified regulation*. In this type, individuals identify with the value of their own behaviours, accepting and considering their behaviours as their own (e.g. learning an L2 to satisfy interests or passions). The last type is *integrated regulation*, which is entirely integrated to the self. In this type, individuals' behaviours are congruent with other values and needs of their own (e.g. learning an L2 to achieve a desired future self). Although integrated regulation is similar in many ways with intrinsic motivation, it is not an intrinsic motivation because the underlying impetus of an action is to expect a certain outcome apart from the intrinsic value of merely engaging in the activity.

As mentioned earlier, although learning activities in school can be interesting, this is not often the case; rather, many academic activities tend to be tedious. Therefore, to improve learning motivation, engagement, and achievement, it is important to internalize and integrate personal interests, values or beliefs into the extrinsic motivation of learners. Ryan and Deci

(2000) accounts for these two concepts of *internalization* and *integration* and how they can have impact on motivation and learning as follows:

> Internalization is the process of taking in a value or regulation, and integration is the process by which individuals more fully transform the regulation into their own so that it will emanate from their sense of self.…With increasing internalization (and its associated sense of personal commitment) come greater persistence, more positive self-perceptions, and better quality of engagement. (p. 60-1)

In this light, to enhance learning engagement and achievement, internalizing extrinsic motivation (of both children and adult learners) is essential. This can be done through providing autonomy support or giving personal meaning to the activities that are not inherently interesting (cf. Deci & Ryan, 2011: 422).

In L2 learning, Dörnyei (1998) introduced self-determination theory to understand L2 motivation. Noels, Clément and Pelletier (1999) examined the associations between perceived teacher communicative style and intrinsic and extrinsic motivation. Although later the theory has been used in L2 motivation research (cf. Boo et al., 2015), it is limited to two themes: (a) investigating the links between perceived intrinsic/extrinsic motivation and other motivational components and/or language achievement (e.g. McEown, Noels, & Saumure, 2014), and (b) improving intrinsic motivation in classroom (e.g. Jones, Llacer-Arrastia, & Newbill, 2009). To my mind, in the light of the above regarding internalization of extrinsic motivation in education, it is important to internalize extrinsic motivation in L2 learning such that L2 learners identify with their learning behaviours, considering engagement in learning as what they value. In this respect, the concept of L2 vision (Dörnyei & Kubanyiova, 2014) - which is drawn from the conceptualization of the L2 motivational system by Dörnyei (2005, 2009b) - can be used as a framework for intervention studies concerning the integration and internalization of extrinsic motivation in L2 learning to improve motivation and learning outcome.

Motivational components in SLA

Since Gardner and his colleagues' construct of integrative motivation (e.g. Gardner, 1985), the conceptualizations of L2 motivation have gone through three main stages of development, including the social psychological period, the cognitive-situated period, and the process-oriented period (cf. Dörnyei & Ushioda, 2011). Although there are a variety of theories and constructs

concerning L2 motivation, in the following I will account only for the most prominent constructs or those that are particularly relevant to instructed SLA.

Gardner's integrative motivation

Integrative motivation (Gardner, 1985, 2010) consists of four variables: motivation, integrativeness, attitudes toward the learning situation, and language anxiety. Gardner (2012) summarized that "integrative motivation can be measured as the sum of Integrativeness plus Attitudes toward the Learning Situation plus Motivation minus Language Anxiety" (p. 218).

- *Integrativeness*, referring to three factors: (a) the tendency to be open to other L2 community, willing and able to adopt characteristics of the L2 community; (b) attitude toward the L2 community; and (c) interest in the L2.
- *Attitudes toward the learning* situation, referring to how good the teacher is, and to what extent the course is evaluated.
- *Language anxiety*, including language class anxiety and language use anxiety.

The construct was confirmed to be able to predict language achievement (e.g. Gardner, 2012) and other motivational dispositions such as language learning affect and intention to learn an L2 (MacIntyre & Blackie, 2012). According to this model, in order to predict L2 motivation (and thus language achievement), perceived integrativeness, attitudes toward the learning situation, and language anxiety) need to be examined. Specifically, three areas need to be considred: (1) reports informing that students are quite open to the groups who speak the L2, ready and able to adopt their characteristics, have positive attitudes toward these groups, and have interest in the L2; (2) students have positive attitudes toward teachers and courses; and (3) students do not have anxiety in language class and language use.

Clément's concept of linguistic self-confidence

The notion of linguistic self-confidence was developed by Clément (e.g. Clément, 1980; Clément, Gardner, & Smythe, 1977), who argued that a high level of linguistic self-confidence is the function of a high level of self-evaluation of language ability and a low level of anxiety (see also Clément, Dörnyei, & Noels, 1994). In this respect, linguistic self-confidence differs from self-efficacy in that the latter only refers to the personal belief in ability to perform a particular

task. Linguistic self-confidence can contribute to L2 motivation and achievement. As Clément et al. (1994) states:

> the student brings into the classroom a level of self-confidence and anxiety related to extracurricular experiences with the language, the quality and quantity of which would then influence classroom behaviour, achievement and anxiety. Accordingly, being active in class means believing that one is able to use English outside the classroom. (p. 442)

Linguistic self-confidence has been a subject of recent L2 motivation research. For example, one of the prominent findings in Magid and Chan's (2012) study, is that the intervention concerning visualizing ideal L2 self in L2 programs led to increased levels of linguistic self-confidence. In another investigation, Hummel (2010) found that active community involvement gave rise to linguistic self-confidence.

Dörnyei and Ottó's process model of L2 motivation

To continue the research line that aimed to make motivation research relevant to education (e.g. Dörnyei, 1994a), Dörnyei and Ottó (1998) developed a complex process model of L2 motivation, which is in part based on the idea that motivation can change in time; as stated by Dörnyei and Ottó, up to the time of their research, existing motivation models "did not do justice to the fact that motivation is not static by dynamically evolving and changing in time" (p. 43). The model lends itself to classroom intervention purposes, providing a general guideline regarding how to utilize motivational influences (e.g. Dörnyei, 1994a; Dörnyei, 2001a) to improve engagement and learning.

The process model consists of three phases: preactional phrase, actional phase, and post-actional phase. In the preactional phase, general wishes or desires to learn are formed, which then evolves into learning goals and intentions accompanied by action plans, commitments, and means and resources to enter into the actional phase. In the actional phase, subtasks are generated and implemented with the support of appraisal and action control so that the initial learning goals are achieved; otherwise action is terminated. In the post-actional phase, the evaluation of the process is conducted with causal attributions being formed, standards and strategies being elaborated, and intentions being dismissed so as further planning is done. During all three phases, motivational forces can be continually instigated to foster motivation to energize learning behaviour.

As noted earlier, one important point of this process model is that it indicates the changeability and malleability of motivation, as opposed to taking motivation as a fixed disposition. In this regard, the model manifests the transitional stage of theoretical development in L2 motivation (Dörnyei, in press).

Ushioda's person-in-context relational view of motivation

A person-in-context relational view of motivation involves "a view of motivation as emergent from relations between real persons, with particular social identities, and the unfolding cultural context of activity" (Ushioda, 2009: 215). In this regard, L2 motivation is not a stable trait, but formed through interactions with other people and other environmental factors in a particular learning setting.

Ushioda (2009, 2015) argues that the fact that particular contextual factors - such as the communicative styles of teachers - are measured through students' self-reported questionnaires means that learners and context are treated as independent of each other. However, motivation and contextual factors reside in a complex system, being interdependent, co-existing with, and co-adapting to each other, as Ushioda (2009) argues:

> despite the focus on contextual variables, the researchers' aim in such studies [e.g. Noels et al., 1999] is, of course, to uncover rule-governed psychological laws that explain how context affects motivation, rather than to explore the dynamic complexity of personal meaning-making in social context. (p. 217)

Thus, in the person-in-context relational view, contextual factors should be considered from a relational (as opposed to linear) perspective, and motivation should be examined "as an organic process that emerges through the complex system of interrelations" (Ushioda, 2009: 220). In order to address this, Ushioda (2015) suggests using a number of qualitative methods such as stimulated recall interviews to examine the contextual aspects that influence motivation.

Dörnyei's L2 Motivational Self System

As a novel conceptualization of L2 motivation which "represents a major reformation of previous motivational thinking" (Dörnyei, 2009a: 9), the L2 motivational self system (L2MSS) (Dörnyei, 2005, 2009a) consists of three main components: ideal L2 self, ought-to L2 self, and L2 learning experience. This tripartite construct was developed partly on the grounds of

psychological theories of the self and possible selves (e.g. Markus & Nurius, 1986) and self-discrepancy theory (Higgins, 1987). It was also based on the findings in the field of L2 motivation and the role of English as a global language at the beginning of 21st century (Dörnyei & Ushioda, 2011; Lamb, 2012). The three components are as follows (see Dörnyei, 2009a: 29).

> 1. *Ideal L2 Self*, referring to a desired image of an L2 user that an individual would like to become in the future; if the individual perceives the discrepancy between the actual self and the ideal self, he or she can be motivated to learn the L2 such that this gap can be bridged.
> 2. *Ought-to L2 Self*, concerning the attributes that an individual believes he or she ought to possess to satisfy others' expectations or to avoid possible negative outcomes; such perceived duties and obligations may therefore bear little resemblance to the individual's own desires or wishes.
> 3. *L2 Learning Experience*, involving situated and contextual factors related to the immediate learning environment and experience (e.g., the impact of the teacher, the peers, the group coherence, the experience of success).

The L2MSS has been the subject of widespread concern, serving as an increasingly popular theoretical framework for considerable empirical work in L2 motivation; as a construct its popularity has surpassed that of the integative/instrumental construct by Gardner and his colleagues since 2012 (Boo et al, 2015). This may be be due to the fact that the tripartite construct has been validated in a various L2-learning contexts (e.g. Csizér & Kormos, 2009; Kormos, et al., 2011; Hiver, 2013; Taguchi, Magid, & Papi, 2009; Ryan, 2009; You & Dörnyei , 2016), in which the L2 ideal self is a consistent predictor of motivated learning behaviour.

The strong predictive power of the L2MSS for L2 motivation can be attributed to two main reasons. First, the two future self-guide components (i.e. the ideal L2 self and the ought-to L2 self) involve the self-images that the learners may want to achieve (and can achieve if sufficient efforts are directed to). The vision of their future self-images tends to give rise to the learners' senses and feelings in a way that is similar to those of actual experiences, appealing to the learners and inducing strong motivational forces. Second, these two components can be paralleled with key motivational components in the popular conceptualizations of L2 motivation such as the integrative/instrumental dichotomy in the integrative motivation construct by

Gardner (e.g. Gardner, 1985; Tremblay & Gardner, 1995) or the intrinsic/extrinsic dichotomy of the self determination theory by Deci and Ryan (e.g. 2000) which are adopted to investigate L2 motivation by L2 motivation researchers (e.g. Noels, 2003).These two attributions are summarized by Dörnyei (2009a) as follow:

> possible selves involves images and senses, approximating what people actually experience when they are engaged in motivated or goal-directed behaviour…possible selves can be seen…as a result of the various motivational factors (e.g. expectancies, attributions, value beliefs). (p. 15)

Given the validity and popularity of the L2 motivational self system, Dörnyei and Kubanyiova (2014) compiled a book to provide comprehensive guidelines regarding the use of vision in classroom. Because one of the primary purposes of this thesis involves examining the effects of visionary techniques, the concept of vision concerning the L2 motivational self system will be discussed further in Section 4.2.

4.1.2 Demotivation

Along with L2 motivation, a growing body of research has placed on the notion of L2 demotivation. Dörnyei and Ushioda (2011) defined demotivation as:

> negative influences that cancel out existing motivation…[demotives] are the negative counterparts of 'motives': a motive increases an action tendency whereas a demotive decreases it. (p. 139)

In this way, demotivation concerns a phenomenon whereby once-motivated students diminish the tendency to take learning actions, reduce efforts and give up on learning.

Dörnyei and Ushioda (2011) noted that there may be influences involving in the diminished learning efforts, but they are not demotives, since they do not concern "specific external forces that reduce or diminish the motivational basis of behavioural intention or ongoing action" (p. 139). For example, it is not considered a demotive when students' interest in learning (temporarily) decreases because of certain natural forces such as exhaustion (as a result of a long period of hard work) or old age.

Demotivation differs from a related phenomenon – *amotivation* (cf. Deci & Ryan, 1985; Noels, 2001). The latter refers to the absence of motivation to learn an L2 because students frame

the potential learning outcomes as beyond their abilities or unworthy of their efforts for certain reasons (Dörnyei & Ushioda, 2011). In this sense, amotivated L2 students may believe that they are incapable of learning the L2, and thus not exerting serious efforts or persisting learning it at any point of their learning experiences. They take the learning actions simply because it is compulsory - at school or work- to do so, not their own choices.

Another phenomenon related to demotivation is *remotivation*. Recent research (e.g. Carpenter et al., 2009; Falout, 2012; Song & Kim, 2017) has looked into this phenomenon of remotivation, referring to the process of restoring the once-existing motivation after a period of demotivation (cf. Falout et. al., 2009). In other words, remotivated students start expending efforts and engaging in learning again after some time of not doing so for losing motivation.

External forces affecting demotivation

Dörnyei (1998) conducted interviews with 50 Hungarian secondary school students studying an L2 (i.e. English or German). He found nine categories of demotivation, four of which (i.e. the teacher, inadequate school facilities, reduced self-confidence, and negative attitude towards the L2) were more frequently mentioned than the others (i.e. compulsory nature of the L2 study, interference of another foreign language being studied, negative attitude toward L2 community, attitudes of group members, and coursebook). Since Dörnyei's (1998) study, a substantial body of research has devoted to investigating main demotives in varying contexts. Studies have been carried out in various settings such as Iran (Alavinia & Sehat, 2012), Japan (e.g. Falout et al., 2009), Korea (e.g. Kim, 2011), Taiwan (Hu, 2011), or Vietnam (Trang & Baldauf, 2007). Overall, the findings revealed a number of consistent sources of demotivation - though weighed and termed differently in different research contexts.

Teacher-related issues appear to have an adverse impact on student learning motivation. In their diary entries and interviews (e.g. Norton, 2001), retrospection essays (e.g. Trang & Baldauf, 2007), interviews and open-ended questionnaires (e.g. Kikuchi, 2009; Yi Tsang, 2012), students strongly and frequently attribute their demotivation in L2 learning to teacher behaviours or personalities. Teacher incompetence or ineffective teaching style also tends to negatively impact motivation. This attribution of learning demotivation to teacher-related influences echoes the findings in communication education (e.g. Christophel & Gorham, 1992; Gorham & Millette, 1997; Zhang, 2007). In addition, *negative peers* may as well have infavourable influences on

learning motivation. For example, as regards English vocabulary learning by students majoring in science and engineering in Japan, Tanaka (2017) found that while the motivated peers hardly had impact on the students' learning motivation, the demotivated peers did.

Obstacles on the way of learning are frequently attributed to learning demotivation. One is the difficulty in learning specific and complicated language features or skills, especially vocabulary (cf. Kikuchi, 2009). Students' interest in learning the L2 tends to dwindle in the face of large amounts of vocabulary (Kim, 2009; Trang & Baldauf, 2007). Another impediment is experience of failure or lack of success (also referred to as lack of self-confidence, low perceived competence or self-denigration, since it can be a result thereof) is also consistently attributed to demotivation in L2 learning in different settings (e.g. Falout, 2012; Falout et al., 2009; Song & Kim, 2017; Tanaka, 2017). Further, inadequate teaching facilities contribute to reducing learning motivation. Hassaskhah et al. (2015) administered an open-ended questionnaire to English major undergraduates in Iran and found that a lack of adequate facilities (such as air-conditioning, libraries, and electronic resources) was a major source of demotivation.

Non-communicative teaching and learning methods (i.e. grammar-translation method or excessive use of memorization) are also reported to be one of the main attributions of demotivation in learning an L2. Demotives rooted from this source were found in a range of studies such as those conducted in Japan (e.g. Falout et al., 2009; Hamada & Kito, 2008; Kikuchi, 2009) and Korea (e.g. Song & Kim, 2017). The overemphasis on this teacher-centred and form-focused approach not only compromises the communicative purposes of L2 learning but requires a large degree of cognitive engagement, in part attributing to the loss of interest in learning. For example, the findings by Song and Kim (2017) indicated that students strongly attributed their demotivation to the fact that they had to frequently memorize vocabulary, grammar or texts.

Uninteresting learning materials such as those in textbooks, reference books, lessons or tests are also reported as a main factor associated with demotivation. In Kikuchi's (2009) study, students reported to lose interest in learning partly because of the tedious contents and excessive and lengthy texts of the textbooks. Sakai and Kikuchi (2009) administered a questionnaire to 656 high school students in Japan. The students reported that one of the main sources of demotivation was poor learning contents and materials, such as uninteresting and outdated topics of the

reading texts, lengthy reading passages, or an absence of use of visual materials. Song and Kim (2017) also found textbooks with uninteresting reading texts to be one of the major demotives.

Other forces involving demotivation

It is important to note that the above-mentioned external forces are not sufficient in explaining the demotivational sources. Thorner & Kikuchi (in press) noted several limitations of the previous demotivational studies. Specifically, these studies collected data based on the *perceptions* of the students; biases thus may occur, leading to the one-sided and thus inconclusive findings. In addition, other influences, such as the *disappearances* of motivational forces and the *emergences* of more attractive alternatives, might involve in reducing the existing motivation.

Thorner & Kikuchi (in press) also mentioned that demotivation is related to several psychological, such as *need deficits* (i.e. basic psychological needs such as competence, related need, autonomy not being fulfilled), *emotional disturbance* (i.e. repeated experiences of negative emotions from learning resulting in tendency to avoid learning), and *maladaptive cognition* (i.e. tendency to attribute failures to abilities, which are stable, and thus unavoidable).

Thus, it could be assumed that as a negative counterpart of motivation (Dörnyei & Ushioda, 2011), demotivation is subject to the interactions between external factors (i.e. teachers, peers, obstacles, methods, or materials) and internal factors (i.e. visions, goals, needs, perceptions, beliefs, or biases). Specifically, when the interactions between the external influences and internal influences are congruous, students tend to be motivated to learn. By contrast, when the interactions between external factors and internal factors are incongruous, students appear to lose motivation to learn. Put another way, when external stimuli trigger disagreeable psychological forces, demotivation might occur. On the contrary, if external stimuli trigger harmonious psychological forces, motivation or remotivation might occur. For example, if students' learning goals is to be able to communicate in the target L2, teaching methods that emphasize memorization appear to demotivate students to learn. In this way, to inhibit demotivation and boost motivation or remotivation, common psychological patterns (e.g. common and general goals or beliefs) of particular student contexts should be identified or intensified before external motivational techniques can be selected and applied to ensure the congruence between the external and internal forces.

4.1.3 Motivational strategies and motivational techniques in L2 education

The following section summarizes the motivational strategies developed Dörnyei (2001a), basing on the traditional motivational concepts. It also discusses the term *motivational techniques* and how they differ from other language learning strategies. Further, it briefly accounts for the relevance of motivational techniques to L2 pedagogical practices and research.

Since the 1990s, there has been a special emphasis placed on exploring methods to improve the motivational disposition of language learners. For example, in part responding to Crookes and Schmidt's (1991) call to foster the educational relevance of L2 motivation, Dörnyei (1994a), as summarized earlier, introduced thirty motivational techniques that teachers can use to motivate L2 learners. These techniques were subsumed into an L2 motivation construct which consists of three levels concerning the language, the learner, and the learning situation (Dörnyei (1994a). Because human behaviour is shaped by a wide variety of factors – ranging from internal reasons such as curiosity or a desire for self-fulfilment to external motives such as various rewards and grades – the notion of motivation is very broad, and there are many ways by which one can positively influence L2 learning behaviours (for a recent overview, see Lamb, 2017). The most comprehensive framework of motivational strategies – that is, instructional techniques employed to "consciously generate and enhance student motivation, as well as maintain ongoing motivated behaviour and protect it from distracting and/or competing action tendencies" (Dörnyei & Ushioda, 2011, p. 103) – has been developed by Dörnyei (2001a). In this light, the framework of motivational strategies consists of four main components: (a) creating the basic motivational conditions, (b) generating initial motivation, (c) maintaining and protecting motivation, and (d) encouraging positive self-evaluation. These are then broken down into 35 main macro-strategies, and then 102 corresponding micro-strategies. The theoretical underpinnings of the motivational strategies are based on his synthesis of the research findings from the fields of psychology, educational psychology and L2 motivation so that "theoretical knowledge can be turned into practical techniques to motivate learners in the classroom" p. 5. The construct focuses on two broad types of strategies (for summaries, see Dörnyei, 2007b, 2014a):

(a) techniques related to promoting the *individual learning experience* (e.g. arousing the learners' curiosity and attention, making the teaching materials relevant to them as well

as increasing the learners' satisfaction and confidence), which has been the main focus of traditional motivation research in educational psychology;

(b) strategies concerning the quality of the *corporate experience of the learner group*, drawing on the various group-building approaches developed within the field of group dynamics (with a special emphasis on group cohesiveness and group norms).

The validity of the motivational strategies proposed by Dörnyei (2001) has been analysed through a number of different research approaches. Dörnyei and Csizér (1998) initiated one methodology which compared teachers' reports of their perceived and actual use of different strategies through a questionnaire survey, resulting in a distilled set of ten macro-strategies (which they termed the "Ten commandments for motivating language learners"), and this approach has been replicated in a variety of contexts (e.g., Cheng & Dörnyei, 2007; Guilloteaux, 2013; Ruesch, Bown & Dewey, 2012). Other approaches attempted to go beyond evaluating the perceived significance of the strategies by also measuring their concrete impact through student survey data (e.g. Papi & Abdollahzadeh, 2012; Sugita McEown & Takeuchi, 2014; Wong, 2014), classroom observation (e.g. Guilloteaux & Dörnyei, 2008) and quasi-experimental designs (Alrabai, 2016; Moskovsky et al., 2013). The findings have indicated that although motivational strategies display culture-specific variation, some of the basic motivational principles tend to be universal and have a significant effect in learning.

In this thesis, motivational strategies are subsumed into a general term *motivational techniques* to encompass other motivational methods beyond the traditional concepts of motivation. It is also noteworthy that motivational techniques are different from other *language learning strategies* despite inevitable overlaps between them. Dörnyei and Ryan (2015) summarized a number of language learning strategies, such as cognitive strategies (i.e. involving cognitive processes of perceiving, attending to, categorizing, analyzing, comparing, or memorizing the target learning materials), metacognitive strategies (i.e. aiming at optimizing the learning process, figuring out how best to be cognitively engaged in the learning materials), social strategies (i.e. ways to facilitate positive interpersonal tendencies so as to increase communication), or affective strategies (i.e. involving monitoring emotions so as to increase engagement in learning). Motivational techniques differ from these language learning strategies in three main ways: (a) the former are comprised of myriad motivational influences, such as group dynamics, group competitions, goal setting methods, or visionary techniques (which

concern the vision construct that will be discussed in Section 4.3 of this chapter), (b) they are developed from both traditional and novel concepts of motivation used (or to be used) in SLA, and (c) they are *deliberately* utilized to promote motivated learning behaviours - that is, to prompt the learners to start engaging, make efforts, and persist in learning to obtain positive learning outcomes in instructed SLA.

As previously noted, systematic uses of motivational techniques tend to enhance motivated learning behaviours (and probably learning outcomes). This is associated to the fact that classroom contextual factors have significant effects on the learners' motivation (see e.g. Clément, Dörnyei, & Noels, 1994; Joe, Hiver, & Al-Hoorie, 2017). This also aligns with Ushioda's (2009) concept of "person-in-context relational view of motivation", which provides an account for the connections between contexts and learners, as in her words "real persons". According to this concept, an L2 learner is an agent interacting with multiple micro- and macro-situated contextual factors (e.g. teachers, peers, classroom tasks, or extra-curricula activities); thereby, the learner's motivations and behaviours are influenced, shaped and formed through these interactions. Regarding the relationship between learner and context, Larsen-Freeman (2015) notes:

> With the coupling of the learner and the learning environment, neither the learner nor the environment is seen as independent, and the environment is not seen as background to the main developmental drama. (p. 16)

In this respect, it is reasonable to investigate motivation in relation to a variety of situational contexts whereby learners are in contact with. Therefore, "the field of L2 motivation was open to a call for incorporating the properties of the learning environment," (Dörnyei, in press).

Due in part to the significant impact of situated factors on motivated behaviours and learning and the success of motivational techniques, Ushioda (2016) urges L2 motivation research to move one step further by viewing L2 motivation 'through a small lens'. Put another way, given that teaching styles or learning tasks have impact on motivational dispositions, it makes sense to investigate the influence of motivational techniques on motivation and thus on classroom task performance regarding specific language features. In addition, the issue of how to motivate learners to learn a target L2 language is a topic of widespread concern, accounting for one third of publications in L2 motivation over the period between 2005 and 2014 (Boo et al.,

2015), little is known regarding the interactions between motivation and the cognitive processes concerning learning specific L2 features (Dörnyei, 2018; Ushioda, 2016). As Dörnyei (in press) puts:

> there has been disproportionately little research linking motivation to the actual cognitive subprocesses involved in the mastery of an L2 such as attaining specific L2 skills (e.g. listening comprehension) or acquiring concrete aspects or the L2 (e.g. lexis). (p. 4)

Dörnyei (2018) and Ushioda (2016) thus call for L2 motivation research to examine the role of L2 motivation in language education at micro levels (e.g. learning vocabulary or increasing the performance of reading comprehension) other than a general level (e.g. motivated learning behaviours or intended learning efforts). This encourages the idea of employing motivational strategies or techniques not only to improve classroom motivation but also to enhance the learning outcomes of particular language features which are part of learning goals during language programs.

4.1.4 Motivation and engagement

Acquiring an L2 in instructed conditions, regardless of whether it is classroom instruction or self-instructed learning, requires a systematic approach to manipulating learning mechanisms and the conditions where they take place (see Chapter 2). Thus, cognitive engagement in learning is critical. Further, due to the incremental nature of language acquisition, sustainable motivation and engagement in learning are crucial to the acquisition of the target language. In the present time, given the fact that there are a plethora of distractions and entertainments from digital devices and social media, keeping focused on engaging in learning in order to acquire needed linguistic knowledge and skills is quite challenging.

The field of SLA has started to shed light on engagement as a result of motivated learning behaviour through the development of two constructs: *vision* (cf. Dörnyei & Chan, 2013; Dörnyei & Kubanyiova, 2014) and *Directed Motivational Currents* (DMCs) (Dörnyei, Muir & Ibrahim, 2014; Muir & Dörnyei, 2013). The notion of vision is related to the construct of the L2 Motivational Self System (Dörnyei, 2005, 2009a). The DMCs construct is largely based on the notion of vision and flow theory in psychology (see e.g. Csikszentmihalyi, 1975, 2000; Nakamura, & Csikszentmihalyi, 2009; Shernoff & Csikszentmihalyi, 2009), with the latter

concerning conceptualizing the nature and conditions of engagement mechanisms. Regarding sustainable motivation in L2 learning, Dörnyei (2018: 13) states that:

> The ultimate questions for motivation scholars is not only to understand what generates language learning motivation but to explain what can sustain this motivation long enough for the relatively slow process of SLA to produce usable L2 proficiency.

He also points out that the notions linked to sustained learning behaviours include the three interrelated constructs: vision, engagement, and Directed Motivational Currents (DMCs). As previously noted, while vision is the primary reason for engagement and DMCs, DMCs is characterized by deep engagement. It is important however to first briefly clarify the relationship between motivation and engagement.

Motivation and engagement are two well-researched concepts in psychology; yet according to Appleton, Christenson, and Furlong (2008), the distinction between the two "remains subject to debate" (p. 379). This is probably due to the well-documented fact that both motivation and engagement are associated with effort, persistence, performance and achievement (see e.g. Atkinson & Raynor, 1978; Dörnyei & Kormos, 2000, Furrer & Skinner, 2003; Kormos & Dörnyei, 2004; Martin & Dowson, 2009; Pintrich & De Groot, 1990).

Differences between motivation and engagement

With regard to its conceptualization, motivation is different from engagement in that in educational psychology and SLA it refers to choice, persistence and effort exerted on a particular learning task, seeking to answer the question of why learners think and behave the way the do (cf. e.g. Brophy, 2013; Dörnyei, 2018). In this way, it concerns the underlying psychological mechanisms which pertain to direction and intensity of human behaviour (cf. Dörnyei, 1998; Skinner, Wellborn, & Connell, 1990).

Considerable research has attempted to conceptualize the notion of engagement in education, with varying terms being coined, including engagement, student engagement or school engagement (see Appleton, et al., 2008 for a detailed review). Despite the subtle differences among the terms, there is a consensus that engagement or student engagement refers to participation and involvement in learning (e.g. Chapman, 2003, Skinner & Belmont, 1993). This meaning will be used throughout the thesis (rather than school engagement which is more

related to general attitudes toward school). There is also consensus that there are three subtypes of engagement, including *behavioural* (observable actions such as attendance or participation), *cognitive* (perceiving, thinking, analyzing, reasoning, choosing or using appropriate learning strategies) and *emotional* engagement (feelings about and reactions to peers, teachers and school). In this light, engagement differs from motivation in that the latter concerns underlying *reasons for action* while the former involves *actual action.*

Connections between motivation and engagement

Given that motivation is the underlying force that triggers engagement, leading to a certain outcome, in order to understand the sources contributing to an outcome, the former and the latter should be considered in tandem. Regarding the relationship between motivation and engagement, Appleton et al. (2008) state that "motivation is central to understanding engagement" (p. 397). Similarly, Fredricks, Blumenfield, and Paris (2004) point out that there is a large overlap between motivation and engagement. Evidence has also suggested positive associations between motivation and engagement variables (e.g. Ainley, 2012; Guilloteaux & Dörnyei, 2008).

It is important however to note that although motivation and engagement can go hand in hand, the former being the precondition and the facilitating forces of, during and after the latter, the relationship is not linear; that is, motivation does not necessarily cause engagement. The fact that one is motivated in learning does not necessarily mean that (s)he will certainly engage in learning. The reason is that both motivation and engagement are context-bound, situated and dynamic (cf. Appleton et al., 2008; Dörnyei, 2018). Further, the link between engagement and outcome is more direct than that between motivation and outcome (Dörnyei, 2018). In the light of the above, to understand sustained motivation, it is essential to point out the nature and conditions of deep engagement in L2 learning, which involves concept of vision and the related construct of Directed Motivational Currents (DMCs) (cf. Dörnyei & Muir, 2013; Dörnyei, Muir, & Ibrahim, 2014; Dörnyei, Ibrahim, & Muir, 2015).

4.2 Vision

4.2.1 Vision, imagery and simulation

In educational cognition research, vision pertains to visual-spatial thinking or thinking with images, which is important in memory and learning (Mathewson, 1999). According to

Richardson (1969), "mental imagery refers to (1) all those quasi-sensory or quasi perceptual experiences of which (2) we are self-consciously aware, and which (3) exist for us in the absence of those stimulus conditions that are known to produce their genuine sensory or perceptual counterparts, and which (4) may be expected to have different consequences from their sensory or perceptual counterparts" (pp. 2-3). In this definition, quasi-sensory or quasi-perceptual experiences refer to concrete representation of senses, perceptions, or emotional and experiential states (Richardson, 1969: 3).

In L2 motivation research, the notion of *vision* is also termed as *mental imagery* or imagery, referring to as future self-guides or future self-images (cf. Dörnyei, 2014; Dörnyei & Chan, 2013; Dörnyei & Kubanyiova, 2014), as put by Dörnyei, Henry, and Muir (2016), vision concerns "a vivid mental image of the experience of successfully accomplishing a future goal" (p. 22). One key aspect of future self-images is that they "involve tangible *images* and *senses*; they are represented in the same imaginary and semantic way as the here-and-now self, that is, they are a *reality* for the individual – people can 'see' and 'hear' a possible self" (Dörnyei & Ushioda; 2011: 81). Similarly, according to Dörnyei (2014) vision or mental imagery involves:

> mental representation of perceptual or emotional experiences and situations in the mind in multiple sensory modalities… in other words, it involves generating an imagined reality that we can see, hear, feel and taste. (p. 13)

The vision construct is related to the L2 motivational self system by Dörnyei (2005, 2009a), since it involves ideal L2 self and ought-to L2 self – the two components of the L2MSS (Dörnyei, 2014). These self concepts in L2 motivation are in part based on possible self theory by Markus and Nurius (1986) and self-discrepancy theory by Higgins (1987) in the field of psychology. Figure 4.1 summarizes the connections between vision, the L2 motivational self system, and other related concepts.

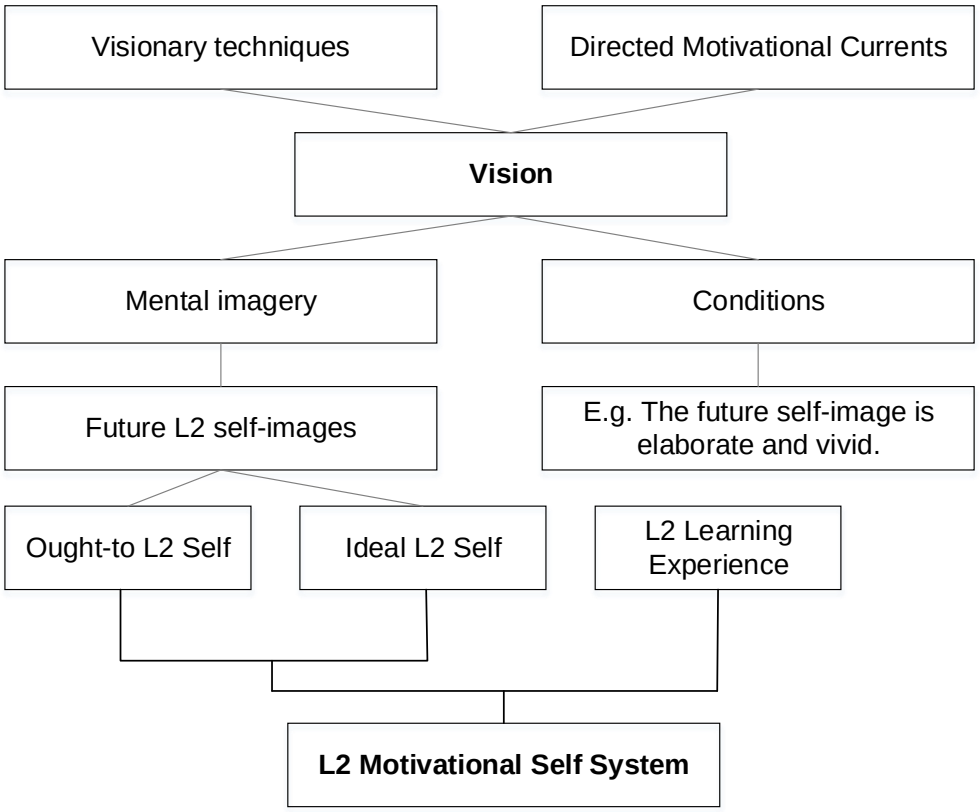


Figure 4.1: Connections between the vision construct, L2 motivational self system, and other related concepts

In cognitive neuroscience, *mental imagery* is referred to by Mulder, Hochstenbach, van Heuvelen, and den Otter (2007) as "a process by which sensations can be relived without the appropriate stimuli being present" (p. 204) (see also Section 3.7.1 for a definition thereof). Similarly, Zimmermann-Schlatter et al. (2008) coin mental imagery as "the active process by which humans experience sensations with or without external stimuli" (p. 9). As such, mental imagery in L2 motivation is neuroscientifically based, involving generating future L2 self images in the brain, which allows for experiences of sensations without the stimuli being physically present.

In psychological science, vision or mental imagery in L2 motivation is as well strongly related to the concept of *simulation* (also referred to as mental simulation), which Markman, Klein, and Suhr (2009) refer to as "the act of imagination and the generation of alternative realities" (p. vii). With respect of harnessing the potential of simulation in goal achievement, Taylor, Pham, Rivkin, and Armor (1998) state that "Mental simulation provides a window on the

future by enabling people to envision possibilities and develop plans for bringing those possibilities about" (p. 429). Further, there is a growing body of evidence in the field of psychology concerning the impact of simulation or mental imagery on performance in various areas of life (e.g. Greitemeyer & Würz, 2006; Kappes & Morewedge, 2016; Taylor & Pham, 1999).

Vision in L2 motivation can thus be viewed as one form of simulation in psychology. However, while the product or target of simulation (and/or the emotions thereof) may be any thing or event that a person can visualize, that of vision is restricted to actions or behaviours of a future L2 self. Put another way, vision in L2 motivation only involves imagining personal vision (Dörnyei & Kubanyiova, 2014: 9), which, as argued by van der Helm (2009), concerns "giving meaning to one's life, with helping to make shifts in professional careers and with coaching yourself in realizing a personal dream" (p .98).

According to Dörnyei (2014), vision in L2 motivation "highlighted the potential significance of mental imagery – and especially future self-images – in energising goal-specific behaviour" (p. 7). As such, vision can be one of the pivotal motivational factors being capable of causing actions in language learning (Dörnyei & Ryan, 2015: 96). Due to its capability of directing behaviours, vision or mental imagery plays a crucial role in motivating L2 learners over the long-term process of mastering a second language. As argued by Dörnyei and Kubanyova (2014):

> it captures a core feature of modern theories of L2 motivation: the emphasis on the learner's desire to approximate a preferred future state, the sort of ideal self a language learner might envision for him-/herself. It is this directional nature of vision, the *pull forwards* an imagined future state, that makes the concept useful within the context of human motivation, because the attractive visionary target mobilises the present potential in order to move in the preferred future direction, that is, to change in order to approximate the future . (p. 9)

It is important to note that although mental imagery can be used as a mnemonic technique (see Section 3.7) in associative learning of language features (e.g. Raugh &Atkinson, 1975), it is not the case in L2 motivation when it comes to vision. In other words, mental imagery concerning the concept of vision in L2 motivation is related to the visualization of future self-

images and simulation of behaviour and action thereof, rather than involving association with a linguistic item for the purpose of memory efficiency.

4.2.2 Self-concordant goals and vision

Drawn upon self-determination theory by Deci and Ryan (1985, 2000), the concept of self-concordant goals was initiated by Sheldon and his colleagues (e.g. Sheldon, 2014; Sheldon & Elliot, 1999). Self-concordant goals refer to the goals that represent the stable and actual interests, desires and potentials of the goal strivers. Differently put, self-concordant goal strivers set goals that express their own deep-seated and internalized passions, beliefs, values and capabilities, and as a result of this they tend to sustain efforts over a long course of time in order to realize the goals. They are also likely to show increased happiness once the goals are attained (Sheldon, 2014).

In contrast, although non-concordant strivers also set goals for themselves, their goals may be triggered by external cues rather than by their internalized passions and thus not representing their values, beliefs and potentials. As a result, the initial efforts toward realizing the goals fade over time; the goals may end up not being realized. The non-concordant strivers are unlikely to be happy even if they can attain their goals. Sheldon and his colleagues (e.g. Sheldon & Kasser, 1995) also found that compared to concordant strivers, non-concordant ones tend to be more influenced by external controls, less likely to enjoy new experiences, and less open to inner experience; further, they encounter more conflict between varying roles in their lives and do not have strong needs to realize their own potentials. Sheldon and his colleagues argued that non-concordant strivers are "out of touch with deeper or more stable aspects of themselves and thus have selected the 'wrong' goals for themselves" (Sheldon, 2014: 18). In these lights, the theory of self-concordant or non-concordant goals can be used to understand L2 acquisition.

A vision is similar to a self-concordant goal in that they are both goals which are personally relevant, but they differ in three main ways regarding L2 learning. First, visions involve *vivid mental imagery* (Markus & Ruvolo, 1989; Ruvolo & Markus, 1992), concerning individuals' specific future self-images or possible selves rather than general long-term or short-term goals. For example, a student majoring in Engineering has a vision of himself/herself being a successful engineer in various situations such as delivering a speech about his/her product with

the team at an engineering conference. The mental imagery involves a *sensory experience*. However, this student may have a self-concordant goal of obtaining an engineering degree or acquiring several technical skills. Second, given that visions generated from visualizing in one language are different from those in another (Dörnyei & Chan, 2013), L2 visions may concern future *L2 self-identities* that may be different from those in L1. This is another unique feature that makes L2 visions differ from self-concordant goals. Third, self-concordant goals tend to be considered in parallel with non-concordant goals, with considerable focus being placed upon factors contributed to goals not being obtained (e.g. Sheldon & Kasser, 1995). Conversely, the notion of vision does *not focus on justifying failures;* rather, it highlights the conditions that facilitate the achievement of future self-images.

4.2.3 Vision in DMCs

DMCs (Directed Motivational Currents), partly inspired by the concept of *flow* by Csikszentmihalyi and his colleagues (e.g. Csikszentmihalyi, 1975), refer to experiences in which L2 leaners are completely absorbed in learning activities, losing the normal sense of the surrounding, including time; the concentration is so intense that there is little energy for distractions (cf. Dörnyei & Muir, 2013; Dörnyei, Muir, & Ibrahim, 2014; Dörnyei, Ibrahim, & Muir, 2015). As Dörnyei, Henry and Muir (2016) notes: "we see DMCs as representing the *optimal form of engagement*" (p. 33).

Vision is a core feature of the DMCs, acting as its directed element (Dörnyei, Henry & Muir, 2016). In addition, in order for DMCs to occur a number of other conditions are required. These conditions include specific set of goals and subgoals, sense of ownership and control of tasks and goals, perceived balance of task challenges and learning skills, openness to DMC experiences, general classroom motivational conditions, learning routines, feedback, progress checks, and dominance of positive emotions (see Dörnyei, Henry and Muir, 2016, for further details of these conditions).

A DMC experience differs from a flow experience in that on one hand, the latter involves an activity that is primarily deemed intrinsically rewarding such as an artist amidst the experience of creating an art work or a gamer playing a computer. As such, the flow concept is used to understand an *autotelic* activity or phenomenon, one that is - as put by Nakamura and Csikszentmihaly (2002) - "intrinsically rewarding in and of itself…, quite apart from its end

product or any extrinsic good that might result from the activity" (p. 89). On the other hand, a DMC experience may concern (but not exclusively) activities that can generally be coined as tedious (though they can be interesting), such as learning grammatical rules. Therefore, although the task in a DMC can be enjoyable, the main force that keeps a learner completely engaged in learning is related to the future L2 self-image or vision.

The primary reason for the engagement in DMCs can be the joy, the positive feelings generated from development of skills and capabilities needed to realize the desired future vision. It is mainly the future self-image that directs the learner to be deeply involved in carrying out a learning task or a series of tasks. The acquisition of knowledge or skills from completing the task(s) in question energizes him or her to move one step closer to the desired future self-image, which can act as a reward that attracts the learner to take part in other tasks. In this respect, it allows the learner to experience the feelings of *authenticity* and *eudaimonic well-being* (cf. Ryan & Deci, 2000b, 2001; Waterman, 1993, 2008) as opposed to momentary happiness. The former refers to the feeling of being able to act in a way aligned with his or her desired future self, and the latter is connected with a deep sense of personal contentment derived from the experience of realizing one's potential and feeling of personal fulfilment (Dörnyei, Henry, & Muir, 2015, see also Deci & Ryan, 2008 for more details).

During the occurences of learning activities, vision or future self-images operationalize as the primary impetus to keep learners engaged and to energize learning. However, it is noteworthy that these future self-guides are unlikely to be automatically inherent in L2 learners; thus, they need to be triggered or made present in the learners' minds during learning activities. This can be done through the systematic utilization of visionary techniques.

4.2.4 Visionary techniques

Drawing on the construct of vision (which concerns the L2 motivational system and the synthesis of prevailing motivation-related constructs and theories), Dörnyei and Kubanyiova (2014) proposed a framework of *general* visionary techniques (also referred to as vision, mental imagery, or imagery), intended for imagery training in L2 pedagogical practices. The framework consists of a six-phase implementation procedure and nine conditions for vision to exert motivational effects and energize engagement in learning.

The six-phase implementation procedure

- *Creating the language learner's vison*. This is an important initial step because learners' visions need to be established. Learners need to have desired future selves so that visionary techniques can exert effects. This can be done in a number of ways, such as using guided imagery, guided narratives, or role models.
- *Strengthening the vision through imagery enhancement.* In this phase, the mental imagery concerning established desired future selves need to be strengthened by such ways as integrating visualizing tasks in to the teaching routine.
- *Sustaining the vision by making it plausible.* It is important learners be aware that achieving the desired future images is possible.
- *Transforming the vision into action.* Learners need to have implementation plans and specific strategies to start taking learning actions towards the achievement of their desired future images.
- *Keeping the vision alive.* Learners' visions can fade when not frequently activated. To keep visions alive, regular reminders need to be incorporated into the teaching materials.
- *Counterbalancing the vision by considering failure.* Learners need to be aware of the negative consequences of not succeeding so that they regulate themselves to engage in learning.

<u>Nine conditions for vision to exert motivational effects and energize engagement in learning</u>

- The learner *does have* a desired future self-image. This is because people vary in regarding whether they can easily generate and maintain their future self-images. Keeping the vision of the future L2 self can fuel the learner's motivation to exert efforts in learning.
- The future self is sufficiently *different* from the current self. The gap between the current L2 self and the future L2 self must be clear. If there is little difference between the current self-image and the future self-image, the learning efforts will not be worthwhile.
- The future self-image is *elaborate* and *vivid*. The L2 vision that the learner imagines becoming has to be clear and specific. If this is the case, the urge to take learning actions will be stronger.

- The future self-image is perceived as *plausible*. Upon considering the learner's circumstances, it is possible and realistic for the learner to achieve the vision.
- The future self-image is *not* perceived as *comfortably certain* to reach, that is, within one's grasp. The possible L2 selves will not happen automatically. If learner wants to achieve his or her future vision, there must be a notable increase in the efforts expended.
- The future self-image is in harmony – or at least does not clash with other parts of the learner's self-concept (e.g. a conflict between the ideal and the ought-to selves), particularly with expectations of the learner' family, peers or other elements of the social environment.
- The future self-image is accompanied by relevant effective *procedural strategies* that act as a *roadmap* toward the goal. Without action plans with specific tasks, the motivation cannot be energized so that needed actions are taken to realize the vision.
- The future self-image is *regularly activated* in the learner's working self-concept. Frequent reminders of possible future L2 selves are crucial so that the images can be active and clear, enduring the motivating potential.
- The desired future self-image is offset by a counteracting *feared possible self* in the same domain. To maximize the motivational effectiveness of mental imagery, the learner must have the vivid images of negative consequences of failing to realize the vision.

(Adapted from Dörnyei & Kubanyiova, 2014: 13-14)

It seems important to reiterate that the visionary techniques and the conditions mentioned above are the general visionary principles. Specific classroom contexts with different research/teaching purposes (such as to enhance motivation and/or to facilitate the learning of specific linguistic features) require differently tailored techniques (see Section 7.2.3 for the specific visionary techniques developed for the second study) that can be developed based on these basic guidelines. To support classroom visionary training in L2 education, Hadfield and Dörnyei (2013) compiled a book-length resource of activities that researchers and teachers can refer to. In L2 motivation research, several studies (e.g. Fukada, Fukuda, Falout, & Murphey, 2011; Mackay, 2014; Magid & Chan, 2012; Sampson, 2012) have successfully attempted to develop and apply of specific visionary techniques across varying contexts (to be reviewed in

further details later). The second study of this thesis (presented in Chapter 6) is an additional example of how the general visionary techniques are tuned to lend themselves to a particular research context.

4.3 The use of motivational influences to impact language learning

Previous research in L2 motivation has examined the key motivational components predicting motivated behaviour and language achievement (e.g. Kormos & Csizér, 2008; Lamb, 2012; Noels, 2001). Although the findings vary across different contexts and are contingent on the orientations being investigated (Dörnyei, 1998: 124), learning situations, such as teaching styles, are associated with learner motivation (Dörnyei, 1998; Dörnyei & Ushioda, 2011; Ushioda, 2009). For example, Bernaus and Gardner (2008) found that attitudes towards the learning situation were indicative of motivated learning behaviour and language achievement. Clément, Dörnyei, and Noels (1994) found, among others, that perceived teacher rapport, teacher competence, course attractiveness, and course difficulty were associated with English use anxiety. Lamb (2012) found both learning experience in school and learning experience out of school to be associated with motivated learning behaviour. Similarly, the findings by Al-Hoorie (2016) suggested that implicit attitudes towards the learning experience positively predict motivation and language achievement.

Further, recent research also reveals that the future self-guides in the construct of L2 motivational self system by Dörnyei (2005) are indicative of motivated behaviour (e.g Kormos, Kiddle, & Csizér, 2011). Similarly, ideal l2 self is found to be positively associated with L2 motivation (e.g. Moskovsky, Assulaimani, Racheva, & Harkins, 2016; Papi, 2010), willingness to communicate (e.g. Munezane, 2015), and learning achievement (e.g. Kim & Kim, 2014). Because the second study presented in this thesis is an intervention study concerning the mediating effects of mental imagery on learning, in the sections that follow I only review intervention studies investigating the impact of motivating techniques on motivation and learning.

4.3.1 Impact of motivating techniques or learning strategies on motivation and learning

To examine the impact of motivating techniques or learning strategies on motivation and/or learning achievement, previous studies observed or tested the use of motivating and learning tasks in classroom over specific courses of time. This was typically followed by the

administration questionnaires (including motivational variables and a criterion measure, i.e. intended efforts or attitudes toward learning), language tests, and/or other qualitative instruments (cf. Dörnyei, 1998; Gardner, 1985; Lamb, 2017). According to a survey article by Boo et al. (2015), a good number of studies have investigated this second issue. Overall, research findings (e.g. Stennett & Earl, 1982; Piniel & Csizér, 2014) indicate the dynamics of motivation in language learning. That is, motivation changes significantly over time, regardless of the type of intervention (including deliberate or non-deliberate use of motivating techniques or learning strategies) and the length of intervention. The following summary reviews the empirical studies which examined the use of the construct of motivational strategies by Dörnyei (2001a), and the use of vision (Dörnyei & Kubanyiova, 2014) in language classes.

4.3.2 Intervention studies on the impact of motivational strategies on motivation and learning

So far four key studies have relied on the framework of motivational strategies by Dörnyei (2001a) to examine the use and the effects of motivational teaching practices on motivation and learning. Guilloteaux and Dörnyei (2008) pioneered in providing empirical evidence regarding how motivational strategies are used in language classes. In their study, they did not set out to deliberately use specific motivational strategies in classroom practices; rather, they used an observation scheme to observe motivational teaching strategies that 27 school teachers employed in their regular teaching practices for over two months. The teachers were not guided beforehand to use motivational strategies. The learners of varied proficiency levels were school students aged from 12 to 15 in Korea. The observation variables were developed in accordance with the taxonomy of motivational strategies. At the end of each observational session, an evaluation scale was administered to the teachers and a self-reported questionnaire to the students. The findings indicated that teacher motivational practice was a strong predictor of motivated learning behaviour, leading to more behavioural engagement in learning in the observed language classes. This study confirmed the validity of the motivational construct by Dörnyei (2001a), indicating that the motivational strategies can be used in language classes to foster engagement in learning.

In lieu of observing motivationl teaching practices, McEown and Takeuchi (2014) examined the changes in the effectiveness of the frequencies of use of 17 motivational strategies employed by one teacher on motivational intensity of 222 undergraduate students in Japan. The list of these strategies was given to both the teacher and the students. While the teacher reported

the frequencies of use of each strategy, the students rated how often they felt motivated by each strategy. This procedure was administered once a month over four months of a language program. The findings suggest that the frequencies of use of seven out of 17 motivational strategies were positively correlated from one to four times with the motivational intensity. These correlations varied across two levels of language proficiency and motivational intensity. Also, the frequencies of use of some strategies were correlated with the motivational intensity in one month, but not in another month.

Moskovsky, Alrabai, Paolini, and Ratcheva (2013) differed from the two aforementioned studies by selecting 10 motivational strategies and guided teachers to use them to investigate whether these strategies had effects on motivated learning behaviour. The participants were 14 teachers and 296 students of different language proficiency levels in Saudi Arabia. The age of the participants ranged from 12 to 25 years. The eight-week intervention was a pre-posttest design with a control group. They used three instruments, including a self-reported questionnaire, a classroom observation scheme, and a teacher evaluation scale. The questionnaire was administered twice, at the beginning and at the end of the program. They found that except for the instrumental orientation, motivational strategies employed had positive effects on all motivational orientations being measured. That is, the deliberate use of the selected motivational strategies led to improved motivation in the classroom setting where the study was carried out. However, the degree of effects was higher for the state motivation (i.e. a less stable disposition than the 'trait' counterpart) than the trait one.

Alrabai (2016) investigated the effects of motivational strategies not only on motivation but on learning outcomes. He selected six motivational strategies to use in a ten-week quasi-experiment, which was a pre-posttest design with a control group being included. The teacher participants were 14 teachers of varied age ranges, qualifications, and teaching experience in five institutions. The student participants were 437 males from beginner to advanced proficiency levels in Saudi Arabia. A classroom observation scheme and a questionnaire were used to measure motivated learning behaviour. A proficiency test was used to measure learning gains. The findings suggested a more significant increase in the motivated learning behaviour of the treatment condition compared to the control condition, resulting in higher learning outcomes in the former than the latter.

Overall, of the four attempts investigating the effectiveness of motivational strategies, only one study by Alrabai (2016) measured their effects on language achievement. Although this was a fairly controlled quasi-experiment, there are still several concerns. First, as acknowledged in the study, the experiment used only young male students. Given that girls can be different from boys regarding motivation, language achievement, and frequency of strategy use (Oxford, Park-Oh, & Sumrall, 1993), it might be interesting to know the effects on both genders at college levels. Second, as noted earlier, the treatment group and the control group used different teachers teaching the same or similar language features. Although the teachers might not be different as to the perceived motivational variables being considered prior to this experiment, they could differ in other motivational orientations (e.g. personality) not being taken into account. Similarly, the motivational orientations of these teachers might vary depending on the interaction with learners (Gregersen & MacIntyre, 2014: 226). Third, the study measured language achievement, but it was unclear what target language features were taught during the experiment. Also, apart from the six motivational strategies, it was unknown what learning and teaching strategies were used in the control and treatment groups over the program. Given that the experiment was carried out over ten weeks, it was unlikely that the different teachers of the treatment group used the same or similar teaching and learning strategies as those of the control did for the students to learn certain target language features. If different cognitive and metacognitive learning strategies (Ehrman & Oxford, 1995) were used to emphasize teaching different language features, this could affect the learning outcomes. Thus, it might be useful to know whether motivational strategies have effects on learning achievement on both male and female college students when these factors are considered.

4.3.3 Intervention studies on the impact of vision on motivation

To my knowledge, four studies have investigated the effectiveness of vision in L2 classroom practices. Magid and Chan (2012) examined the effects of visionary tasks on motivated learning behaviour. They developed two visionary language programs to be used in England and Hong Kong for Chinese college students. The two programs were based on those by Hock, Deshler, and Shumaker (2006) and Oyserman (2003) used in American contexts for underprivileged children and for college students who needed to increase their academic motivation. The number of participants in England was 31 while that in Hong Kong was 80. In the former, the students determined their future self-images by writing down the people they would like to become or

fearful of becoming, personally and professionally. This was followed by specifying the timelines and elaborating on the objectives, the obstacles, and the action plans. In the latter, the participants took part in similar activities as those used in England. However, they were involved in imagining their future images, drawing, and mapping their action plans instead of only listing and writing them down. To enhance the vividness of the future self-images, both programs used scripted or guided imagery (i.e. scripts of imagined scenarios of their future selves with or without the aural support). Instruments included a questionnaire and interviews, with the former being administered twice (i.e. at the beginning and the end of the programs). They found the effectiveness of the two programs in terms of increasing the participants' motivated learning behaviour as well as making the visions of their ideal L2 selves clearer and more specific.

Fukada et al. (2011) reported the use of a range of visionary activities to teach 466 students over a semester in six universities in Japan. The visionary intervention was integrated into a language programme. The treatment activities ranged from the students brainstorming or choosing their future self-images from a list to imagining themselves being these self-images using English in future situations (e.g. a ten-year reunion). The instruments were a questionnaire administered twice (i.e. at the beginning and at the end of the semester), and interviews. They found that there were significant increases in the students' motivated learning behaviour as well as in-class and out-of-class learning efforts.

Sampson (2012) conducted a qualitative study, incorporating visionary tasks into a 15-week program and examined their impact on the students' motivation and self-regulatory inclination. The participants were 34 female colleague students of varied proficiency levels in Japan. Before the intervention procedure, the students were asked to write about their ideal L2 selves. Qualitative analysis of these writing assignments showed that the students generally did not have developed visions of their L2 future selves. During the ten-session intervention procedure that followed, the students did a variety of tasks and activities which involved developing their future self-images. For example, in the Session 1 they wrote about their future ideal selves and communicated these ideas to their classmates; in the Session 7 pairs of students discussed their present and future troubles involving not being able to use English. The data were collected through the students' learning journals (which were written at the end of each intervention session) and their semester-end reflections. The findings indicated that the students found most tasks motivating. They tended to realize the importance of using future self-guides to

personalize and self-regulate their learning. Further, their future self-images became clearer and more specific.

Mackay's (2014) study differed from the aforementioned visionary treatment procedures by including a control group in the investigation. Similar to those of Fukada et al. (2011) and Sampson (2012), the intervention was incorporated into a language programme. Specifically, it was a12-weekly-session treatment procedure, investigating effects of visionary techniques on the students' motivation and the development of L2 self-images in an European context. The participants were 98 upper-intermediate EFL students in Spain, 47 in a treatment condition and 51 in a control condition. The visionary treatment involved various activities aiming at developing the students' ideal L2 selves. For example, the students listened to scripts read by the teacher so as to have ideas of their future self-images. They visualized, wrote about their desired future selves, and worked in small groups to compare their ideas in class. They did written assignments based on in-class visionary activities. They created timelines, adding details concerning their L2 learning objectives such as being able to use English automatically or giving lectures abroad. The data was collected through questionnaires and interviews. The findings indicated that the intervention was successful in terms of enhancing the students' future self-guides. The students in the intervention condition were more likely to have clear visions of their desired self-images than those in the control condition. In addition, while the former tended to increase their willingness to communicate in the target L2, the latter did not. Also, their inclination to make contact with people from other countries in the L2 did not decrease significantly for the treatment group while the opposite tended to be true for the control.

Overall, these studies indicate that the use of visionary tasks in language classes is not only practicable but also conducive to increased motivation and clearer future self-guides. However, there are two primary concerns. First, despite the current technological availability and accessibility, no studies utilized printed or computer-based pictures to help the students generate their future self-images. Given that picture can be used to support the construction and visualization of mental images and activities (Moallem, 2001), it might be useful to consider taking advantage of these types of visual support. Second, although not only was vision consistently found to predict motivated behaviour, but they were effective in terms of causing positive impact on motivation, no experimental study has examined the effects of vision on the learning outcomes of general L2 proficiency or specific L2 features.

In brief, although the only quasi-experimental study (i.e. Alrabai, 2016) has examined the effects of motivational strategies on learning outcomes, no study has incorporated motivating tasks with specific language features to examine the effects of motivation on the learning outcomes of these language features. Given the significance of motivation in education in general and in L2 education in particular, Pintrich (2003) urges that it is necessary researchers do "more experimental work on how different motivational beliefs can facilitate and constrain these cognitive and learning processes" (p.118).

4.4 Imagery, motivation and vocabulary learning

This section briefly reviews two categories of studies related to vocabulary learning: the first are those that utilize imagery as a cognitive tool to support vocabulary learning and the second are the studies that investigate the connection between L2 motivation and vocabulary learning.

4.4.1 Imagery as a form of cognitive support in vocabulary learning

Studies that investigate the role of imagery as a form of cognitive support in vocabulary learning can be divided into the use of mental imagery (without the presence of pictures as a type of visual aids) and the use of pictures.

Mental imagery

Mental imagery is an essential component in the mnemonic keyword method in vocabulary learning (Atkinson, 1975) in that it serves as a memory aid, facilitating the learning of new lexical items (Cohen, 1987). As noted previously, to learn a new L2 word with the keyword method, learners visualize an image, which displays two important elements. One is a keyword, of which native language has similar sound as the L2 word they want to learn. The other element is the meaning of this new L2 word, which in some way interacts with the keyword. Thus, upon recalling this interactive mental image, they can recall the form and meaning of the L2 item.

Substantial research has found the superiority of the keyword methods over other vocabulary learning strategies. For example, in Atkinson and Raugh (1975), the university students, who had little experience with the L2, studied L2 words with the keyword method. They found that the subjects learning with the keyword method recalled the target items significantly better than those who were asked to do their best to remember the items and those who used rehearsal strategy. In a case study, Beaton, Gruneberg, and Ellis (1995) found that ten

years after learning 350 Italian words using the keyword method, one individual learner could recall 50% of the words with minor spelling errors. Sagarra and Alba (2006) compared rote memorization, semantic mapping (i.e. drawing a map indicating the semantic associations of the target words), and the keyword method. It is noteworthy that this study controlled word length, frequency, concreteness, and imageability of the target words because these factors may influence the effectiveness of vocabulary learning strategies (cf. Ellis & Beaton, 1993; De Groot & Keijzer, 2000; Laufer, 1990). The findings revealed that with low-proficiency EFL learners, the keyword method was superior to other two methods in terms of word recognition.

However, some evidence suggests that the keyword method may be not effective in some cases. For example, Hall, Wilson, and Patterson (1981) found that when the learners had to generate their own keywords, their learning regarding vocabulary retention was inferior to free study (i.e. the learners were free to choose their own learning strategies). Similarly, Campos, González, and Amor (2003) found rote learning to be superior to the keyword method.

The combination of the keyword method and context may be more conducive to learning words than the keyword method alone. For example, Brown and Perry (1991) used low-proficiency ESL participants to investigate the effectiveness of the keyword method. They compared one group using the keyword method to learn 40 words, another learning each word with its definition, two sentences as examples, and a question related to the word that they had to answer, and the other group learning the words in the combination of both methods. Although the keyword-method condition was superior to the sentence-context condition in the posttest, the combination of the context and keyword method seemed more effective in terms of both word recognition and cued recall after nine days of treatment. Similarly, Rodríquez and Sadoski (2000) found the combination of the context and keyword method to be superior to rote rehearsal-only, keyword-only, and context-only conditions.

In brief, at the beginning stage of L2 learning, the use of interactive imagery in the keyword method as a memory-aiding tool appeared to be superior to several vocabulary learning strategies such as rote rehearsal (cf. Sagarra & Alba, 2006). Also, this method may be more effective if combined with context-related tasks. Although the keyword method is useful, given that so far, to our knowledge, most studies regarding the keyword method investigate the learning of single words and use L2 beginners as participants, it may be assumed that the use of

the keyword method may be subject to level of proficiency and be difficult to apply to the learning of formulaic language which has a multi-word nature.

Pictures

Unlike the use of mental imagery in the mnemonic keyword method as previously reviewed, pictures, as one kind of visual imagery, are typically used as annotations or explanations for L2 vocabulary in vocabulary learning tasks (cf. Chun & Plass, 1996). Pictures can be used for learning words in isolation (e.g. Chen, 1990) or for learning words in reading texts (e.g. Yoshii & Flaitz, 2002). The use of annotations in reading texts is to not only make clear the meaning of new vocabulary, but to foster reading comprehension and vocabulary learning as well (Boers, Warren, & Deconinck, 2017; Hulstijn, Hollander, & Greidanus, 1996). In vocabulary learning, to annotate L2 lexical items, pictures can be accompanied with the L2 definitions or the L1 translations (i.e. multimodal annotations/glossing). The use of pictorial annotations or multimodal annotations can be paper-based (e.g. Boers et al., 2017; Kost, Foss, & Lenzini, 1999) or computer-based (e.g. Akbulut, 2007; Chun & Plass, 1996) or combination of both (e.g. Al-Seghayer, 2001).

As regards learning lexical items in isolation, three studies (Carpenter & Olson, 2011; Chen, 1990; Lotto and de Groot, 1998) compared the use of pictures to explain the meanings of words in word pair learning and the use of L1 translations. The findings revealed that pictorial elucidation did not lead to better recall of the target items. However, in Carpenter and Olson (2011), when the participants were warned not to be overconfident in their ability to recall L2 words better from pictures than from translations, the pictorial annotation was superior to the translation. Boers et al. (2008) compared the use of pictures and the use of L1 translations to elucidate formulaic sequences. They found that pictorial elucidation was more effective than L1 translation annotations in the retention of meaning of the target items, but this was not the case the when it comes to the retention of form.

With respect to learning vocabulary in reading texts, although research evidence suggests that using pictures only to annotate L2 words is unlikely to be more effective than using translations (e.g. Kost, Foss, & Lenzini, 1999; Jones & Plass, 2002; Yoshii & Flaitz, 2002), multimodal annotations (i.e. pictorial and textual annotations) tend to be superior to translations only or pictorial annotations only in terms of the learning gains of target items (e.g. Kost, et al.,

1999; Jones & Plass, 2002; Plass, Chun, Mayer, & Leutner, 1998; Yeh & Wang, 2003; Yoshii, 2006; Yoshii & Flaitz, 2002). However, in stark contrast with the previous studies, the recent findings by Acha (2009) and Boer et al. (2017) revealed that multimodal annotations were the least effective compared to annotations by translation only or pictures only.

In sum, although at beginning stage of L2 learning the use of mental imagery in the keyword method or the combination of the keyword method and context is generally superior to a number of vocabulary learning strategies such as rote rehearsal, there is an absence of evidence as to the effectiveness of this method on the learning of formulaic language. Similarly, although pictorial annotations may enhance vocabulary learning when combined with other annotations such as translation, only one study by Boers et al. (2008) investigated the role of pictorial elucidation in learning formulaic sequences. Furthermore, the use of mental imagery and pictures in the previous L2 vocabulary studies is a method that deliberately utilizes the mnemonic benefits of imagery to lead to better recall. This is because according to an assumption in the duel-coding-theory (Paivio, 1986; Clark & Paivio, 1991), words can derive meaning from images and from semantic associations with other words. The enhancing effects of pictures when combined with translation in vocabulary learning can also be explained from the perspective of the level-of-processing theory (Craik & Lockhart, 1972) because with a wider range of unique features regarding vision than words (cf. Nelson, 1979), pictures might get a greater amount of semantic elaboration (cf. Nelson, Reed, & McEvoy, 1977). Thus, there is a phenomenon in memory research called *picture superiority effect* due to the findings that pictures are easier to remember than words (Carpenter & Olson, 2011; Nelson et al., 1977).

4.4.2 Motivation and vocabulary learning

There has been interest in researching L2 motivation in connection with learning specific language features, viewing L2 motivation through a 'small lens' perspective, as coined by Ushioda, (2016). This section will discuss two approaches – a theoretical and an empirical - in examining motivation in vocabulary learning: (1) Tseng, Dörnyei and Schmitt (2006) developed an instrument to measure self-regulatory capacity in vocabulary learning, and Tseng and Schmitt (2008) devised the model of motivated vocabulary learning; and (2) Gardner and MacIntyre (1991) and Papi (2018) examining the role of motivation in and vocabulary acquisition.

<u>Self-regulatory capacity and model of motivated vocabulary learning</u>

Drawing on self-regulatory strategies by Dörnyei (2001b), which was based on taxonomies of action control strategies by Kuhl (1987), and Corno and Kanfer (1993), Tseng, Dörnyei, and Schmitt (2006) developed and validated a construct to measure strategic learning of vocabulary. The construct was named SRCvoc (abbreviated for Self-Regulatory Capacity in Vocabulary Learning). According to this construct, a self-regulated vocabulary learner is an individual having five capacities: commitment control, metacognitive control, satiation control, emotion control, and environmental control.

- *Commitment control* allows the individual to maintain or improve the initial goal commitment (e.g. focusing on expectations or positive incentives and rewards; reminding oneself of the consequences of failing to realize the original intention).
- *Metacognitive control* involves managing procrastination and increasing concentration (e.g. identifying patterns of recurring distractions and forming alternative routines to steer clear from them; figuring out the first steps that can be taken to get down to an activity).
- *Satiation control* helps get rid of boredom and to make the task more appealing and interesting (e.g. adding artistic, competitive or unexpected features to the task; adding elements of fantasy to the task).
- *Emotional control* enables the individual to manage disruptive emotions or impulses, and bringing forth emotions that facilitate intention realization (e.g. self-encouragement; using techniques such as mediation to calm one down).
- *Environmental control* involves eliminating undesired environmental influences and to utilize favourable environmental facilitators in the pursuit of a difficult goal (e.g. asking support from friends to control distractions).

With the development of this SRCvoc instrument, Tseng, Dörnyei, and Schmitt (2006) underscore an important implication in vocabulary pedagogy: to train the self-regulatory capacities in L2 learners. This is because they believe that "the essential aspect of empowering learners is to set into motion the self-regulatory process rather than to offer instruction of a set of strategies" (p. 95).

To further highlighting the role of motivation in vocabulary learning, Tseng and Schmitt (2008) drew in part on the process model of motivation by Dörnyei and Ottó (1998), the work on motivational strategies by Dörnyei (2001a, 2001b, 2005), and their instrument of self-regulatory

capacities (Tseng, Dörnyei & Schmitt, 2006) to develop the model of motivated vocabulary learning. With the use of structural equation modeling, they confirmed their hypothesized model of six latent variables, including:

- *Initial appraisal of vocabulary learning experience*, referring to the initial level of vocabulary-learning motivation, which can be indicated by interests, desires or beliefs in the value of vocabulary learning. The motivation generated at this stage also involves goal-setting, forming intentions, and initiating intention enactment.
- *Self-regulating capacity in vocabulary learning*, referring to the five capacities previously noted of the construct of SRCvoc (Tseng, Dörnyei & Schmitt, 2006), which is subject to the degree of instigation of the initial appraisal of vocabulary learning experience. The self-regulating capacity is directly linked to the use of learning strategies.
- *Strategic vocabulary learning involvement*, concerning the quantity dimension of strategy use, which concerns effortful acts of identifying, utilizing and increasing the effectiveness of particular vocabulary learning techniques.
- *Mastery of vocabulary learning tactics*, referring to the quality dimension of strategy use, becoming proficient at using specific vocabulary learning techniques.
- *Vocabulary knowledge*, involving mastering various aspects of vocabulary knowledge, such as vocabulary size and depth.
- *Postappraisal of vocabulary learning tactics*, referring to the self-reflection on the task upon task completion. This stage is critical because retrospection contributes considerably to experience accumulation, facilitating the subsequent expectation of success, self-efficiency, achievement behaviours, and emotional responses.

In short, the work by Tseng and his affiliates emphasizes the idea that the employment of various cognitive strategies in vocabulary learning can be combined with motivational techniques and strategies to foster vocabulary acquisition. This idea is consistent with Dörnyei (2001a; 2001b; 2014) and Dörnyei and Kubanyova (2014) regarding using motivational strategies and visionary techniques in order to improve the effectiveness of L2 practices. Given the situated and dynamic nature of motivation, their theoretical constructs lay the grounds for the research and practice on the deliberate integration of cognitive and motivational aspects in L2 pedagogy.

Motivation and explicit and incidental vocabulary acquisition

Apart from developing theoretical models for incorporating motivation into learning vocabulary, there is also interest in investigating the direct link between motivation and vocabulary acquisition. To my knowledge, however, only three studies have examined this link.

As regards integrative/instrumental motivation and explicit vocabulary learning, Gardner and MacIntyre (1991) investigated the effects of integrative and instrumental motivation on French/English vocabulary. The participants were 92 students majoring in psychology who did not have pre-knowledge of the 26 target vocabulary items. In the first part of the study, a questionnaire was administered to all participants to investigate their motivational dispositions. In the second part, the participants divided into two conditions, the instrumental and the control. Each in the instrumental was paid $10 if they succeeded in recalling the absolutely correct form of 24 out of 26 target items. After a tightly controlled computer-based learning procedure, the participants were given a computer-based test in which they were allowed a maximum of six trials for each item, and the correct answer was displayed on the monitor. The scores of the questionnaire and the vocabulary test battery were compared across groups of participants.

They found that both integrative and instrumental motivation had positive effects on motivation and learning; participants in the two conditions spent significantly more time studying the target items and significantly more time considering the correct answer. As a result, their vocabulary scores were higher than those who were not so motivated. However, when the incentive was removed, those in instrumental condition did not spend as much time as they did with the incentive being present. These findings indicated the important role of motivation in facilitating vocabulary acquisition. The findings shed light on the L2 motivation literature in terms of indicating the direct effects of motivational dispositions on engagement and learning outcome.

In respect of trait/state motivation and explicit vocabulary learning, Tremblay, Goldberg and Gardner (1995) examined the impact of trait motivation (i.e. the relatively stable motivational dispositions) and state motivation (i.e. the motivational condition at a particular time) on vocabulary learning. Questionnaires were administered to eighty-eight participants before and after a vocabulary learning task to measure trait motivation. The participants learned 26 Hebrew words in the vocabulary learning task. The state motivation was measured through a

composite of indexes recorded and administered during the learning task, including the time spent trying to guess the translation of the item, the time spent trying to commit the item into memory, the responses to the motivational states before, during, and after each trial of the learning task. The learning outcome was the result of the trials during the learning task. Among others, they found that trait motivation was associated with state motivation, but trait motivation had no direct impact on the learning of the target words. In contrast, state motivation had positive effects on learning.

In terms of regulatory fit theory and incidental vocabulary acquisition, Papi (2018) examined the predicting power of regulatory fit theory by Higgins (2000) in incidental vocabulary acquisition. Participants were 189 ESL students who were randomly divided into a gain condition and a loss condition. They were administered a questionnaire for their regulatory-focus dispositions and then did a combined reading/writing task. The regulatory –focus dispositions include prevention-focus individuals and promotion-focused individuals, with the former being those who study mainly to avoid negative consequences while the latter being those studying mainly for their own interest and progress. The participants in the gain condition started the task with zero points and had to gain 75 points to enter a drawing so as to win one of three $100 gift cards; the students in the loss condition started with 100 points and had to to avoid losing more than 25 points. The vocabulary test was a meaning recognition multiple-choice test, which included 40 items taken from the reading/writing task.

The findings revealed that prevention individuals learned significantly more lexical items in the loss condition than in the gain condition. This is not the case for the the promotion individuals; their vocabulary scores in the gain condition and the loss condition did not significantly differ. The findings were consistent with those by Gardner and MacIntyre (1991) in that there was a direct impact of motivation on vocabulary acquisition, although Papi did not measure engagement in terms of time spent on task or test.

In sum, although the two studies have provided useful findings that confirm the significant part that motivation can play in vocabulary acquisition, there are two main limitations. First, both studies adopted cross-sectional designs, carrying out experimental research in laboratory conditions, and Gardner and MacIntyre (1991) did not include a delayed posttest. Further, neither have they replicated these studies in real classroom conditions.

Therefore, it is unclear whether the motivational effects were durable in Gardner and MacIntyre (1991) and whether the findings were applicable in pedagogy. Second, through administering a survey questionnaire to measure integrative motivation, it implied in Gardner and MacIntyre (1991) that this motivational disposition is similar to a trait, being static and fixed. Given that current motivational research highlights the dynamic dimension and long-term motivation, it would also be useful to examine the impact of motivation, especially motivational adaptation (see Section 4.2.3), from a dynamic perspective.

4.5 Conclusion

This chapter has provided the background for the second study. First, it presents issues concerning the connection between motivation and L2 education, providing backgrounds of the key motivational components that are relevant to L2 education, briefly referring to the motivational strategies and the positions that lend support to using motivation in L2 education, and clarifying the possible confusion between motivation and engagement. Another focus of this chapter is to account for the construct of vision and the related concepts before mentioning visionary techniques. Finally, I have reviewed previous studies concerning the use of motivational strategies and visionary techniques in L2 education at a general level of language learning. Following that, I looked at the studies using metal imagery and pictures as a mode of cognitive support before reviewing the studies investigating the connection between motivation and vocabulary learning. The literature provided in this chapter is relevant to the purpose of the second study which is to examine whether motivation can help improve vocabulary learning and whether imagery (or vision can be more robust than motivational strategies in terms of enhancing the effectiveness of explicit vocabulary teaching.

Chapter 5: English education in Vietnam: How it may affect learning motivation

This chapter begins by laying out a brief history of language education in Vietnam, from which the situated conditions and the primary motivation for the current English education are pointed out to differ from those for other L2s or English in the past. Following that, the current context of English education in the school system is presented. In this section, the placement of English in the general education is provided, including at which levels English being compulsory and the number of hours being used to teach it. Subsequently, the prevailing teaching and testing methods are discussed before the English teaching and learning beyond the formal education system is mentioned. Finally, types of English students from upper the secondary school levels to the tertiary level are looked at in the consideration of their motivation to learn English.

5.1 History of language education in Vietnam

To have a better understanding of English education in Vietnam, it is useful to view it in the overall picture of language education. Table 5.1 summarizes the changes in the history of language education in Vietnam. For further details regarding this, see Hoang (2010), Pham (2014), and Wright (2002). As can be seen, the development of the national languages and the adoption of L2s are aligned with the socioeconomic and political changes throughout the historical phases of the country. Accordingly, the L2 motivation varies considerably over time.

Table 5.1: A summary of the changes in the history of language education in Vietnam

Time	Main L2	Other L2s	National language	Sociopolitical and economic affairs
111 BC to 938 AD	NA	NA	Chinese	Under the rule of China
938 AD – 13th century	NA	NA	Chinese	An independent Vietnam (from China) with its own educational system
13 – 16th century	Chinese	NA	Chữ Nôm[1]	An independent Vietnam

				(from China) with its own educational system
16 – 18th century	Chinese	NA	Quốc Ngữ[2] (limited use)	Severe civil conflicts; The arrivals of European adventurers and missionaries
1887-1954	French	Chinese, English	Quốc Ngữ	Under the rule of the French
1954-1975	Russian English	French, Chinese	Quốc Ngữ	The fall of French Indochina in 1954; North Vietnam allied with the former Soviet Union; South Vietnam with the USA
1975-1986	Russian	English, French, Chinese	Quốc Ngữ	The fall of Saigon in 1975; An independent but impoverished and isolated Vietnam, receiving aids and support from the Eastern Bloc
1986-present	English	Russian, Chinese, French, German, Japanese, and others	Quốc Ngữ	The collapse of Comcon (communist trading bloc) in 1991; Vietnam launching the initiative of the overall economic reform, known as Đổi mới (Renovation)

Note. NA = not available; [1]The language developed by Vietnamese scholars, based on Chinese characters; [2]The Romanized-Vietnamese language developed by a Alexandre de Rhodes, a French Christian missionary working in Vietnam in the early 17th century

The socioeconomic, political and educational shifts have had impact on English education in Vietnam, in part making the motivation to learn it now differ from that in the past. Not only are more influences now involved in decisions and efforts in English learning, but conditions are more facilitative as well. For example, more educated and better-off parents in rural areas now (Hoang, Pham, & Ulubaşoğlu, 2014) influence their children into learning English (Phan, 2011) and afford them to take extra English courses. Years ago, they would be occupied with making ends meet and could not afford basic schooling for their children (cf. Wright, 2002), let alone English or another L2.

In addition, a broader range of academic and professional prospects can be available for Vietnamese young people if they are competent in English, affecting their motivation to learn (Phan, 2011). This is because English has become the lingua franca of domains such as science or business. There are also world Englishes (cf. Bolton, 2005), indicating varieties of the English language in different regions of the world. As regards the motivation to learn English as an international language, Csizér and Dörnyei (2005) noted:

> even if they [learning contexts] offer little or no contact with L2 speakers, and it would also suitable for studying the motivational basis of language globalization: World English is turning into increasingly international language, rapidly losing its natural cultural base and becoming associated with a global culture. (p. 30)

Furthermore, Vietnam joined ASIAN (Association of Southeast Asian Nations) in 1995, APEC (Asia-Pacific Economic Cooperation) in 1998 and entered WTO (World Trade Organization) in 2007 (cf. Abbott & Tarp, 2012). Thanks to the international economic cooperation, foreign investors and organizations have been operating in big cities, joint-venture companies have increased in numbers, and local businesses have been trading internationally. Also, there is an increasing trend in the internationalization of enterprises (cf. Thai & Chong, 2008) and of tertiary education (cf. Tran, Marginson, & Nguyen, 2014) in Vietnam. Similarly, local and international organizations offer funds to qualified Vietnamese students and professionals for their oversea education. Accordingly, a good command of English allows for higher chances of landing jobs locally or overseas as well as chances of studying or working abroad.

In this way, Vietnamese people currently learn English because of their own willingness to learn. That is, they choose to learn English as a main L2 for their long-term personal and professional goals or visions (although these can be influenced by parents) instead of being under influence of any political regime. And these goals or visions are practically feasible because they can be realized locally, regionally or internationally.

5.2 English education in Vietnam in the current time

Since the implementation of the open door policy in 1986, English has been taught along with other languages such as French, Russian, German, Chinese, Japanese or Korean. English has been the main foreign language learned by the majority of students at school and college levels (cf. Hoang, 2010; Nguyen, 2017).

5.2.1 The placement of English in the general education

English is taught in and beyond the formal education system. Formal education includes general education (school education) and tertiary education. There are three levels in general education as follows:

- primary, Grades 1-5, for children aged 6-10
- lower secondary, Grades 6-9, for children aged 11-14
- upper secondary, Grades 10-12, for children aged 15-17

English has got increasingly interested by the population, resulting in constant changes in many aspects of its education in both in and beyond the formal education system. Table 5.2 summarizes the changes in placement of the English subject in Vietnam's general education system since the economic reform Đổi mới in 1986 to present. For further details, see Bui and Nguyen (2017), Hoang (2010), Ngo (2018), Nunan (2003), Pham (2014), and Wright (2002).

Table 5.2: Changes in placement of the English subject in the general education of Vietnam from 1986 to present

Level of education (Grade)	1986-1996	1996-2002	2002-present
Primary level (3-5)	NA	Elective	Elective

Lower secondary level (6-9)	Elective	Elective	Compulsory
Upper secondary level (10-12)	Compulsory	Compulsory	Compulsory

Note. NA = not available

As is shown in Table 5.2, from 1986 to 1996, English was a compulsory subject only for upper secondary level, but since 2002, it has been mandatory to teach English in both lower and upper secondary schools. Since 1996, English has been an elective subject for children from Grades 3-5 (8-10 years old).

These trends will keep changing given the recent decisions by Ministry of Education and Training (MOET) as regards reforming L2 education in Vietnam, i.e. Decision 1400 (MOET, 2008) and Decision 2080 (MOET, 2017). These decisions involve changes in textbooks, curriculum, teacher training, and other related policies with an aim to encourage and boost the education of foreign languages at all levels and types. According to these new decisions, the L2 subject (primarily English because most students choose to learn it) will be compulsory for primary school children at Grades 3-5 in the near future.

English is taught on weekly basis at the general education levels, as documented by Hoang (2010) in Table 5.3 as regards the number of hours of English weekly taught. As is indicated, a student learns at least *524 hours* of English during their 12 school years.

Table 5.3: Numbers of hours expended on teaching English at schools in Vietnam during 2008-2018 (adapted from Hoang, 2010)

Level of education (Grade)	Placement	Number of teaching periods[1] per week	Total number of teaching periods (in rounded hours)
Primary level (3-5)	Elective	2/week/35 weeks	210 (140)

Lower secondary level (6-9)	Compulsory	3/week/35 weeks	315 (236)
Lower secondary level (9)	Compulsory	2/week/35 weeks	70 (52)
Upper secondary /High school level (10-12)	Compulsory	3/week/35 weeks	315 (236)
		Total	910 (664)

Note. [1]One period = 40 minutes at the primary level, = 45 minutes at the lower and upper secondary levels

5.2.2 English tests in important examinations and the division of upper secondary education into English-specialized and non-English-specialized education

There are two important examinations over the general education time for Vietnamese school students: the examination for upper secondary level (examination for Grade 10) and the national examination for upper secondary school graduation.

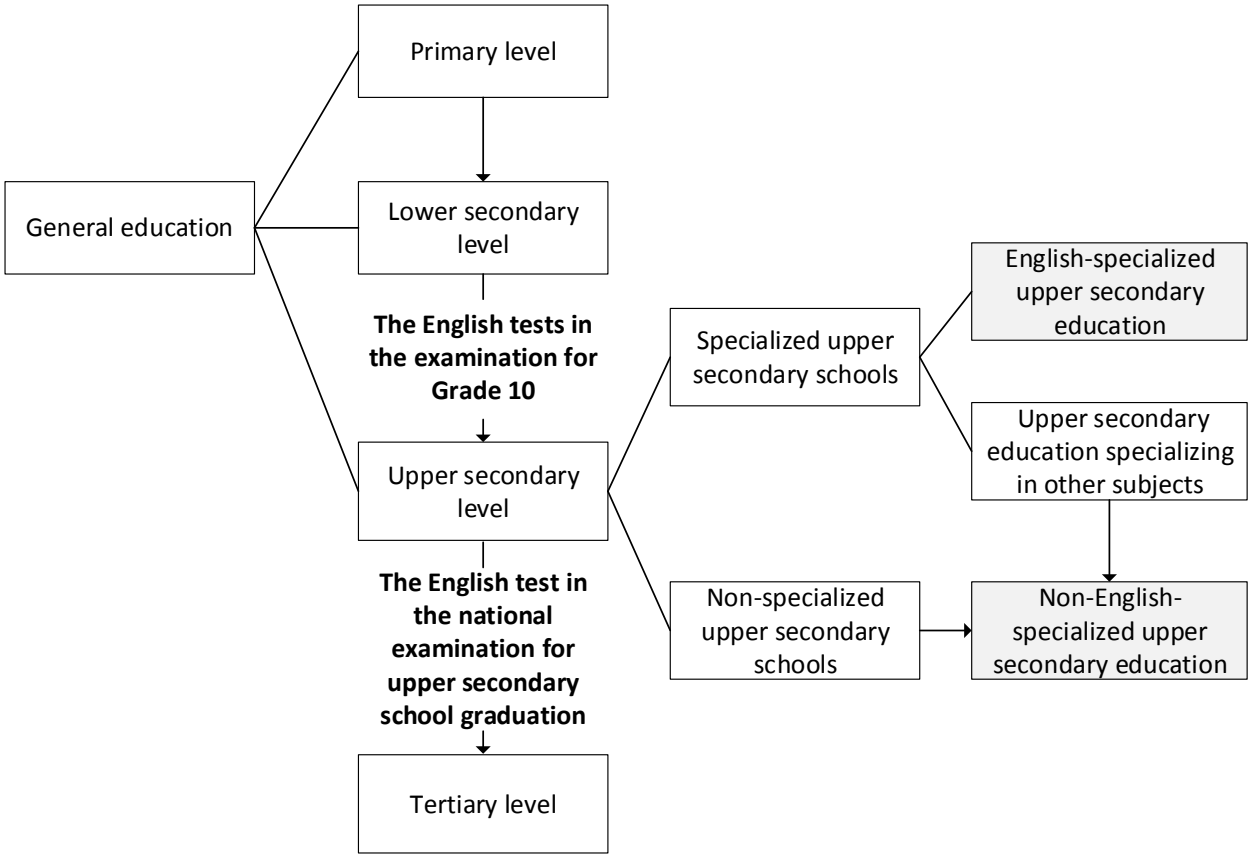


Figure 5.1: English tests in important examinations and specialized and non-specialized English education and in the general education system in Vietnam

Upon completing the lower secondary level at Grade 9, students take part in the *examination for Grade 10*. They can decide to either learn at specialized or non-specialized upper secondary schools (see Figure 5.1). The admissions into the former largely require the aggregated test scores of the three compulsory subjects: Math, Literature, and another subject (English or otherwise). To be admitted to the latter, apart from these three compulsory subjects, they have to take an additional test on the subject they want to specialize in. Thus, the admissions of *English-specialized* students are primarily based on the combination of their three compulsory subjects' scores and the score of a special English test designed by the specialized school they want to be admitted to. Once admitted, they use an advanced set of English textbooks which are different from that for *non-English-specialized* students (cf. Hoang, 2010). The *English tests* in this examination heavily focus on testing the knowledge of grammar, vocabulary and reading comprehension (for a test sample, see Lao Động, 2018; Toan, 2013).

Although lower secondary students have 288 compulsory hours (see Table 5.3) for learning English, the prospective non- English-specialized students do not always have to take an English test to enter upper secondary school, and their English textbooks are a standard set. According to Hoang (2010), roughly 96% of the upper secondary students use the standard English textbook set. This means that the vast majority of upper secondary school students do not specialize in English. In this way, the requirement regarding English competence for the overwhelming majority of upper secondary students (i.e. non-English-specialized students) is low and on-and-off.

The *national examination for upper secondary school graduation* takes place upon the completion of Grade 12. It recently involves three tests on three subjects (MOET, 2015) Math, Literature, and an L2 (English or another L2). All students nationwide take the same exam at the same time (cf. Vietnam Net, 2017). To get admitted to a college or a university, they have to take an additional test complex (i.e. a combined test involving either three subjects of natural sciences or three subjects of social sciences), which is related to the college major (MOET, 2017b). Similar to the examination for Grade 10, the *English test* in this examination also heavily focuses on testing the knowledge of grammar, vocabulary and reading comprehension (for a test sample, see Vietnam Net, 2018a).To pass the national secondary exam and to be considered admissions to higher education, the score of each test is required to be above 1.0 (out of 10) (cf. Tuổi Trẻ, 2016).

In this way, if a non-English-specialized student takes English as the L2 compulsory subject, they can pass the national upper secondary school graduation exam and get admitted to a university to study their majors, provided that their English test score is above 1.0 and the aggregated score (from three out of six compulsory tests and the test complex) satisfy the university admission condition. For example, a non-English-specialized student can still get admitted to a prestigious local university to major in Information Technology even if their English test score in the national upper secondary graduation exam is as low as 1.5 (out of 10) while the test scores of Math, Physics, and Chemistry are as high as the requirement of that university.

In brief, even though a student is required to study up to at least 524 hours (see Table 5.3) of English at school levels, the requirement for English proficiency to obtain national upper

secondary school graduation diploma and to be admitted to higher education is low, equivalent to the beginner level. It could be argued that this allows a fair amount of autonomy for non-English specialized school students to decide whether to study English. However, this could also mean that those who lack motivation to learn English tend to end up at *low proficiency level* upon entering higher education. This manifests in the recent English test in the national examination for upper secondary school graduation, with the mean score of the test being 3.9 (max = 10), and 78.22% of the students having the scores below the mean (Vietnam Net, 2018b).

5.2.3 Teaching methods

The grammar-translation method, a "teaching practice that does not have any communicative aspirations" (Dörnyei, 2009b: 273), has been used as the dominant teaching approach for English education in Vietnam (Nguyen, 2017; Tran, 2013; T. L. Tran, 2007, Vietnam Net, 2018c). This is the case despite the fact that Communicative Language Teaching (CLT) approach has received support and approval by both government language education policies and Vietnamese teachers of English (Ngoc & Iwashita, 2012). Thus, the main learning activities in classroom include explanations of grammatical rules and vocabulary, corrections of grammatical errors, or translations of texts from Vietnamese to English and vice versa (cf. Nguyen, 2017).

One reason for the adoption of the grammar-translation method as the main teaching approach could be the washback effects, which were defined by Alderson and Wall (1993) as "the influence of testing on teaching" (p. 1). The English tests in important examinations and most of other English testing types in the formal education system inVietnam "are designed to test only linguistic competence rather than communicative competence" (Ngoc & Iwashita, 2012: 27). As previously discussed, the test components mainly assess the knowledge of grammatical rules, vocabulary, and reading comprehension; there is an absence of the assessment of listening, speaking, or composition-writing elements. Another possible explanation for the common practice of the grammar-translation method is the lack of teachers with sufficient English communicative competence (Dörnyei, 2009b). In a recent English test of for language skills (using the Common European Framework of Reference (CEFR)) administered by Ministry of Education and Training to Vietnamese teachers of English, of the teachers in Hanoi and Hue achieved the B2 competence; the figures were much lower in other provinces in Vietnam (cf. Ngoc & Iwashita, 2012).

Further, in lower secondary school In addition, large class-sizes allow the ease of using the grammar-translation method. According to Le (2001), on average there are about 42-52 students in a secondary school class in Vietnam. Ngoc and Iwashita (2012) noted that the differences between the Western and the Vietnamese cultural contexts are also one of the main constraints in the practice of CLT, which can partly explain the persistence and prevalence of the grammar-translation method.

Since the overuse of non-communicative methods of teaching and learning, as summarized in Section 4.1.2 of Chapter 4, is one of the major sources contributing to the demotivation in learning English. The low English competence of the Vietnamese students - despite at least seven years of compulsory English education - can thus in part concern the *overemphasis* of the grammar-translation method at school and even college levels.

However, it should be noted that the grammar-translation method is not necessarily of no value; this is because, as put by Dörnyei (2009b) it "presents an almost pure manifestation of an explicit teaching approach, with hardly any pretence of, or ambition for, any implicit learning components….the ultimate aim of the [grammar-translation method of] instruction is to produce explicit knowledge" (p. 273) (see also Section 2.3 of Chapter 2 for further details of the explicit-implicit dichotomy in ISLA).

5.2.4 English beyond the formal education system

Aside from being taught at school in the formal education system, English is also taught at private tutoring classes, English centers, language schools of various sorts and sizes. English teaching is carried out by both local and international teachers and schools outside the formal education system. The teaching goals vary greatly, from learning basic pronunciation to preparing for national exams or standardized tests such as TOEIC, IELTs, SAT, or TOEFL. This form of English education is burgeoning (Hoang, 2010), being encouraged and supported by the government's policies (e.g. MOET, 2008, 2017a). The attendants range from children at primary school to people already in employment.

One of the main motives for school students to study English in this form of education can be that higher education institutions, including the prestigious ones, provide various choices of majors for students whose English proficiency meets their requirements (along with other conditions). For example, in 2018 Vietnam National University, Hanoi accepted students in part

on the basis of their Cambridge International Examinations A-Level and SAT scores; Foreign Trade University admitted students to some of its international programmes partly based on the students' scores of TOEIC, IELTs, or TOEFL tests (Báo Mới, 2018). It is a common practice that universities base on the scores of the English tests to select students for a range of majors other than English. For example, Ho Chi Minh City University of Technology offers admissions to Information Technology-major students based on their aggregated scores of Mathematics, Physics, and English (Đại học Kinh tế Tài chính, 2015).

5.2.5 Types of students from upper secondary school to higher education and their motivation to learn English

Due to the division of upper secondary education into English-specialized and non-English-specialized education, upper secondary school students in Vietnam can be divided into three main types: (1) English specialized and motivated students, (2) non English specialized but motivated students, and (3) non English specialized and unmotivated (also amotivated) students.

As previously mentioned, *English specialized and motivated* school students obtain high English test scores in the examination for Grade 10 and decide on pursuing English over the years as a specialized subject. During upper secondary school, they place considerable focus on learning the English subject and learn from an advanced set of English textbooks. In this way, they are generally *motivated* to learn English at school. This is because motivation concerns choices, efforts and persistence in learning (Dörnyei, 2018), affecting the success or the lack thereof in learning an L2, as put by Csizér and Dörnyei (2005), "motivation obviously matters with respect to how successful learning is likely to be" (p. 20). However, these students account for a tiny minority of the total number of upper secondary students, i.e. around 4%, (Hoang, 2010). Owing to their high English test scores, these students can decide to study as *English majors* or *non English majors* in higher education.

Non-English specialized but motivated school students do not learn from the advanced English textbooks at upper secondary school as the specialized students do, but learn English outside school such as in evening classes, English centers, or on their own. Given that their English test scores in the examination for Grade 10 are not as high as those of the English-specialized to be be accepted in English-specialized programs (or that they do not take this special English test and choose to specialize in other subjects or study at non-specialized schools

instead), their English learning motivation at lower secondary school may differ from the English-specialized (cf. Lukmani, 1972). Although they are non-English specialized, the extra learning outside school enables them to achieve high scores in the English test of the national examination for upper secondary school graduation, English standardized tests (which can be as high as those of the English-specialized) and English placement tests by the university (if any) right after being admitted to the university. Because they decide to learn and sustain the learning efforts for a long time and manage to achieve these high test scores, they, similar to the English-specialized, are generally *motivated* (to learn English) at school (cf. Csizér & Dörnyei, 2005). Similar to the English specialized, the high test scores allow them to choose to study as *English majors* or *non-English majors* in higher education.

Upon entering university, the motivation of these students, similar to normal L2 learners, tends to ebb and flow, subjected to situational conditions such as peers, teachers or personal issues (cf. Dörnyei & Ushioda, 2011). The motivational changes may revolve around three main states: motivated (cf. Tran, 2007), demotivated (cf. Tuan, 2011; Trang and Baldauf, 2007), or remotivated. When motivated, they take learning actions, engage and persist in learning (Dörnyei, 2018). Being in demotivated states, they may lose the interest and commitment that they used to have in learning, (Dörnyei & Ushioda, 2011; Thorner & Kikuchi, in press; see also Section 4.1.2 of Chapter 4), thereby putting half-hearted efforts or ceasing the engagement they once had in learning. Remotivated states refer to the times they regain the motivation after a period of demotivation (Falout, Murphey, Fuduka, & Trovela, 2013; Song & Kim, 2017).

The *non English specialized and unmotivated* school students learn English from the standard English textbooks at upper secondary school as a compulsory subject. They hardly expend efforts in learning English; rarely do they learn it outside school or aim to have high scores in English tests. They thus typically have low scores in the English tests at secondary school, in the national examination for upper high school graduation, and English placement tests (if any) right after being admitted to the university. One of the reasons for this could be that at upper secondary school they are not interested in learning English or choose to pay attention to studying their specialized subjects other than English (Vietnam Net, 2018c). In this way, it can be assumed that they are generally *unmotivated* in learning English at upper secondary school. If admitted to higher education, these students are *non-English majors*.

When faced with external factors such as repeated obstacles or failures in English learning in higher education, these non-English major college students are inclined to continue being unmotivated. However, chances are that some become motivated in learning and start taking extra English courses outside the university curriculum. This could be the case given their frequent interactions with their peers and teachers in new learning conditions which could be motivational sources, as Ushioda (2009) put that motivation can emerge "from relations between real persons, wit h particular social identities, and the unfolding cultural context of activity" (p. 215).

In the light of the above, both motivated and unmotivated secondary school students can possibly change their motivational states in higher education and beyond. To induce changes in the motivational states in the directions that both English majors and non-English majors remain or become motivated and remotivated and to mitigate changes towards the unmotivated and demotivated states, it is important to practice motivational teaching for all students, but the focus should be placed on the students of low learning motivation: the non-English major college students who used to be non-English-specialized and unmotivated students at upper secondary school.

In an effort to understand why at some point Vietnamese non-English major students become demotivated in learning, Trang and Baldauf (2007) asked 100 students to write retrospective essays regarding this. The students in their study attributed the changes in their motivational states in the directions that they become demotivated to a range of external influences such as teacher behaviours, teaching methods, teacher competence, or obstacles on the way of learning such as difficulties in learning complicated grammar or large amounts of vocabulary. Despite being useful, it could be argued that the findings cannot sufficiently explain the underlying causes for the demotivation in learning English in Vietnamese non-English major students. The additional reasons for their demotivated learning behaviours can be the incongruence in the interactions between external factors, such as the teaching methods, with the students' internal psychological factors such as needs, goals or visions. That is, there is a disappearance (cf. Thorner & Kikuchi, in press) of one of the main motivational sources - the specific and personalized images of their possible selves (cf. e.g. Markus & Ruvolo, 1989), of which the realization is time-bound. Specifically, at secondary school English is considered as a school subject of which test scores are based on to decide admissions to universities. Once

having achieved the required English test scores and admitted to their desired universities, their needs, goals or visions of being the students of these universities have been fulfilled, leading to the loss in the motivation to study English.

Therefore, to address amotivation and demotivation and to maintain and enhance motivation, it is reasonable to increase the moments the students are (re)motivated to learn, enhancing the time and the quality of engagement in learning. To support this motivational teaching, Dörnyei (2001) provided a framework of motivational strategies and Dörnyei & Kubanyiova (2014) suggested using the construct of vision to enhance motivational practices in L2 pedagogy (see Chapter 4 and Chapter 7 for further details of these motivational techniques). Thus, it is important to explore the applications of these strategies and techniques over a period of time (such as weeks) in increasing the motivational strength, which in turn can enhance the learning of specific features of the target language instructed over that period. The second study presented in this thesis attempted this.

5.3 Conclusion

This chapter has laid out the history of English education over the changes of socioeconomic and political contexts in Vietnam. It has pointed out that the decision on English as the main L2 subject in the education system is the choice of the Vietnamese people, not subjected to any political regimes. Due to the current trends of globalization and internationalization, and the support and encouragement of the government policies, English has gradually become the compulsory subject in the formal educational system in addition to more families being able to afford their children to have extra English education. English education of varying sorts and sizes beyond the formal education is burgeoning. However, the English competence of the Vietnamese is still low, which can be partly attributed to the absence or loss of motivation in learning English. Therefore, it is important to integrate motivational teaching into the education system by applying motivational techniques in ways that are congruous with the students' internal psychological forces so as to foster motivational strength in students' English learning.

Chapter 6: Explicit Instruction versus Coursebook Instruction of Formulaic Sequences

6.1 Introduction

As reviewed in Chapter 3, previous research on the teaching of formulaic sequences has shown that they can be learned through both incidental and explicit approaches. However, there are few studies on the efficient combination of these approaches. There has also been a lack of studies investigating the effects of the integration of principled explicit vocabulary instruction into a language course relative to other coursebook-based vocabulary teaching approaches. Further, it is unknown whether explicit learning with context has an effect on the learning of formulaic sequences. With this in mind, this chapter was designed to answer the following research questions:

1. Is the explicit teaching of formulaic sequences more effective than traditional coursebook instruction[1]?
2. Is there a difference in learning gains of knowledge of formulaic sequences explicitly taught with and without context?
3. Does the degree of salience of the formulaic sequences embedded in the traditional coursebook instruction have an effect on learning gains? If so, how does the learning of incidentally encountered items compare to that of the explicitly taught items?

6.2 Methodology

6.2.1 Participants

A total of 76 Vietnamese EFL students at a private university in Vietnam participated in this study. Data of 16 participants were removed from analysis because they were not present during one of the testing or learning sessions. This left the data of 60 participants (47 males, and 13 females) for analysis. Their ages ranged from 19 to 21, though one was 31 years old (M = 19.4,

[1] *Traditional coursebook instruction* is operationalised in this paper as the teaching method that exclusively relies on the materials and activities included in the coursebook. These include meaning-focused input (reading texts, listening texts, instructions for tasks, etc.) and vocabulary activities that occasionally included formulaic sequences, without formulaic language being the main focus of instruction. This approach is contrasted with the *explicit teaching approach* which consists of the teaching through exercises specifically designed to teach a set of formulaic sequences.

SD = 1.6). Right after being admitted to the university, the participants (together with other students who were accepted into the university) took an English placement test, which were designed by the university so as to put students of similar test score results into a group (of several classes) to study the same coursebook; they were placed into the lowest level (the elementary level) of a five-level general English language course as a result of this test. At the time the present study was carried out, they were taking part in the last level before starting their majors in Information Technology and Software Engineering. Thus, all participants received the same traditional coursebook instruction and were also assigned to one of three groups that varied in presence of, or the type of explicit instruction. They were quasi-randomly assigned into three groups (control = 20, no-context = 21, sentence-context = 19). At the beginning of the study, participants completed the Vocabulary Levels Test (Schmitt, Schmitt, & Clapham, 2001). The results suggest they, though studying in the last level of the five-level general English language course, were actually at a low proficiency level because the mean scores of the test of the first 2000 word families was 22.13 (*SD* = 3.8). Given "learners with a vocabulary closer to 5000 words would normally be classed as Intermediate" (Meara, 1992: 5), the participants in the present study would generally be at a low intermediate or low proficiency level. The three groups did not differ significantly in terms of vocabulary level ($F(2, 54) = .374$, $p = .69$). Table 6.1 shows the scores of Vocabulary Levels Test 2000 for the three groups.

Table 6.1: Scores on Vocabulary Levels Test 2000

Group	Min	Max	*M*	*SD*
Control	14	29	21.44	4.08
No-context	17	29	22.50	2.78
Sentence-context	13	29	22.32	4.63

The participants of the present study spoke Vietnamese as their L1, and they were non-English major students in their first year at university. Since their English proficiency was low, they could be non-English specialized and unmotivated students at upper secondary school (see

Section 5.2.5 for types of students from upper secondary school to higher education and their motivation to learn English in Vietnam).

6.2.2 Materials

Coursebook

The coursebook used for the program of study was the student book and workbook of *Summit 2* (Saslow & Ascher, 2006), the upper-intermediate level in the multi-level series of general English by Pearson Longman. This series aims to prepare the students with an integrated set of skills for global communication. The total word count for the coursebook was 81,152 running words.

Target items

Given that most experimental research on formulaic sequences has focused on either collocations or idioms, the present study investigated another type: phrasal expressions. The reference for this type of formulaic sequence was 505 phrasal expressions compiled in the PHRASE List by Martinez and Schmitt (2012), which according to the authors might cause trouble for learners at the receptive level (see Section 3.2.6). Sixty-nine formulaic sequences (see Appendix A) co-occurring in the coursebook and in the PHRASE List were selected for the study. Fifty-six of these were selected as experimental items (target items), appearing both in the coursebook and the explicit teaching treatments. The remaining 13 items were control items (non-target items) that were found in the coursebook content but were not part of the explicit teaching treatments.

While it cannot be completely guaranteed that all parts of the textbook, and subsequently all the target items, were covered by the teachers in the three groups, it is highly likely that they were. The reason for this is that the course was designed to be an intensive English-preparation program with a tightly-controlled syllabus. This meant that the teachers had strict guidelines about what they were to teach in each 90-minute session (i.e. approximately two pages of the textbook each time) such that the entire textbook and associated materials were accounted for by the end of the course. The procedure of selecting these items was as follows:

The selection was done with the AntCont software (Anthony, 2011), available at *http://www.laurenceanthony.net/software.html*. Figure 6.1 shows the process of selecting the items with AntCont.

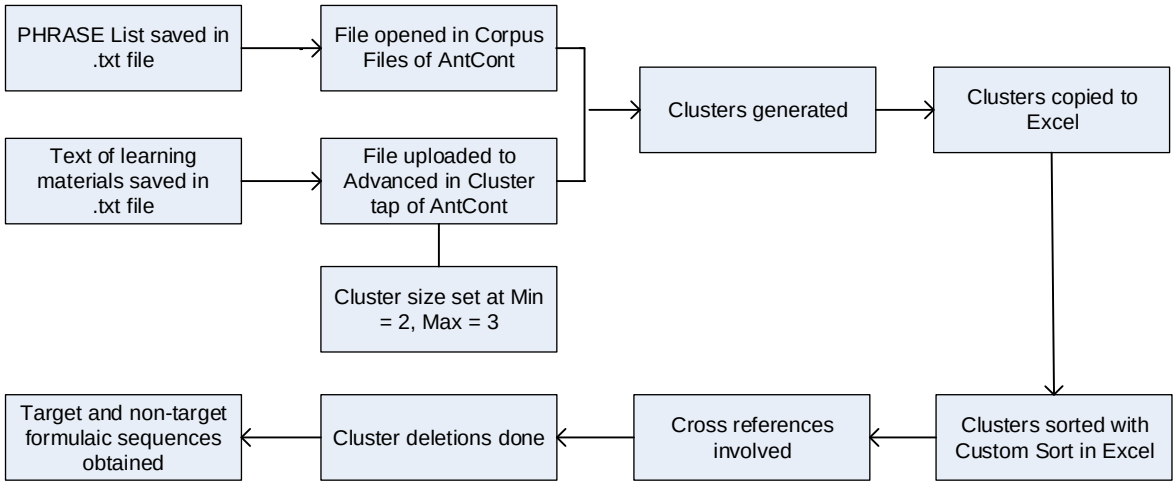


Figure 6.1: Process of selecting target and non-target formulaic sequences using AntCont

The first step was to prepare the .txt files of the PHRASE List and the learning materials. The file for the PHRASE List only includes formulaic sequences in the *Phrase* column of the list. Other information such as the *frequency, spoken general, written general, written academic*, and *examples*, was removed. After that, for each verb phrase in the list, its inflected verb forms such as *-ing* and *-ed*, infinitive forms, or third person singular forms ending in *-s* and *–es* were added. The list was then saved in the encoded UTF-8 .txt file.

To prepare for the analysis, the learning materials were converted into .txt files. Meanwhile, all the vocabulary exercises in the Student Book and the Workbook were completed. This was done to be informed about the contextual meanings of the formulaic sequences which the learners would meet in the materials over the language program. These meanings and those in the frequency list would be referred to during the process of manual selection of the target items. Following that, non-word items such as frames, images, and spaces in the text of the learning materials were eliminated to ensure that it would be analyzable by the software. The learning materials' text of 81,152 running words was then saved in a .txt file in the encoded UTF-8.

The next step was to find the co-occurrences of the formulaic sequences both in the PHRASE List and in the learning materials. To do this, the .txt file of learning materials was opened in the Corpus Files tap of the AntConc software while the .txt file of the PHRASE List was uploaded to the Advanced tool in the Clusters/N-Grams tap. At the same time, the Cluster Size tap in the AntConc was set to minimum at two (Min = 2) and maximum at three (Max = 3).

There is no need to set the Cluster Size to the maximum of four words because this setting will result in an additional four-word cluster type (i.e. lexical bundle) for each item being generated. This item will be the repetition of its three-word cluster type and an adjacent word in the context. Because most of the formulaic sequences (95%) in the PHRASE List are items of two to three words, there is a high likelihood that the adjacent words are not parts of the list's formulaic sequences. In this case, removing them is more time-consuming. If the analysis generates the first three words of a four-word formulaic sequence, this item can be referred to the learning materials and the PHRASE List to get the whole formulaic sequence. After running the analysis, the software generated an outcome of 1,506 cluster types from two to three words (3,260 tokens).

The cluster types were subsequently sorted in Excel. Figure 6.2 illustrates an example of the presentation of the formulaic sequence *bring about* and its contextual clusters generated by the AntCont software in the Excel Spreadsheet. In this figure, the second column from the left is the order of the items on the output, the third is their frequency of occurrence in the learning materials, the fourth is the information of the range of the clusters, and the last column represents the formulaic sequence and its contextual clusters. Next, the meaning of each contextual cluster was compared to the meaning of the formulaic sequence *bring about* in the PHRASE List to make sure that they were consistent. In this example, as all the contextual meanings represented in the learning materials agree with that of the PHRASE List, no cluster was deleted. Following that, the formulaic sequence *bring about* was kept in the list while other contextual clusters were deleted. The frequency count was lemma-based (i.e. the sum of the frequencies of all inflected forms of a word). Thus, the frequency in the learning materials for this item is nine (i.e. six for the cluster *bring about* and three for the cluster *brought about*).

254	84	6	1	bring about
255	587	1	1	bring about an
256	588	1	1	bring about any
257	589	1	1	bring about changes
258	590	1	1	bring about laughter
259	591	1	1	bring about much
260	592	1	1	bring about: to
261	593	1	1	bring up
262	594	1	1	bring up the
263	179	3	1	brought about
264	274	2	1	brought about by
265	595	1	1	brought about great

Figure 6.2: Example of the presentation of a formulaic sequence in Excel

After this work, a list of 280 formulaic sequences occurring both in the PHRASE List and the learning materials, with the information of their lemma frequency in the learning materials was obtained. The full list of these items can be seen in Appendix B. The next step was to select the most useful target items from these formulaic sequences for teaching. To do this, the items with one of the following five criteria were removed from the list.

First, the formulaic sequences were taken out if they had high frequency of occurrences in the learning materials. These items occurred from 10 to 39 times in the learning materials. Thus, these high frequency items are more likely to be learned from the context of learning activities than the lower frequency ones. This is because the more a formulaic sequence is encountered, the more likely it is to be learned (Schmitt, 2008). Thus, to maximize the return for the learning efforts, the limited time for the explicit teaching procedure was allocated to the items that occur less often. It should be noted that in the teaching materials of the present study, these are lower frequency items than the removed ones. However, in the Phrase List, they may be the higher frequency ones. Second, the items that were believed to be known to the learners were removed. With nearly ten years of teaching experience, the researcher's expert judgement was utilized to predict these items to remove them from the list. This was done in an attempt to serve the research purposes, because if the learners already knew the items before learning them, it would be difficult to measure the extent of their learning over treatment time. Third, the removed items are polysemous phrasal verbs (cf. Garnier & Schmitt, 2014). These formulaic sequences had more than one meaning, and the meanings presented in the learning materials were different from those from the Phrase List. Fourth, to limit the number of items sharing the orthographically identical first words (e.g. *in the first place*, *in the meantime*), some of them were removed. This was an attempt to include a diversity of items that were as different from the others as possible so that they could be more representative of general formulaic sequences rather than for special groups of items sharing a certain criteria. Finally, the removed items were more highly compositional (cf. Nation & Webb, 2010). This means that the meanings of these items could be more or less inferred from the meaning of their components. Although the items on the PHRASE List were identified based on the criteria of relative non-compositionality, among others, there are items that are more compositional than others. For example, the item *first of all* can be more compositional than *when it comes to*. Therefore, the latter was kept while

the former was taken out. To sum up, Table 6.2 below presents an overview of the formulaic sequences removed from the list of 280 items.

Table 6.2: Information on the items removed from the list

Criteria	Example	Number of items removed	Frequency of occurrences
High frequency items	*there is, of course*	44 (15.7%)	10-39
Highly compositional items	*think so, something about*	46 (16.4%)	1-9
Polysemous phrasal verbs	*turn on, go through*	28 (10%)	1-9
Items whose first word is orthographically identical to another item to be selected	*in detail* (sharing the same *in* with *in particular*)	15 (5.4%)	1-9
Items believed to be known to the learners	*at the moment, first of all*	79 (28.2%)	1-9

Finally, sixty-nine formulaic sequences were retained. All participants were exposed to these 69 items in the coursebook. Fifty-six of these were selected as experimental items, appearing both in the coursebook and the explicit teaching treatments. The remaining 13 items were control items that were found in the coursebook content but were not part of the explicit teaching treatments. While it cannot be completely guaranteed that all parts of the textbook, and subsequently all the target items, were covered by the teachers in the three groups, it is highly likely that they were. The reason for this is that the course was designed to be an intensive English-preparation program with a tightly-controlled syllabus. This meant that the teachers had strict guidelines about what they were to teach in each 90-minute session (i.e. approximately two pages of the textbook each time) such that the entire textbook and associated materials were accounted for by the end of the course.

The coursebook was carefully inspected to determine the type of input and activities where the experimental and control items appeared and the number of times they occurred (see Table 6.3). Out of the 56 experimental items, 48 occurred in meaning-focused input only (e.g. texts for reading and listening comprehension and instructions for tasks in the coursebook) that could lead to incidental learning opportunities, and eight in both meaning-focused input and exercises (e.g. vocabulary instruction activities that occasionally included formulaic language). Among the 13 control items, eight occurred in meaning-focused input only, and five in both meaning-focused input and exercises. Appendix C provides an example of how two target items were presented in vocabulary exercises in the coursebook.

Table 6.3: Frequency of exposure in the coursebook materials of the experimental and control items

Experimental sequences (appearing in both coursebook and explicit teaching treatment)		
	n = 48	*n = 8*
Frequency of exposure in meaning-focused input	1-9	1-7
Frequency of exposure in coursebook exercises	0	1-5
Control sequences (appearing only in coursebook)		
	n = 8	*n = 5*
Frequency of exposure in meaning-focused input	1-6	2-6
Frequency of exposure in coursebook exercises	0	2-3

Note. *n* = numbers of items

To examine the possible effect that the level of prominence of the formulaic sequences in the coursebook had on their learning in the experimental conditions (no-context group and sentence-context group), the target items were classified by their salience in the coursebook. Based on the information provided in Table 3, the 13 control items (which only appeared in the coursebook) were classified in two categories that distinguished their level of prominence or

salience: *low salience* and *low salience plus*. As is shown in Table 6.4, *low-salience* sequences are those occurring one to three times in meaning-focused input, but not in coursebook exercises. *Low-salience plus* sequences occurred two to six times in meaning-focused input, and in coursebook exercises. These two types of control items were compared to the *explicitly taught* items which occurred once to six times in meaning-focused input in the coursebook and they were also explicitly taught in experimental sessions. Only the items that met these requirements were used for this analysis, which meant 12 out of the total 13 control items, and 42 out of the total 56 experimental items that the experimental groups (sentence-context, no-context) were exposed to.

Table 6.4: Target items classified by salience

	Numbers of items	Frequency of exposure in meaning-focused input	Exercises	Explicit teaching
Low-salience	7	1-3	No	No
Low-salience plus	5	2-6	Yes	No
Explicitly taught	42	1-6	No	Yes

To examine the possible effect that the prominence the same formulaic sequences were given in the coursebook on their learning in the control condition (the group that did not receive the explicit treatment), the 69 items appearing in the coursebook were classified by their salience in the coursebook activities. As is illustrated in Table 6.5, similar to those for the experimental conditions, *low-salience* sequences for the control group were encountered once to three times in the meaning-focused input, but not in exercises. *Low-salience plus* items were encountered not only once to seven times in meaning-focused input, but in exercises as well. Fifty-four of the total 69 items that satisfied the requirements for this classification were chosen for the analysis.

Table 6.5: Target items classified by salience for the control group

	Numbers of items	Frequency of exposure in meaning-focused input	Exercises
Low-salience	41	1-3	No
Low-salience plus	13	1-7	Yes

Context sentences

Participants in the sentence-context group were exposed to the 56 experimental items with sentence context. In an attempt to ensure contextual diversity so as to suit preferences of different learners, sentences were selected from four sources: dictionaries (41.1%), learning materials (14.3%), BNC and Brown Written corpus (21.4%), and BNC Spoken corpus (9.8%). A total of 112 sentences were created. Each of the 56 experimental sequences, which was made salient by boldfacing or highlighting in the sentence, occurred once in each sentence. Thus, there were two different sentences for each experimental sequence. Each of the sentences was used twice over the whole experiment, i.e. in sessions 1 and 3, or in sessions 2 and 4. Since the vocabulary level of the participants was at approximately 2000 word families, the context sentences were analyzed and modified to the extent that over 97% of the token coverage was from the most frequent BNC 2000 word families. This was done because to comprehend a text, learners are recommended to know 95% or more (Laufer, 1989; Hu & Nation, 2000) of the words in that text. The purpose of the analysis and the modification of the sentences was to ensure that the effects or lack of effect of the treatment were not due to the difficulty of the context sentences.

One of the purposes of the present study was to investigate whether there are differences in learning formulaic sequences with and without context sentences. The context sentences used for this purpose were either taken from dictionaries or corpora, i.e. simplified from authentic examples in corpora. There are a number of reasons for these two criteria to be established. First, given their isolated and decontextualized criteria, sentences from dictionaries can encourage precise noticing while elaborate situations and extended contexts are not necessary prerequisites

to processing (Cook, 2001). Second, these sentences from dictionaries appear more helpful than authentic sentences derived from corpuses in terms of making comprehension of new lexical items easier (Laufer, 1992). Third, authentic sentences are often long ones which consist of infrequent words (Bogaards, 1996) and superfluous details (Cowie, 1999), causing problems for learners to be able to use them as models for production purposes. Therefore, this sentence selection was to guarantee the *pedagogical relevance*, the sentences being *simple* enough for the *ease of processing* of the learners whose average vocabulary level was at around 2000 word families. The selection was carried out in the following procedure.

To begin with, three major sources were referred to so that 112 context sentences for 56 formulaic sequences (i.e. two sentences for each target item) were selected. As mentioned earlier, the first source was from the BNC and Brown Written corpus (over two million words), and the BNC Spoken corpus (one million words), available at *http://www.lextutor.ca/conc/* website. These corpuses were selected because with the total size of over three million words in a wide range of topics and usages, they can offer contextual diversity so as to suit preferences of different learners. However, it is important to note that for each target item, there were a large number of sentences of various topics resulted from the corpuses, which made the procedure of reading and selecting sentences quite labor intensive. Furthermore, the authentic texts were often context-specific with a variety of discourse features. Therefore, attention, meticulousness and intuition were needed to make sure that the examples selected were *contextually transparent, topically relevant and appropriate*, and *pedagogically useful* for the majority of non-English-major college learners in the EFL context. For example, the sentences concerning politics and religion, which were ubiquitous in the BNC corpuses, seemed to be inappropriate choices for EFL learners in a developing country where politic and religious ideologies may be different. The second source for sentences was the learning materials from which the target formulaic sequences were manually extracted. The third source was from online dictionaries (Cambridge Dictionaries Online, available at: *http://dictionary.cambridge.org/dictionary/english/,* Oxford Language Dictionaries Online, available at: *http://www.oxforddictionaries.com/*, Collins English Dictionaries Online, available at: *http://www.collinsdictionary.com/dictionary/english),* and electronic dictionaries (Cambridge Advanced Learner's Dictionary Second Edition, Babylon Dictionary 10.3, English Idiom 2.Edition, and WordNet 2.0). Electronic dictionaries were used

because of not only the speed and ease of use, but the quality of the information provided (Laufer & Hill, 2000: 68).

The context sentences extracted from the learning materials, BNC and Brown Written corpus, and BNC Spoken corpus were in the corpus-oriented category, which constituted 45.5% of the total number of examples. The other sentences (54.5%) that were selected from dictionaries belonged to the invented category. Table 6.6 provides the breakdown of the categories regarding sources of examples in further details.

Table 6.6: Sources of sentences

Sources	Number of sentences
BNC & Brown Written corpus	24 (21.4%)
BNC Spoken corpus	11 (9.8%)
Learning materials	16 (14.3%)
Cambridge Dictionaries	46 (41.1%)
Other Dictionaries	15 (13.5%)
Total	112 (100%)

The following step was to make sure that approximately 98% of the token coverage of the context sentences was from the most frequent BNC 1000 and 2000 word families. This was to ensure the adequate comprehension (Nation, 2001) of the context sentences. To satisfy this requirement, three analyses and two modifications of context sentences were carried out, using the software *AntWordProfiler 1.4*, available at *http://www.laurenceanthony.net/software.html*. As shown in Table 6.7, the results from the first analysis indicated that with 1784 tokens, the token coverage of the context sentences was 94.03%, in which 88.9% was in the BNC 1000 and 5.4% in the BNC 2000, leaving 101 tokens (5.7%) beyond the BNC 2000 word families.

Table 6.7: Token and type coverage of the context sentences, the first analysis

Level of Word Families	Token Count	Token Coverage
1000	1586	88.9%
2000	97	5.44%
>2000	101	5.66%
Total	1784	100%

In the next step, the sentences were modified for the first time to ensure that the basic sentence structures were maintained while they became briefer and simpler, and more of the token coverage was from the first 2000 word families. This was to help the learners process the sentences with more ease and speed. The criteria for modifying sentences included changing the proper names into personal pronouns; removing modifiers; removing clauses; removing conjunctions, conjunctive adverbs, or other linking words or phrases; and changing some complex and compound sentences into simple sentences. The modification of sentences was based on either one criterion or a combination of some of these criteria. Table Table 6.5.8 presents the examples of context sentences modified in accordance with these criteria.

Table 6.8: Criteria for modifying sentences and examples

	Criteria	Sentences before modifying	Sentences after modifying
1	Changing the proper names into personal pronouns and removing linking words or phrases	Miss Upton and Miss Packard, as a matter of fact, had many tastes **in common.**	They have many tastes **in common.**

2	Removing verb phrases	When we learned of the mysterious sickness, we protested, became a link, and joined the chain. **As a result**, the cocoa exporters cut down the use of the toxic pills.	When we learned of the sickness, we protested. **As a result**, the cocoa exporters cut down the use of the toxic pills.
3	Removing relative clauses	**In other words**, we must identify a unique way of representing each possible pattern of communication a process might exhibit.	**In other words**, we must identify a unique way of representing each pattern of communication.
4	Changing a complex sentence into a single sentence, and removing conjunctions	This represents nearly 10% of total London area traffic movements and is almost certainly an underestimate, according to Eurotunnel, because it fails to **take into account** the effects of increasing congestion.	The traffic project fails to **take into account** the effects of increasing congestion.
5	Changing complex and compound sentences into simple sentences	When **large-scale** manufacturers start to produce the same goods, or when superstores like Wal-Mart move in, these small businesses will not be able to keep up and will be crowded out.	**Large-scale** manufacturers start to produce the same goods.

Note. The target items are in bold.

After this modification, the text was analyzed again to find the count of the tokens beyond BNC 2000 word families. The second analysis resulted in the total token count of the text being 1250. As can be seen in Table 5.9, the token coverage was 96.32 %, in which 90.88% was in the BNC 1000 and 5.44% in the BNC 2000, reducing the number of tokens beyond BNC 2000 to 46 (3.68%).

Table 6.9: Token and type coverage of the context sentences, the second analysis

Level of Word Families	Token Count	Token Coverage
1000	1236	90.88%
2000	68	5.44%
>2000	46	3.68%
Total	1350	100%

Next, the second modification was done to keep the token coverage at the target of approximately 98% from BNC 2000 word families. Although the sentences' token coverage after analyses was generally within BNC 2000 word families, this did not necessarily mean that the learners would have perfect understanding of the context sentences, including the target formulaic sequences. This is because the formulaic sequences in the PHRASE List were selected to the degree of less compositional (Martinez & Schmitt, 2012: 304), that is, the meaning of the whole formulaic sequence is not understood from the meanings of the constituent parts. Therefore, even if the learners generally understood the sentences, they were not likely to fully know the formulaic sequences. The modification was done by replacing words beyond BNC 2000 word families with their synonyms within BNC 2000 word families. Among 46 tokens that were beyound BNC 2000 word families, two were in the same word families (*recipe, recipes*); three were the target items' constituents (*spite, spite, conjunction*) (*spite* was repeated twice). Therefore, the number of tokens that could be modified was 42. The modification and examples are illustrated in Table 6.10.

Table 6.10: Examples of sentence modification toward BNC 2000 word families

Words beyond BNC 2000	Replacements within BNC 2000	Sample sentences after replacement

resolved	*solved*	This conflict may be *solved* in a way which will suit middle-class people.
midst	*middle*	She had experienced nothing but cold and loneliness in the *middle* of kindness
toxic	*harmful*	When we learned of the mysterious sickness, we protested. As a result, the cocoa exporters cut down the use of the *harmful* pills
opt	*select*	I think I will *select* this one after all.
preserve	*keep*	In spite of her attempt to *keep* her balance, she fell.
talents	*abilities*	His *abilities* are not limited to numbers.
wept	*cried*	I could no longer contain my emotion, but going down on my knees I *cried* as quietly as I could.
innovations	*technologies*	Will Western industry ever catch up with Japanese *technologies?*

The final analysis, as can be seen from Table 6.11, resulted in a text coverage of 97.53%, in which 91.62% was in the BNC 1000 and 5.91% in the BNC 2000, reducing the number of tokens beyond BNC 2000 to 31 (see Appendix D for the list of those items). These tokens were not further replaced, and the coverage was kept at 97.53% of the tokens from BNC 2000 because to comprehend a text, learners need to know 95% (Laufer, 1989), or more than 95% (Hu & Nation, 2000) of the words in that text. Given that the vocabulary level of the learners in the present study was at approximately 2000 word families, the coverage of 97.53% was tought to allow them to achieve a reasonable understanding of the sentence contexts.

Table 6.11: Token and type coverage of the context sentences, the third analysis

Level of Word Families	Token Count	Token Coverage
1000	1148	91.62%
2000	74	5.91%
>2000	31	2.47%
Total	1253	100%

In brief, this section has illustrated the procedure of selecting the context sentences for the deliberate language-focused learning of formulaic sequences in sentence context. The examples were taken from a variety of sources, including corpuses, learning materials, and dictionaries, and then simplified to the extent that the overall token coverage reached approximately 98% within the BNC 2000 word families. The purpose of the sentence simplifying procedure was to increase the learners' comprehension of the context sentences, and to make sure that the effect or lack of effect of the treatment was not due to the difficulty of the sentence contexts.

Translation of the target and non-target items

The target and non-target items were translated by the researcher herself, her colleague in Vietnam and then crosschecked with an online bilingual dictionary, available at *www.Vdict.com*. The list was first sent to the colleague to be translated into Vietnamese, and meanwhile it was translated by the researcher. The researcher relied on the translation of this colleague because he completed his Ph.D. in Education, and he had 20 years experience of teaching English. The colleague was informed to give two Vietnamese equivalents for each target items if necessary, referring to its two sentence contexts. After receiving the translated version from the colleague, the translation versions were compared. The researcher and the colleague disagreed on the translation of fifteen target items (27%). Following that, the online dictionary was referred to, and the researcher and her colleague discussed again to decide on the final versions. Figure 7 illustrates the summary of the procedure of translating target and non-target items into Vietnamese.

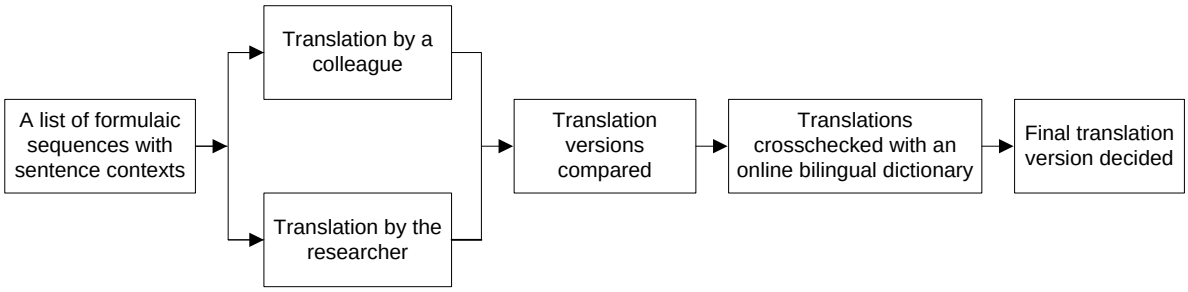


Figure 6.3: Summary for the procedure of translating the target formulaic sequences

It is noteworthy that the translations of the target items in the decontextualized condition were the same as those in the sentence-context context condition. The learners in the sentence-context condition met two sentences for each target item during the treatment. Even though the linguistic features (i.e. meaning, grammatical functions, or syntagmatic associations) of that item can be the same in the two contexts, its translation versions in two different sentences might vary due to the contextual differences. This is because there may be many ways of expressing the same thing or phenomenon. For example, the English word *die* can be replaced by such expressions as *pass away* or *kick the bucket*, contingent on the context in which it is used. In the same way, different translations can be used for the same meaning of a formulaic sequence. In the present study, some of the target items had two different translation versions. For example, for the target item *after all*, the learners in the sentence context condition will meet two sentences. In the first, *The rain has stopped, so the game will go ahead* ***after all,*** the target item was translated as *sau đó*. In the second, *I think I'll opt for this one* ***after all***, the target item was translated as *cuối cùng thì.* Therefore, the learners in decontextualized condition also learned the pair L2-L1of ***after all***, translated as *sau đó,* and *cuối cùng thì*. However, not all the target items had two different translations. Among 56 target items, 35 (63%) of which had two translations, and the rest had only one equivalent translation.

6.2.3 Tests of knowledge of formulaic sequences

There were the two 69-item multiple-choice tests, serving as pretests, posttests and delayed posttests. Each test included 56 target items, which were taught during the experimental sessions, and 13 non-target items, which were not explicitly taught in these sessions. For each item in the cloze test, an L2 sentence was given with the formulaic sequence missing and the learners chose

the best options to make the sentence complete. For each item in the translation test, the L1 translation was given and learners chose the correct answer from the options in the L2.

There are a number of advantages to opt for the multiple-choice test format to measure the receptive knowledge of form and meaning link of the target formulaic sequences. First, the marking is straightforward because no personal judgement is needed (Paxton, 2000). Thus, the threat of subjectivity in marking is minimized. Second, with distractors not being closely associated, the multiple choice tests can allow learners to make use of their partial knowledge of the item (see Webb, 2007a for partial knowledge of vocabulary). Third, although there seems to be a threat of random guessing of the answers, multiple-choice tests appear to work effectively for low-proficiency learners (Meara & Buxton, 1987: 144). This may be due to the fact that the insufficient linguistic knowledge of the low-proficiency learners did not allow them to rule out the distractors to guess the answers. Also, Nation (2013) stated that "there seems to be no major disadvantage in using multiple choices except perhaps in the amount of work required to make the items" p. 543.

In an attempt to minimize the random guessing of the answers, there were six options for each multiple-choice item in each test. Each item consisted of five distractors and one answer. Also, the learners were instructed to write only one option (A, B, C, D, E, F, or leave the question unanswered) on an Answer Sheet of a total of 138 items for the two tests. They were instructed three times (i.e. at the beginning of the tests, while testing, and at the end of the testing times) to leave the question unanswered if they did not know the answer. The pretests can be found in Appendix E.

The multiple-choice cloze test

This sixty-nine item test was used to measure form and meaning recognition of the target items with contexts. The sentences used in the test were adapted from those experimented. The distractors were word groups created with reference to the three levels of difficulty (i.e. the lowest, the intermediate, and the highest) of multiple-choice test items by Nagy, Herman, and Anderson (1987). Specifically, at the lowest level of difficulty, the meanings and the parts of speech of the distractors are as different from those of the target items as possible. At the intermediate level of difficulty, the parts of speech of the distractors are almost the same, but the meanings were fairly varied. At the highest level of difficulty, the meanings represented by the

distractors are similar to or closely associated with the meaning of the target word. To create distractors for each item in the multiple-choice cloze test based on these levels of difficulty, first, word groups (i.e. groups of words that may be formulaic sequences or may be not), following criteria were created.

1. The word group was one of the formulaic sequences used in the explicit instruction, but it was not the answer.
2. The word group was one of the formulaic sequences, but not the instructed item, that occurred both in the Phrase List and in the coursebook.
3. One of the content words of the word group had similar meaning to one of the content words of the answer.
4. The meaning of the word group was different from that of the answer. And it did not make (syntactic) sense in the sentence (i.e. the word group cannot syntactically collocate with the words occurring before or after it, and/or it did not make sense in the sentence).
5. The meaning of the word group was similar to the answer, was related to the answer, or seemed to befit the meaning of the sentence. However, it did not make (syntactic) sense in the sentence (i.e. the word group could not syntactically collocate with the words occurring before or after it, and/or it did not make sense in the sentence).
6. The word group was randomly selected (i.e. it may have the criteria 4 or the criteria 5).

` Five word groups, each comprised two of these six criteria, were five distractors for a multiple choice item. Criteria 1 and 2 were based on consideration of the learners' familiarity with the distractors. These were the formulaic sequences encountered by the learners during the language program and thus had some degree of familiarity with. Criteria 3 and 5 were adapted from the highest level of difficulty of test items, which concerns the semantic similarity of distractors with correct answers. Criteria 4 was adapted from the intermediate level of difficulty, which concerns the syntactic relevance of distractors to correct answers. Criteria 6 was typically either criteria 4 or 5. Overall, the distractors were created to be either at the intermediate or the highest level of difficulty.

Each of the five distractors was created from a word group that had a combination of one of the first three criteria (i.e. 1, 2, or 3) and one of the last three criteria (i.e. 4, 5, or 6). Specifically, among the five distractors, one was combination of criteria 1 and one of the last three (i.e. 1 + 4, 1 + 5, or 1 + 6); another was combination of criteria 3 and one of the last three (i.e. 3 + 4, 3 + 5, or 3 + 6); the other three are the combinations of criteria 2 and one of the last three (i.e. 2 + 4, 2 + 5, and 2 + 6). The combinations of pairs of criteria of word groups as distractors are presented in Figure Figure 6.5.4. An example is illustrated in Table 18.

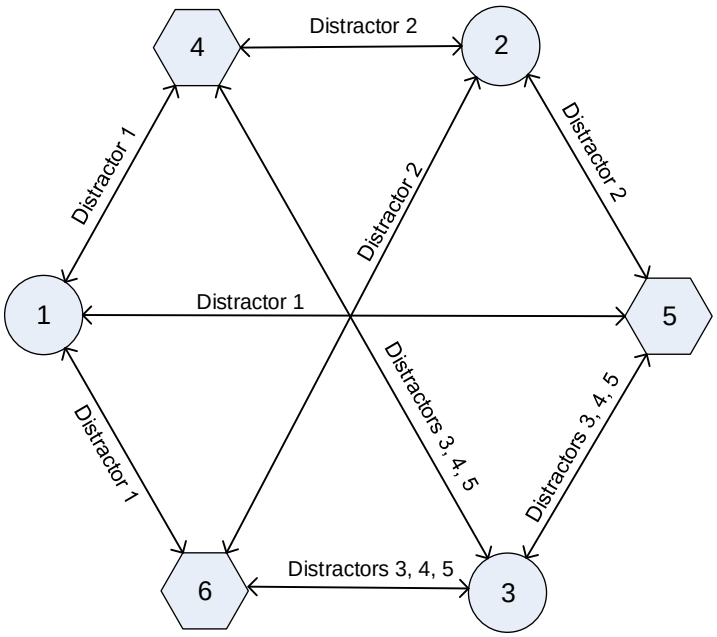


Figure 6.4: Combination of pairs of criteria of word groups as distractors for the multiple choice items for the cloze test

Table 6.12: Example of an item from the cloze test with distractor explanations

Stem: *People join groups for ___ motivation, learning and support*.	
Options	Distractor Explanation
A. *on average*	Formulaic sequence taught in explicit sessions. Syntactically

	could occur with the words before it in the sentence, but not the words after it.
B. *all sorts of*	Correct answer.
C. *variety with*	*Variety* similar in meaning to *sorts*. Meaning of *variety with* related to *all sorts of*, but this word group did not fit syntactically in the sentence.
D. *all the way*	Formulaic sequence occurring both in the Phrase List and in the coursebook. Syntactically could occur with the words before it in the sentence, but not the words after it.
E. *find out*	Formulaic sequence occurring both in the Phrase List and in the coursebook. Meaning could fit the sentence, but it did not fit syntactically in the sentence.
F. *and all that*	Formulaic sequence occurring both in the Phrase List and in the coursebook. Selection was random.

The multiple-choice translation test

In a similar way of designing test items for the cloze test, this sixty-nine item test was used to measure form and meaning recognition of the target items without contexts. In a process similar to that of the multiple-choice cloze test, the distractors for this test were based on the combination of two of the five following criteria:

1. The word group was one of the instructed items.
2. The word group was one the formulaic sequences occurring both in the PHRASE List and in the coursebook, but not the instructed item.
3. One of the content words of the word group has similar or related meaning with the answer, or one of the content words of the answer.
4. The word group was semantically related or similar to the answer.

5. The word group was partially orthographically similar to the answer.

Each distractor was created from a word group that has a combination of one of the first three criteria (i.e. 1, 2, or 3) and the last two criteria (i.e. 4 or 5). Specifically, among the five distractors, two are the combinations of criteria 1 and one of the last two (i.e. 1 + 4 and 1 + 5); other two are the combinations of criteria 2 and one of the last two (i.e. 2 + 4 and 2 + 5); the other is the combination of criteria 3 and one of the last two (i.e. 3 + 4 or 3 + 5). An example is illustrated in Table 6.13.

Table 6.13: Example of an item from the translation test with distractor explanations

Stem: *Nhiều, rất nhiều*

Options	Distractor explanation
A. *large scale*	Formulaic sequence taught in explicit sessions. Semantically related to the answer.
B. *a couple of*	Formulaic sequence occurring in the Phrase List. Partially orthographically similar to the answer in Vietnamese.
C. *more and more*	Formulaic sequence occurring both in the Phrase List and in the coursebook. Semantically similar to the answer.
D. *a great deal*	Correct answer.
E. *a number of*	Formulaic sequences occurring both in the Phrase List and in the coursebook. Partially orthographically similar to the answer.
F. *extent of*	*Extent* was related in meaning with *a great deal*. *Extent of* partially orthographically similar to the answer in Vietnamese.

6.2.4 Piloting

The procedure was piloted with two Vietnamese learners studying in the UK, and one native speaker of English in the UK. Among the two Vietnamese, one was male, aged 20, doing an undergraduate course in Sales and Marketing, and the other was female, aged 25, doing a graduate course in Chemistry.

The native speaker participated in the cloze test. The testing time lasted approximately 40 minutes for 71 six-option multiple-choice items to be completed. The native speaker got 65 (91.5%) correct items. The other six items were revised because they were vague or ambiguous (e.g. items in which, according to the native speaker, it was acceptable to choose more than one correct answers among the six options given). These items were then corrected before they were administered to the two Vietnamese learners.

There were treatment sessions in this study. The two Vietnamese took part in the learning procedures for sessions 2 and 4 in the sentence-context condition. Sessions 1 and 3 were not piloted as they were similar to sessions 2 and 4. Likewise, the procedure for learning in the decontextualized condition was not piloted as it was similar to that in the sentence-context condition. Following that, the problems caused by unclear instructions before and during the piloting were corrected. As for the testing procedure, the two learners took approximately 50 minutes to complete the cloze test, and it took them roughly another 25 minutes for the translation test. There were no problems to the two learners regarding the former. However, as for the latter, the test-takers suggested four items be modified because the distractors were similar to the answers and could be acceptable as correct answers.

As the target learners in the present study were low-proficiency learners, the time for the cloze test was set at 60 minutes, and the time for the translation test was 30 minutes.

6.2.5 Procedure

The language course consisted of 90 hours of classroom instruction, three hours per day, five days a week, over six weeks. For the experimental groups, the 90 hours of classroom instruction were divided into: 2.67 hours of explicit teaching of formulaic sequences (see Table 6.14 for further divisions of time during the experimental procedure), and 87.33 hours of traditional coursebook instruction and tests. For the control group, the 90 hours of classroom was

completely devoted to the traditional coursebook instruction and tests, and the time the experimental groups spent on formulaic sequence instruction was spent on further work on the meaning-focused input in the textbook. Appendix F presents the overall teaching procedure for the three groups over the whole language course, exclusive of the weeks for the testing procedure. Table 6.14 presents the overall experimental procedure for the explicit teaching and testing of the experimental items. In the first week, the Vocabulary Levels Test and the formulaic sequence pretests were administered. To avoid the possible effects of one test on the other, the cloze test was administered first, followed by a 10-minute break before the translation test was administered. The order of the items on the first test differed from that of the second.

Table 6.14**:** Experimental procedure for explicit teaching of formulaic sequences incorporated into the language program

Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 9
VLT and Pretests	Session 1	Session 2	Session 3	Session 4	Posttests	Delayed Posttests
100 minutes	40 minutes	40 minutes	40 minutes	40 minutes	90 minutes	90 minutes

Note. VLT = Vocabulary Levels Test

The target formulaic sequences were explicitly taught in four sessions in weeks two through five of the study. The first researcher used PowerPoint slides to present the target items in the first two of these sessions. In the first teaching session, the form and meaning of the items were presented in the direction of L2 to L1 (English to Vietnamese). This was followed a paper-based matching exercise. For the no-context group, each formulaic sequence was presented with a word missing (e.g. *a* _____ *deal*). The researcher read the sequence and asked the participants to guess the missing word. If no correct response was immediately given, the researcher continued by providing the missing word with the letters presented in random order (e.g. *a eragt deal*), and asked the participants to once again try and supply the missing word. The full sequence was then presented (e.g. *a great deal*) with its translation. In the sentence-context condition, the same procedure was carried out, but the sequence was presented in a full sentence. The same procedure was used for the second teaching session, but in the direction of L1 to L2. In

the third and fourth teaching sessions, word cards with the English formulaic sequence on one side and the Vietnamese translation on the other were used for instruction purposes. For the sentence-context condition, a full sentence was included on both sides of the card. In the third session, the participants worked in pairs with the cards to recall the form and meaning in the direction of L2 to L1, and then they made a short sentence for each item. In session four, a similar procedure was used but in the direction of L1 to L2. For each teaching session, the participants encountered each item twice. To avoid the possibility that the participants might revise the target items out of classroom, they were asked not to take notes during the treatment sessions, and they were not informed about the next teaching session or about the posttests. Overall, the time for explicit teaching over four weeks was 160 minutes, accounting for approximately 3.4% of the total course time. In the sixth week, the posttests were administered in the same manner as the pretests, and three weeks later, the delayed posttests were administered. The delayed-posttest was administered three weeks later because this was the time the students gathered for the end-of-course exam after a break, minimizing the possibilities of delayed posttest drop-outs.

6.2.6 Scoring and analysis

Dichotomous scoring was used for all test items. A correct answer received a score of one point, and an incorrect a score of zero. The statistical analyses were based on the mean scores of the items. Normal distribution of the mean scores of the two post-tests (cloze and translation) in the three groups was checked and Shapiro-Wilk test showed that data was approximately distributed as only one of the scores of the delayed translation test in the no-context group was not normally distributed. All other mean post-test scores were normally distributed. The Levene's tests for equality of error variances showed that the mean post-test scores did not violate the assumption of homogeneity of variance, as the scores for all post-tests were $\geq .05$. To answer the third research question, relative gains were used. This is because the pre-knowledge of the target items varied across the participants, and relative gains take into account the learning opportunities that vary amongst the participants (Webb & Chang, 2014). Relative gains were calculated based on the following formula:

Relative gain (%) = (posttest mean score – pretest mean score)/(1 - pretest mean score) x 100

6.3 Results and discussion

Research Question 1: The impact of explicit teaching

In order to examine the impact of explicit instruction, the results from the control group (which was exposed to the target items in traditional coursebook instruction but which received no explicit treatment) and the two experimental groups (i.e. sentence-context and no-context) were compared by means of ANCOVAs for the cloze and the translation posttests, where the dependent variable was the results of the posttest and the delayed posttest, and the covariate the pretest score. As can be seen in Table 6.15, the three groups differed from each other significantly in all the four comparisons, and the effect sizes were large. LSD post hoc tests revealed that, as expected, in all the four cases the experimental groups learned significantly better than the control group (see Figure 6.5). Importantly, there was no significant difference between the two experimental conditions, i.e. sentence-context and no-context groups.

Table 6.15: Analyses of covariance of the two vocabulary tests in the post and delayed conditions with the pretest scores being the covariates

	M(SD)					
	Sentence-context group *(n = 19)*	No-context group *(n = 21)*	Control group *(n = 20)*	F(2, 56)	Effect size[1]	Post-hoc[2]
Cloze posttest	67% (0.18)	63% (0.15)	37% (0.09)	29.92***	.517	S, N > C
Translation posttest	82% (0.14)	84% (0.12)	50% (0.10)	59.34***	.679	S, N > C
Cloze delayed posttest	68% (0.19)	64% (0.17)	38% (0.11)	22.28***	.443	S, N > C
Translation delayed posttest	79% (0.13)	83% (0.14)	53% (0.08)	43.66***	.609	S, N > C

Notes. S = Sentence-context group, N = No-context group, C = Control group; ***p<.001;
[1]Partial Eta squared; [2]LSD

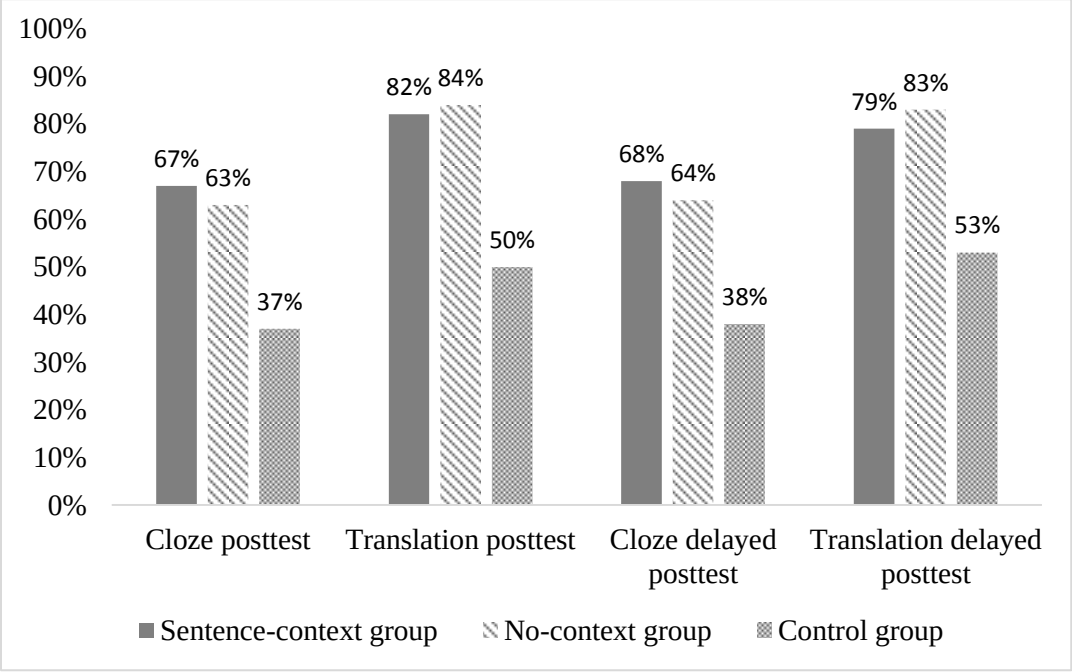


Figure 6.5: Vocabulary post-test (immediate and delayed) scores in the experimental and control groups

Thus, in answer to the first research question, not unexpectedly, the results indicate that the incorporation of explicit teaching of formulaic sequences was more effective than relying only on the presentation of formulaic sequences using traditional coursebook instruction. Not only were the effect sizes large, but the delayed posttest showed that the significant learning gains remained stable over three weeks. The findings are in line with evidence on effects of explicit instruction on both single words (e.g. Laufer, 2006; Webb, 2005, 2007b) and formulaic sequences (e.g. Alali & Schmitt, 2012; Peters, 2012, 2014; Webb & Kagimoto, 2009, 2011). The findings were also consistent with those of Schmitt *et al.* (2004) regarding incorporating explicit instruction of formulaic sequences into a regular L2 course. This supports Dörnyei's (2009) claim that in instructed SLA, the explicit teaching of formulaic language is of crucial importance.

Research Question 2: Differences between the two experimental conditions

In answer to the second research question, contrary to expectations, the results reported above indicate that instruction with context sentences was not more effective than with no context for both test batteries. These nonsignificant findings echoed those obtained for individual

words by Dempster (1987), Pickering (1982), and Webb (2007b). The findings also supported Griffin (1993) for low-proficiency participants, but this was not the case for advanced participants in that study, because the latter benefited from learning vocabulary with the sentence context. One explanation for this could be that when engaging in learning pairs of L1-L2 items with no context, the participants could have used their own strategies to generate mental context and associations, processing them deeply to commit into memory rather than applying shallow processing of simple rehearsal (Laufer & Shmueli, 1997).

Another possible explanation is that the participants in the present study were at a low-proficiency level. As such, their second language knowledge might be insufficient to take advantage of syntactic and semantic associations presented in the context sentences so as to learn the target formulaic sequences better. According to Nation and Coady (1988), this is because second language learners who have weak vocabulary tend to be poor decoders, and they therefore do not seem to be in a position to make use of the context, despite the context being within their level of knowledge.

Research Question 3: The impact of degree of salience of formulaic sequences embedded in traditional coursebook instruction

In order to answer the third research question, vocabulary scores for those items that had appeared in the coursebook in different types of activities and input modes were analyzed and compared with the items that had been explicitly taught in the experimental sessions. A repeated measures ANOVA with gain score as the dependent variable and type of exposure as the independent variable was performed. Table 6.16 presents a comparison of the gain scores of the two groups of target items – low-salience and low-salience plus – that received no explicit teaching in the experimental groups. The table shows a very consistent pattern: The explicitly taught items were always learned significantly better than the non-explicitly-taught items, regardless of whether the latter belonged to the low-salience or the low-salience plus categories. Furthermore, the low-salience plus items did not score any higher than the low-salience ones (and indeed, in one instance the low-salience plus score was lower than that of the low-salience group). This presents a bleak picture of the effectiveness of the teaching of formulaic sequences as part of vocabulary activities within traditional coursebook instruction: items that were targeted by special exercises did not do better than items that were only presented in meaningful input,

without being targeted in special exercises, and neither category got even close to the impact of the experimental conditions.

Table 6.16: Repeated measures ANOVA for gain scores (pre-post gains and pre-delayed gains) in the experimental conditions (*n* = 40)[1]

	Low-salience items *(k = 7)*		Low-salience plus item *(k = 5)*		Explicitly taught items (*k* = 42)		F	Effect size[2]	Post.hoc[2]
	Absolute gains	Relative gains (%)	Absolute gains	Relative gains (%)	Absolute gains	Relative gains (%)			
Cloze pre-post	0.01 (0.23)	-5.50 (47.06)	0.10 (0.26)	9.23 (46.92)	0.31 (0.16)	45.07 (24.04)	(1.58, 76)= 17.27***	.312	LS, LSP < ET
Translation pre-post	0.17 (0.26)	25.74 (45.87)	0.01 (0.16)	-3.12 (44.74)	0.40 (0.15)	70.61 (23.37)	(2, 76)= 41.26***	.521	LSP < LS < ET
Cloze pre-delayed	0.12 (0.26)	13.57 (48.70)	0.17 (0.29)	21.71 (52.09)	0.34 (0.18)	48.26 (27.69)	(1.45, 55.02)= 8.19*	.177	LS, LSP < ET
Translation pre-delayed	0.18 (0.28)	20.77 (60.90)	0.10 (0.16)	17.69 (28.72)	0.38 (0.15)	66.25 (21.33)	(1.38, 52.52)= 21.77***	.364	LS, LSP < ET

Note. LS = low-salience items, LSP = low-salience plus items, ET = explicitly taught items; *** $p < .001$; * $p < .05$

[1] Greenhouse-Geisser values reported when assumption of Sphericity violated.; [2]Partial Eta squared.; [3]LSD

Table 6.16 presented results from the experimental groups, which received both types of treatment, and one could argue that the reason why the non-explicitly taught items were not learned well is that the students' attention was drawn to the explicitly taught items. Therefore, further analyses were conducted in the control group, where there was no possible distraction by explicit teaching. Table 6.17 presents the results of paired sample *t*-tests comparing the gain scores of low-salience and low-salience plus items. As can be seen in the table, no significant difference emerged in any of the testing conditions.

Table 6.17: Paired sample t-tests of gain scores (pre-post gains and pre-delayed gains) in the control condition (n = 20)

	Low-salience items *(k = 41)*		Low-salience plus items *(k = 13)*		*t*(19)
	Absolute gains	Relative gains (%)	Absolute gains	Relative gains (%)	
Cloze pre-post	0.07 (0.13)	8.63 (17.89)	0.07 (0.21)	9.65 (33.97)	-.14
Translation pre-post	0.03 (0.11)	4.56 (17.29)	-0.04 (0.18)	-24.15 (72.12	1.77
Cloze pre-delayed	0.09 (0.14)	12.07 (18.63)	0.15 (0.17)	24.34 (28.64)	-1.77
Translation pre-delayed	0.08 (0.91)	12.73 (14.21)	0.00 (0.20)	-18.30 (82.13)	1.79

Thus, as seen in Tables 6.16 and 6.17 the formulaic sequences that occurred in vocabulary-teaching exercises in the coursebook – that is, the low-salience plus items – were not learnt significantly better than those that only occurred in the input texts of the coursebook

without being included in specific exercises (i.e. low-salience items). This is again a rather sobering indication of the inefficiency of vocabulary instruction in the specific learning environment of the study. To confirm the absence of any learning gains in this respect, a final analysis was carried out in which the "plus factor" was compared (i.e. the additional learning impact of the items being included in exercises) to the results obtained in the experimental groups and the control group.

The "plus factor" was operationalized by taking the pre-post difference between the low-salience plus and low-salience items, thereby examining whether low-salience-plus items achieved a higher gain between the pretest and the posttest than the low-salience items (which lacked any occurrences in specific vocabulary-teaching coursebook exercises); for example, if a student improved by an average of .60 points in the salient-plus items between the pretest and the posttest, and only .50 in the salient items, his/her "plus factor" score was .10. The cloze test results did not show any significant differences in the "plus factor" between the experimental groups (M =14.73, SD =67.20) and the control group (M =1.27, SD =32.29), $t(57) = .84$, $p = .40$. Similarly, no differences were found in the cloze pre- and delayed posttest (experimental conditions: M = 8.14, SD =69.85; the control condition: M = 9.49, SD =33.15), $t(57) = -0.82$, $p = .93$, the translation pre- and posttest (experimental conditions: M =-28.86, SD =57.09; the control condition: M =-32.64, SD = 99.86), $t(57) = .18$, $p = .85$, and the translation pre- and delayed posttest (experimental conditions: M = -3.08, SD =61.22; the control condition: M = -31.88, SD =113.30), $t(57) = 1.27$, $p = .21$. In other words, the non-significant gain pattern characterizing low-salience and low-salience plus items was observable across all the teaching and assessment conditions.

In summary, in answer to the third research question, the results indicate that the degree of any form of salience of formulaic sequences in the traditional coursebook instruction appeared to have no effects on learning gains. Explicit teaching, however, was superior even to the most direct form of vocabulary instruction; that is, in contrast to the fact that adding a direct element to the teaching of vocabulary items in traditional coursebook instruction (by means of vocabulary exercises) was not more effective than presenting the vocabulary items in meaningful input in the coursebook, complementing meaning-focused tasks with explicit teaching in the experimental condition resulted in significantly more learning. This effectiveness remained stable over three weeks, and the effect sizes were large for both testing times. The findings

support the arguments by Dörnyei (2009: 283-4) that although explicit learning is assumed to scaffold incidental learning in general, its impact in a language teaching program is contingent on how the target items are made salient, how they are presented and how they are integrated with the indirect, meaning-focused (i.e. incidental) learning of that program. The explicit teaching component in the present study took these factors into consideration by employing a procedure of systematic instruction which created opportunities for the target items to be noticed, repeated, and retrieved. The significant gains achieved in the experimental conditions are all the more meaningful as the explicit teaching tasks were conducted only over four sessions, making up only 3.4 percent of the total course time, and thus it hardly interfered with the overall language teaching syllabus.

6.4 Limitations and further research

There are several limitations in the present study. First, the study was carried out in a six-week EFL program, and the participants were low-proficiency students at a technology university. Therefore, any generalization that may be inferred from the study is limited to this context. Second, the tests used in the present study only measured receptive knowledge of form and meaning of the formulaic sequences because the participants were at a low-proficiency level. Future research should consider tests that measure other aspects of knowledge of formulaic sequences. Third, to maintain pedagogical relevance, interlexical factors, e.g. congruency (cf. Peters, 2014), and intralexical factors i.e. pronounceability, orthography, morphology, synformy, part of speech, and other semantic features (Laufer, 1997) that might affect learning of target formulaic sequences were not taken into consideration. Fourth, even though the tasks for explicit instruction in the present study were created to encourage the participants to process the context sentences, whether they wanted to do this, or whether they were able to do this seemed to be conditional on individual differences. For example, given that advanced learners may have their own strategies to take advantage of context sentences while learning words (Griffin, 1992), it would be useful to know whether higher proficiency learners would read, analyze, or process the context sentences so that they would learn formulaic sequences with context better than without. Fifth, learning tends to vary across different types of formulaic sequences as well as different forms of instruction (Nguyen & Larsen-Freeman, 2017); thus, further research may consider these when it comes to similar research purposes. Finally, during the explicit learning of the target items with context sentences, the participants could have attended to learning the form-

meaning link rather than to this context assistance. Griffin (1992) suggested that context sentences may give rise to the syntactic and semantic processing once the task of learning them is taken as a semantic task (i.e. learning contextual meaning) rather than as an episodic task (i.e. recalling word pairs). With the former task, learners can engage with contextual information which may support explicit learning of target items and leading to better learning. Thus, further research may consider designing tasks that can motivate learners to utilize this.

6.5 Pedagogical implications

The findings of the present study suggest a number of useful implications for teachers, curriculum designers, and coursebook writers. To begin with, the findings support explicit teaching and its advantage over vocabulary learning through traditional coursebook instruction regarding learning of the receptive form and meaning of formulaic sequences. Thus, it is important that teaching professionals consider integrating explicit teaching of formulaic sequences into their language classes. This is because although formulaic sequences may occur in exercises and meaning-focused tasks of coursebooks, if they are not explicitly taught, they are unlikely to be learned. To make explicit teaching a success in the classroom, teachers and curriculum designers can plan and carry out their teaching practices and syllabuses in an organized fashion. For example, in the procedure of the present study, three main factors, among others, were taken into account. First, the items selected were useful and befitting to the proficiency level of the learners (i.e. they co-occurred both in the coursebook and in a frequency list targeted to a proficiency level similar to that of the learners). Second, the instruction was carried out in stand-alone sessions instead of being part of meaning-focused activities. Third, the procedure ensured that the target items were attended to, repeated and retrieved on weekly intervals.

Furthermore, since the findings indicate no significant differences in learning gains between teaching frequent formulaic sequences with or without sentence context, teaching professionals, dependent on their teaching motivation, may decide to either include or exclude context sentences in their instruction. If contextualized teaching is preferred, the sentence context should be comprehensible to their learners. It is thus important to take into consideration the proficiency (at all levels) of the learners when it comes to selecting the context sentences. For instance, with the participants' vocabulary level taken into consideration, over 97% of the

coverage of the context sentences used in the study was from the most frequent 2000 word families. Thus, if the students' proficiency levels are higher, the coverage of the context sentences can be within the wider ranges of the most frequent words families.

Finally, the results indicate no effect of degree of salience of the formulaic sequences in the coursebook input or vocabulary activities on learning of the target sequences. Thus, to help incidental learning of target formulaic sequences through meaning-focused tasks, coursebook designers may consider integrating guidelines for explicit teaching of these items into teacher manuals. Also, exercises that teach formulaic language should be embedded into coursebooks in a way that the sequences spread systematically across several lessons instead of occurring in one or a few exercises in isolation, before, or after meaning-focused tasks as was the case in the coursebook investigated. The integration of explicit teaching and vocabulary exercises should ensure that target items are repeated and retrieved at least eight times in spaced intervals.

6.6 Conclusion

This study set out to investigate how best to teach formulaic sequences in language classes. To address this, it attempted to respond to the call for research in instructed SLA to maximize the effectiveness of explicit and incidental learning in tandem (cf. Dörnyei, 2013). The findings suggest that the incorporation of systematic explicit teaching elements into a traditional language syllabus is more effective than following the procedures of traditional coursebook instruction and its approach to vocabulary instruction for the purposes of learning formulaic sequences. The fact that learning through a combination of explicit instruction and incidental encounters was significantly more effective than what was considered to be the best vocabulary teaching approach in the instructional context in question (i.e. coursebook-based exercises accompanied by incidental encounters in meaning-focused tasks) indicates that it is important to consider what type of explicit exposure is more effective in a particular context, and how explicit exposure can work with incidental encounters to benefit learning. The other result of this study was that there was no significant difference between learning the frequent formulaic sequences with or without context sentences. The reason, amongst others, could be that the participants were insufficiently motivated to be engaged in the tasks designed for learning with context to make use of their contextual meanings. Above all, the study has contributed to our understanding of the teaching of

EFL and it has shown not only that explicit teaching seems to be effective for formulaic language learning, but also which types of explicit instruction seem to be most beneficial.

Chapter 7: Increasing the Effectiveness of Teaching L2 Formulaic Sequences Through Motivational Strategies and Mental Imagery

7.1 Introduction

As reviewed in Chapter 3 regarding vocabulary acquisition, there are three main summaries that are worthy of reiterating. First, the amounts of exposure to, engagement with, or work on lexical items are linked to the acquisition of the items. Second, although pictures combined with texts may facilitate vocabulary learning, pictures have only been used as annotations for vocabulary items, giving further explanations for the vocabulary. Third, mental imagery has previously been used in the mnemonic keyword method to merely support the learning of single words. Similarly, as reviewed in Chapter 4, although previous research on L2 motivation research has shown that motivational strategies and techniques have effects on motivated behaviour, increasing learning outcomes, little research has been carried out in a classroom setting to examine the impact of motivation on learning of a specific language feature. There are a handful of studies investigating the link between motivation and vocabulary learning; however, these studies have only focused on elaborating on the theoretical basis of motivated vocabulary learning. The study presented in this chapter differs from the aforementioned research directions. Specifically, its main objective was to examine the mediating effects of motivational strategies and mental imagery on the learning of L2 formulaic sequences, thereby relating to each other cognitive and motivational processes within instructed second language learning. As such, imagery used in the present study was mainly to serve as a motivational tool.

To examine the above research purpose, this investigation was a follow-up to the classroom experiment of vocabulary learning presented in Chapter 5, which included explicit vocabulary teaching procedures as the treatment condition and confirmed that they produced significantly more learning gains than the traditional, integrated way of teaching formulaic language by means of doing coursebook exercises and tasks. For the current study if the addition of a motivational dimension to this successful treatment results in further improvement, that could unambiguously be attributed to the motivational impact rather than the Hawthorne effect associated with the increased attention paid to the motivational treatment groups; in other words, the successful component of the first vocabulary teaching experiment was set as the baseline (i.e.

the control condition) for the follow-up study and examined how students' learning could be further enhanced through motivational means.

There were two conditions for the motivational treatment: the first – labelled the 'motivational condition' – included the application of a number of established motivational strategies (to be described below) from Dörnyei's (2001) taxonomy; the second condition – the 'visionary condition' – incorporated recent developments of L2 motivation research by employing mental imagery in the learning process. It should be noted that the visualisation activities (to be described below) were not related to the mnemonic keyword method outlined earlier but utilised instead the motivational capacity of future self-guides. Thus, to reiterate, the current study compared the effectiveness of three conditions: (a) explicit vocabulary teaching, (b) explicit vocabulary teaching augmented by traditional motivational strategies, and (c) explicit vocabulary teaching augmented by visionary techniques.

For the purpose of assessment the vocabulary test developed for the first study presented in Chapter 5 was applied. The test was administered three times: before the experiment (pretest), after the experiment (posttest) and three weeks after the experiment (delayed posttest). In order to gain further insights into the motivational and learning processes, a qualitative component was added to the study – by means of focus group interviews and my research journal – thereby producing a mixed methods design that Creswell et al. (2003) referred to as a 'sequential explanatory design'. Two specific research questions were formulated:

1. Do the motivational techniques applied in the motivation-specific treatment increase the effectiveness of explicit vocabulary teaching of L2 formulaic sequences?
2. Are there any differences between the impact of traditional motivational strategies and visionary techniques utilising mental imagery on the acquisition of L2 formulaic sequences?

7.2 Methodology

7.2.1 Participants

199 intermediate EFL students in nine language classes at a private university in Vietnam participated in this study, but 49 participants were excluded from the quantitative analysis because they were absent from some experimental or testing sessions. The age of the 150

remaining participants (120 males and 30 females) ranged from 19 to 25 (M = 19.29). The participants in this second study were different from those of the first study, but they had similar characteristics to those of the first study (see Section 6.2.1); they were non-English major first year students of the same university, speaking Vietnamese as the L1, starting the university at the elementary level of English proficiency, studying the same English coursebook at the time the second study was carried out (the second study were carried out one year after the first study). Thus, similar to the students of the first study, they could be non-English specialized and unmotivated students at upper secondary school (see Section 5.2.5 for further details regarding the student contexts in Vietnam).

Prior to the experiment, they took part in an end-of-term exam, which involved four language skills (reading, listening, writing, and speaking), and then placed into the fifth level of the university's five-level General English course based the exam's results. They were then randomly assigned into three groups (motivation group = 62, visionary group = 51, control group= 37). Sixty-three participants, 40 in the visionary and 23 in the motivational conditions, volunteered for focus group interviews and were divided into seven focus groups based on their original language classes.

7.2.2 Instruments

A multiple-choice test was used to measure the learning of 56 target formulaic sequences that occurred in both students' coursebook *Summit 2* (Saslow & Ascher, 2006) and Martinez and Schmitt's (2012) 'Phrase List'. The test was the same instrument developed and used in the first study presented in Chapter 5 and was used as the pre-, post-, and delayed-posttest with the order of the items being altered for each testing time. Table 7.1 includes a sample item.

Table 7.1: Sample multiple-choice item of the instrument used to measure vocabulary learning

Successful people have many habits ___.
A. back up
B. at once
C. in common (the correct answer)
D. for general
E. in the way

F. if only

The interview schedule of the focus group interviews included questions aimed at eliciting reflections regarding the learners' participation in the tasks of the motivational treatment conditions and asking about suggestions for any future improvement.

7.2.3 Procedure

The language course consisted of 90 hours of classroom instruction, three hours per day, five days a week, over six weeks, and the experiment was embedded in the middle four weeks of the course; Appendix G summarised the overall teaching procedure for the three groups (excluding the weeks for the testing procedure). The experimental time was spread over seven sections, four for teaching and three for testing. Table 7.2 presents this overall experimental procedure for the three groups.

Table 7.2: Experimental procedure for teaching of formulaic sequences in each of the three groups (the control, the motivational and the visionary groups) incorporated into the language program

Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 9
Pretest	Session 1	Session 2	Session 3	Session 4	Posttest	Delayed Posttest
60 minutes	55 minutes	55 minutes	55 minutes	55 minutes	60 minutes	60 minutes

During the four 55-minute weekly teaching sections, the control group received the explicit vocabulary teaching procedures (see below for the general vocabulary teaching procedure applied to all three groups) without any principled motivational techniques being incorporated; the motivational group and the visionary group were taught the same vocabulary teaching/assessment protocols procedures as the control group. But the tasks were embedded in a

carefully orchestrated motivating environment that utilised ideas and techniques from Dörnyei (2001) for the motivational condition and from Dörnyei and Kubanyiova (2014) for the visionary condition. The main elements of motivational treatments are summarised in Table 7.3.

General vocabulary teaching procedure applied to all three groups

PowerPoint slides were used to present the target items in the first two experimental sessions. In the first teaching session, the form and meaning of the items were presented in the direction of L2 to L1 (English to Vietnamese), followed by a paper-based matching exercise. Each formulaic sequence was presented in a sentence with a word of the sequence missing (e.g. His support cannot be taken for *g*_____). The researcher read the sentence and asked the participants to guess the missing word. If no correct response was immediately given, the researcher provided the missing word with its letters presented in a random order (e.g. His support cannot be taken for *gtdearn*), and asked the participants to once again try and supply the missing word. The full sequence was then presented (e.g. His support cannot be taken for granted.) with its translation. The same procedure was used in the second teaching session, but in the direction of L1 to L2.

In the third and fourth teaching sessions, word cards were used, with each sentence containing an English formulaic sequence on one side and the Vietnamese translation of the sequence on the other. In this session, the participants worked in pairs, using the cards to recall the form and meaning of the sequences in the direction of L2 to L1, and then made a short sentence for each item. In session four, a similar procedure was used but in the direction of L1 to L2. To avoid the possibility that the participants might revise the target items outside the classroom, they were asked not to take notes during the treatment sessions, and they were not informed about the next teaching session or about the posttests.

Table 7.3: Main elements of the motivational content of the two motivational treatment conditions (Ss = Students)

Motivational strategies	Visionary techniques
• T establishes rapport with Ss and Ss are put at ease. • Ss are made aware of the instrumental	• Ss are explained the rationale for and possible benefits of visualisation, and are given practice in the process. • After processing each item, Ss are asked

value of formulaic sequences.

- Ss set specific goals for themselves of mastering the target formulaic sequences in each lesson.
- Ss write their goals down on colourful sticky notes, expressing their commitment by adding resolutions (e.g. *I'll learn them all!*) and even decorating them with drawings.
- Ss monitor their own progress in each lesson and celebrate fulfilling their goals through fun activities such as drumming on the tables and jumping up and down.
- Ss take part in group-competition games and final group scores are displayed on the board.
- Ss also "compete" within pairs, comparing with each other how many correct answers they have.
- Before each learning episode, Ss are reminded of their strengths and abilities through a task that recalls some past accomplishments.
- Ss are encouraged to attribute their failures (if any) to a lack of effort or concentration instead of insufficient ability.

to imagine their future selves conducting a short interaction in either a professional or an everyday situation, incorporating the target formulaic sequence into a single relevant sentence. The visualization task is carried out either in silence as individual work or communicatively in pair-work interactions.

- The visualisation is done sometimes with and sometimes without accompanying pictures as visual aids, provided either digitally or in print.
- After the visualisation, Ss record on a chart the emotional reaction caused by their use of mental imagery.
- In pair work, Ss also record the emotions of their partners as reflected by their facial expressions and body language.
- To make their visions more plausible, Ss are shown pictures of successful role models whom they know and with whom they share a similar background.
- Ss are reminded of the obstacles that their future selves may encounter by doing a problem-solving task.

The following summarizes the general vocabulary teaching procedure applied to all three conditions (the cognitive baseline) and the motivational procedures added to the explicit

vocabulary teaching in the two experimental conditions. Table 7.7 presents the elaborate teaching procedures in all three conditions.

Motivational strategies added to the explicit teaching procedure used in the motivational group

As is illustrated in the Table 7.4, eight macro-motivational strategies in the framework of motivational strategies by Dörnyei (2001) were used for the motivational condition. Corresponding with each of these strategies, a micro-motivational strategy in the framework was selected. As can be seen from the table, the strategies of using goal setting methods, promoting efforts attributions, and increasing learner satisfaction were used in three or four experimental sessions. However, the two strategies of developing personal relationship with the students and building the learners' confidence by providing regular encouragement were used in only one session.

Table 7.4: Frequency of motivational strategies deliberately used by the teacher in the motivational-setup treatment

Macro-motivational strategies	Micro-motivational strategies	Session 1	Session 2	Session 3	Session 4
Develop a personal relationship with the students (strategy 3)[1].	Pay attention and listen to each of the students.	√			
Promote the development of group cohesiveness (strategy 6).	Involve small-group competition games.	√	√		
Promote the students' awareness of the instrumental values associated with the knowledge of an L2 (strategy 12).	Regularly remind students that the successful mastery of the L2 is instrumental to the accomplishment of their valued goals.	√			

Make learning stimulating and enjoyable for the learner by increasing the attractiveness of the tasks (strategy 18).	Make task content attractive by adapting it to the student's natural interest or by including novel, intriguing, exotic, humorous, competitive, or fantasy elements.			√	√
Use goal-setting methods in the classroom (strategy 21).	Encourage learners to select specific, short-term goals for themselves.	√	√	√	√
Build the learners' confidence by providing regular encouragement (strategy 24).	Draw the learners' attention to their strengths and abilities.			√	
Promote effort attributions in the students (strategy 31).	Encourage learners to explain their failures by the lack of effort and appropriate strategies applied rather than by their insufficient ability.	√	√	√	
Increase learner satisfaction (strategy 33).	Monitor student accomplishments and progress, and take time to celebrate any victory.	√	√	√	

Note. [1]The strategy numbered in Dörnyei (2001: 137-44)

The selection and distribution of the strategies across the treatment sessions were based on the following three criteria:

- feasibility
- appropriateness
- student interests

To guarantee the satisfaction of these criteria, a number of characteristics concerning the students, the target language and the classroom (i.e. the demographic characteristics of the students, the students' language levels, the target language features, and the class sizes) were taken into account.

Specifically, the small class-sizes (14-27 students in each class) allowed for the feasibility of teacher paying attention to all students and involving them in small-group competition games. The class-sizes and the students' age range (around 19 years old) also made it *feasible* to ensure all students listen to a short lecture about the instrumental values of the target items and L2. As the students were low-proficiency non-English majors, it was appropriate to carried out this lecture. It would have been difficult to do so if the class sizes had been larger and/or the students had been much younger. Since the target language features were a specific number of lexical items, i.e. 56 formulaic sequences, it was possible to carry out goal-setting activities. Because the goals were challenging, failures to realize them could occur; thus, it was *appropriate* and possible to carry out activities whereby the students attributed their their failures to the lack of effort and to draw the learners' attention to their strengths and abilities.As the students were in the first year at the university, they could be enthusiastic about setting learning goals, learning and competing; thus they could be *interested* in goal-setting activities, game-based activities and competitions. In order to avoid boredom, the activities and distributions of the activities varied considerably across sessions.

Visionary techniques added to the explicit teaching procedure used in the visionary group

The specific visionary techniques applied in this study were developed based on the general visionary principles (see Section 4.2) which concern the concept of vision (Dörnyei & Kubanyiova, 2014) and the conditions to make future self-guides capable of motivating action. The techniques also consider three criteria regarding the selection and distribution of motivational strategies (i.e. feasibility, appropriateness and student interests) (see Table 7.3 for the motivational elements of the visionary techniques).

As this study concerned the learning of specific lexical items (formulaic sequences) in sentence contexts, three components involved in developing the visionary techniques: target formulaic sequences, sentence contexts (also referred to as promted language contexts) and pictures (images). Because this second study was a follow-up of the first study, the target items and the sentence contexts were the same as those used in the first study (see Section 6.2.2 for the procedures of selecting the target items and selecting and adapting the sentence contexts). The criteria for choosing the images are as follows:

- The images are *clear* and *vivid*, having high resolution and suitable for the teaching (or researching) purposes, methods and conditions.
- The pictorial contexts are *congruent* with prompted language contexts and target language items.
- The images serving as future self-guides are *different* from the target students' current selves, but *desirable*; the people in the images appear successful, confident, and contented.
- The images as future self-guides appear *plausible*, but *not* perceived as *comfortably certain* to reach and harmonious with the individual self-concepts of the target students.
- The pictorial contexts appear *international.*
- There are relatively *balanced* pictorial contexts of personal and professional lives.
- The pictorial contexts contain *communicative* situations, containing people about to have conversations, having conversations or having finished conversations.

The specific procedure of developing visionary techniques includes three main categories of considerations. First, the design of the visionary teaching materials and procedures took into account the condition that the participant "*has* a desired future self-image" which are "*elaborate* and *vivid",* and that the visions were "*different* from their current selves". To ascertain this, apart from the general visualization practices, in each experimental session the participants visualized their future self-guides communicating and using each target item twice. That is, over the whole experiment, each participant had a maximum of eight encounters of their L2 future selves communicating in eight different situations in which one target item was used. Thus, with a total of 56 target items used in four experimental sessions, each participant was exposed to their L2 future self-guides a maximum of 448 times. Table 7.5 provided the details of the sources from

which the visions could be generated. A total of 112 colour pictures in varying contexts were selected, 56 of which were turned into black and white for the PowerPoint presentation activity and then converted back to colour pictures in the computer-based activity. This was aimed to increase the memory of the future self-guides and thus the motivational impact of the images. As previously mentioned, to make the future images desirable for the participants the people in the pictures appeared successful, confident and contented. For example, it was an image of an expert talking to his international visitors, or a picture of a group of nicely-dressed and happy international colleagues socializing at a party (see Figure 7.1). Table 7.6 presents the distribution of 112 pictorial contexts into professional and non-professional situations in four treatment sessions.





Figure 7.1: Examples of pictures used in the imagery intervention procedure

In addition, the pictures presented in the PowerPoint could be fairly clearly seen even from the end of the class and from the participants' own laptop computers because the image pixels ranged from roughly 500 pixels wide and 330 pixels high to 2080 pixels wide and 1170 pixels high. The pictures as future self-guides were also different from the participants' current selves in the fact that the participants were the first-year students at the age of around 19, whereas most pictures included young professionals or successful-looking people in their 30s.

Second, upon selecting the pictures and contexts, I kept in mind the conditions that the future "self-image is perceived as *plausible",* but "*not* perceived as *comfortably certain* to reach", and "in harmony with the individual self-concept". Since the participants were young Asian males and females, virtually all pictures included either Asian man or women conversing with other Asian or non-Asian people. Similarly, given that the participants were first-year students at a technology university, one of whose ambitions was to prepare graduates who could

work in an international environment, it was a realistic scenario that if these students made sufficient efforts, they could be able to use English to work globally. In other words, in this time of globalization, integrating a "globalized world-citizen identity" (Dörnyei & Ryan, 2015:79) into their future selves were not far-fetched expectations for these young participants. Further, the pictures and contexts were selected considering that the conversations in the pictures could take place in three common and daily topics of an individual's private life, social life, and professional life. Thus, these categories of images were assumed to subsume the images of ideal or ought-to L2 selves as expected by the participants themselves, but not conflict with the expectations of their friends, their families, or the society.

Finally, the experiment considered the conditions that the future self images are "accompanied by relevant and effective *procedural strategies* that act as a *roadmap* towards the goal", they are "*regularly activated* in the learner's working self-concept", and they are "offset by a counteracting *feared possible self* in the same domain". The procedural strategies in respect of the scope of this experiment referred to the plan for the overall language goal of the learning sessions, the sub-goals of each lesson, the specific activities for the learners, and specific tasks for the teacher to help the learners realize these goals. This detailed plan could give a clear direction, and thus making it easy for the learners to begin to engage, expend efforts, and persist in learning once they had decided the vision to become successful professionals, good friends, or/and lovely partners who would use the L2 to communicate effectively in future professional, social or/and personal settings. Furthermore, as mentioned earlier, the equal spreading of hundreds times of exposure to future self-images over the four experimental sessions would ensure the condition of regular activation to set forth. To guarantee that the participants would visualize encountering the selves that they would fear to become in the future, the procedure included in the session four a brief problem-solving activity that set up a scenario in which a qualified graduate failed to get his dream job because he could not express himself clearly in L2 at an interview.

Table 7.5**:** Sources of visions that could be generated from four experimental sessions

Sources of visions

Session 1	Black and white pictures presented from PowerPoint with contexts.
	The same pictures as those encountered in the PowerPoint presentation, but in full colour, encountered in a computer-based matching exercise in contexts.
Session 2	Mental images generated from the contexts presented from PowerPoint.
	Mental images generated from the contexts in the paper-based matching exercise.
Session 3	Mental images generated by the participants when their partners showed them the contexts.
	Mental images generated by the participants when they showed their partners the contexts.
Session 4	Pictures in full colour printed in hardcover cards shown to the participants by their partners.
	Pictures in full colour printed in hardcover cards that the participants showed to their partners.

Table 7.6: Distribution of pictorial contexts into professional and non-professional situations

	Professional situations	Non-professional situations
Sessions 1, 3	26	30
Sessions 2, 4	25	31

Note. *Professional situations* = the pictures and prompted language contexts indicate that conversations take place at work, between colleagues or business partners; *Non-professional situations* = the pictures and prompted language contexts indicate that conversations take place in non-work situations, between friends or family members

It is important to note that there could be overlaps in motivational activities which were arbitrarily used between the motivational condition and the visionary condition, such as teacher paying attention to the students by asking questions related to their English studies or encouraging them to take part in class activities. However, the difference between the two conditions is that the motivational elements applied in each treatment condition were based on different motivational principles and theories (as elaborated above) which were carefully selected/designed and *deliberately* used to increase the students' motivation.

Table 7.7: Elaborate procedure for the treatment activities used in the three groups

Control Group	Motivational Group	Visionary Group
Session 1: PowerPoint presentation & Matching exercises in an L2-L1 direction		
T introduced the lesson. **Presentation 1:** T used Power Point topresent the first sentence briefly in which the target formulaic sequence was missing and asked Ss to read the sentence quickly E.g. *We enjoyed ourselves __ at the party*. T presented the first formulaic sequence in sentence in which one of the content words was missing but its first letter was given, and asked Ss to guess the missing word. E.g. *We enjoyed ourselves* ***a g__*** *at the party*. The number of the missing letters for	**Taking Ss' learning seriously/ Personal relationship.** T asked Ss questions about their expectations and difficulties in learning English and wrote these expectations and difficulties on a notebook (without Ss knowledge). **Instrumental values.** T presented about the advantages of knowing a large number of FSs (e.g. *as a result*) in the achievement of the overall goal of mastering the English language. **Sufficiently high expectation/Goal orientedness**. T suggested that after the lesson, the goal for each student was to *recall the meanings* of 56 FSs (T gave an example). T wrote the example goal on the corner of the board asked Ss to write their own goals on colourful sticky notes (given by T), decorate	**Preparation conditions for guided imagery** (1) T told Ss what visualization was and the benefits of visualization in learning English (e.g. relaxing, enjoyable, or motivating); (2) T told Ss that they were going to relax and allow some images came into their minds (Activity 2 – Introduction to Visualization, Hadfield & Dörnyei, 2013: 20); (3) T made sure that Ss were 'sufficiently fresh to visualize" by considering the time, the location, and/or activities to make Ss feel fresh. **Tasks + imagery & visualization components (with pictures)** T gave Ss Handout 1 (see Appendix H) **Presentation 1:** T used PowerPoint to present each target item in

the first target formulaic sequence was given above the sentence (e.g. 4 letters).

T presented the sentence in which one content word of the formulaic sequence having letters in jumbled order and asked Ss to guess that word

E.g. *We enjoyed ourselves* ***a garet deal*** *at the party*.

T presented the sentence in which the whole item and then its meaning in L1.

E.g. *We enjoyed ourselves* ***a great deal*** *at the party*.) – rất nhiều.

Practice 1: matching exercise

T then gave Ss handouts and asked them to do a matching exercise which consisted of eight groups of seven L2-L1 pairs of phrases in sentence contexts.

T checked the correct answers with Ss.

the notes, and stick them on the table.

Group competition. T divided the class in to two teams, asked each to choose a name, and wrote the team names on the board.

Presentation 1:

Stimulating and enjoyable tasks. T used PowerPoint to present a target item (in the same procedure as done with the control group), but when a student in class sounded out the correct answer the most clearly and loudly so that T could hear well, the student got one star for his/her team. T drew the star on the board under the name of the team that student belonged to and congratulated the student (e.g. Dan got it!)

Promoting effort attributions and increasing learner satisfaction.

Practice 1: matching exercise

T gave Ss handouts and asked them to do the matching exercise (the same as that of the control group). When completing, each Ss

its context sentence in the same procedure as that of the control group (see the first column on the left), and eventually presented a black and white picture.

Each of the 56 black and white pictures suggested a future L2 situation whereby the learner imagined he /she would be in.

Emotions

Ss worked on Handout 1 to express their emotions generated from these imagined situations of using L2. At the end of the session, each student counted the situations that had given them good feelings and asked his/her partner for theirs.

Practice 1: matching exercise

(The items were in a different order from the PowerPoint presentation, the same as the activity for the control group)

T asked Ss to do a matching exercise (similar to the control group). This task was computer-based, and there were pictures to illustrate the sentence

T discussed with Ss on the difficulties in learning the target formulaic sequences.	counted their correct answers and the whole class celebrated their accomplishments by table drumming in three levels. Ss reported on the extent of their goal fulfilment by writing the number of learned items on the colourful sticky notes. T then gave each student a piece of paper writing "I could have achieved my goal if I (A) had made more efforts (B) had concentrated better", and asked them to circle A or B. T asked some Ss for the reasons for their failure to achieve the goal.	contexts. These were the same pictures used in the PowerPoint presentation activity, but in color. The matching exercise was accessed from the website https://quizlet.com/class/2574573/, password ***. Ss's names were removed from this Internet-based class immediately after the treatment so as to guarantee no subsequent access (see also Appendix H for the paper-based version without pictures). During the activity T asked Ss to quickly recall their feelings while reading sentences, viewing the pictures, and imagining being in context sentences.
Session 2: PowerPoint presentation & Matching exercises in an L1-L2 direction (revision 1 and 2) (The context sentences are different from those in Session 1)		
T introduced the lesson. **Revision 1 and 2:** The activities were similar to those in Session 1, but the target items in the sentences were in Vietnamese.	**Sufficiently high expectation/Goal orientedness**. T suggested that after the lesson, the goal for each student was to *recall the forms* of 56 FSs (T explained this by giving an example) T wrote the goal on the corner of the board and asked Ss to write their own goals on	**Preparation conditions for guided imagery** (2) T introduced the concept of L2 self and got Ss to visualize what their ideal L2 self would be (Activity 6 – My Future L2 Self, Hadfield & Dörnyei, 2013: 26); (3) T made sure that Ss were 'sufficiently fresh to visualize" by considering the

T checked the correct answers with the Ss. T discussed with the Ss on the difficulties in learning the target formulaic sequences.	their colourful sticky notes (given by T), and stick on part of the table next to them. **Group competition**. T divided the class into two teams, asked each group to choose a name, and wrote the group names on the board. **Revision 1:** **Stimulating and enjoyable tasks**. T used PowerPoint to present the same treatment procedure as that of the control group, but when one student in the team sounded out loud a correct answer, the student got one star for the team. T drew the star on the board under the name of the team that the student belonged to and congratulated the student (e.g. Dan got it!) **Promoting effort attributions and increasing learner satisfaction**. **Revision 2: matching exercise** T gave Ss handouts and asked them to do the matching exercise (the same as that of the	time, the location, and/or activities to make Ss feel fresh. **Tasks + imagery & visualization components (without pictures)** T gave Ss Handout 2 (see Appendix H) **Revision 1:** T used PowerPoint to present each target item in the same procedure as that of the control group, but eventually asked Ss to follow the instructions in Handout 2 to imagine the images of their L2 future selves. **Emotions** Ss worked on Handout 2 to express their emotions generated from these situations of using L2. At the end of the session, each student counted the situations giving them good feelings. T asked for Ss who had the most counts of good feelings, and some random others.

	control group). After giving the answers, each student counted their correct answers and the whole class celebrated their accomplishments by jumping up in three levels of height in accordance with their levels of goal achievements. Ss reported on the extent of their goals fulfilment by writing the number of learned items on the colour sticky notes. T then gave each student a piece of paper writing "I could have achieved my goal if I (A) had made more efforts (B) had concentrated better", and asked Ss to circle A or B. T asked some Ss reasons for their failure in achieving the goals.	**Revision 2: matching exercise** (The items were in a different order from the PP presentation, the same as that of the control group) T asked Ss to do the same matching exercise (see Appendix H) as that of the control group. But they also recalled their feelings while reading each sentence and imagine themselves being in each context sentence.
	Session 3: Word cards in the L2-L1 direction (The context sentences are the same as those in Session 1)	
Consolidation 1: T introduced the lesson.	**Consolidation 1:** **Building confidence by drawing to their strengths and abilities**. T gave each student a	**Consolidation 1:** **Making the vision seem plausible** – using role models

Ss worked in pairs.

T gave each pair a set of 56 word cards with L2 and phonetic symbols of the content words in one side and L1 and the sentence context on the other.

Pairs had five minutes to review the cards together.

Each student in the pair randomly took 28 cards.

Ss mixed the cards several times for the phrases to be in a random order. This was to prevent the possibility that if the cards for pairs in the same order, a student in one pair could hear the answer from another student nearby and imitated.

Each pair sat facing each other. One person placed the card of the target item in front of the other partner for him or her to recall the L1 and make a short sentence with it within about 13.4 piece of paper which wrote "I can_____ very well. My friend/sister/brother, _____ cannot." T asked Ss to circle the person and fill out the gaps.

Sufficiently high expectation/Goal orientedness. T suggested that after the lesson, the goal for each student was to be *able to make sentences based on the sample sentences using the 56 FSs*. T wrote the goal on the corner of the board and asked Ss to write their own goals on their colourful sticky notes.

Stimulating and enjoyable tasks/Individual competition. T gave each student a sheet of paper which wrote numbers from 1-56. T then instructed Ss to follow the same procedure as that of the control group (see the left), but when one student in the pair sounded out loud a correct sequence and made a short sentence with that sequence, he or she got two ticks (√√) for that number on the partner's scoring sheet (one for the correct sequence and one for the sentence). After the activity the partners

T presented the pictures of L2 role models who were the former Ss at the university and successful young Vietnamese people in the technological areas. These people were working or studying in the contexts where they used English (such as a national TV reporter for events using English). T asked Ss to pick their favourites.

T asked Ss to close their eyes and visualize the images of their own future L2 selves.

T asked questions about the extent of vividness of some Ss' future -self images (e.g. Can you see the colour of the dress you are wearing?)

Tasks + imagery & visualization components (without pictures)

Ss followed the same procedure as that of the control group when working with the word cards. But they also visualized and acted out their L2 future selves communicating short utterances in various contexts, using the target items based on the sample contexts given in the word cards. They

seconds. Feedback like "Well done!" or "Sorry" was given immediately after the partner turning the card upside down to check for the correct L1 recall. The activity continued with the role switching to the other partner holding the next 28 cards of target formulaic sequences.

The two exchanged the set of cards and the same activity continues.

T used a stopwatch when the time ends for each item and command "ONE, NEXT, NEXT…CHANGE ROLE…ONE, NEXT, NEXT…CHANGE SET…NEXT, NEXT..".

Before the activity, Ss were instructed not to turn to the next card if the command was not been given by the T, even if their partner already recalled the meaning. Similarly, if the partner told each other the scores they got.

Promoting effort attributions and increasing learner satisfaction.

Ss reported on the extent of their goal fulfilment by writing the number of learned items on their colourful sticky notes.

T then gave each student a paper writing "I could have achieved my goal if I (A) had made more efforts (B) had concentrated better", and asked Ss to circle A or B. T asked some Ss reasons for their failures to achieve the goals.

T praised each student's achievement by saying simple words such as "great", "very well done", "good", or "not bad".

did these without accompanied pictures.

T gave Ss Handout 3 (see Appendix H)

Ss followed the same learning procedure as that of the control group, and meanwhile working on the Handout 3 which focused on the imagined L2 selves, and the emotions generated from imagined experiences.

Emotions

The difference in this Session 3 (from Sessions 1 and 2) was that not only did Ss express their own feelings generated from imagined experiences, they also described their partners' feelings by drawing simple symbols of happiness and sadness.

could not recall the meaning, the other still had to change to the next card when he or she heard the command.

T discussed with the Ss on the difficulties in learning the target formulaic sequences.

Session 4: Word cards in the L1-L2 direction

(The context sentences are the same as those in Session 2)

Consolidation 2:

T introduced the lesson.

The activities were similar to those in Session 3, but in L1 – L2 order.

T discussed with the Ss on the difficulties in learning the target formulaic sequences.

Consolidation 2:

Sufficiently high expectation/Goal orientedness. T suggested that after the lesson, the goal for each student was to be *able to quickly and fluently make sentences based on the sample sentences using 56 FSs*. T wrote the sample goal on the corner of the board and asked Ss to write their own goals on their colourful sticky notes.

Stimulating and enjoyable tasks/Individual competition. T gave each student a sheet of paper which wrote numbers from 1-56. T then

Consolidation 2:

Counterbalancing the vision by considering failure

T described a scenario of a guy who used to be a good student who wanted to work in a foreign company so as to improve the professional skills. However, he failed the interview for the inadequate use of English even though the other skills were qualified.

T asked Ss what that guy could have done so that he could have been offered his dream job.

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instructed them to follow the same procedure as that of the control group, but when one student in the pair sounded out loud a correct sequence and made a short sentence with that sequence, he or she got two ticks (√√) for that number on the partner's scoring sheet (one for the correct sequence and one for the sentence). After the activity the partners told each other the scores they got.

T wrote the elicited answers on the board.

Tasks + imagery & visualization components (with pictures)

Ss followed the same procedure as that of the control group when working with the word cards. They visualized and acted out their L2 future selves communicating short utterances in various contexts, using the target items based on the sample contexts given in the word cards, with T pictures printed in the cards.

T gave Ss Handout 4 (see Appendix H)

Ss followed the same procedure as that of the control group, and meanwhile working on Handout 4 which focused on expressing imagined L2 selves, and the emotions generated from the imagined experiences.

Emotions

The activity was similar to that in Session 3 in the way that Ss expressed their own feelings generated from imagined experiences, and

	meanwhile describing their partners' feelings. But instead of drawing symbols of happiness and sadness, Ss wrote the letters indicating their positive or negative feelings.

Note. T = teacher, Ss = students

7.2.4 Data collection, scoring, and analysis

For the quantitative data, dichotomous scoring was used for each test item, followed by the calculation of *relative gains* to take into account the varying learning opportunities amongst the participants (i.e. the different number of target items that they did not know at the start of the programme), using the following formula (Webb & Chang, 2015): *Relative gain = (posttest mean score – pretest mean score)/(1 - pretest mean score) x 100.* In order to compare the relative gain scores across the three experimental conditions, a one-way analysis of variance was conducted.

The qualitative data was collected from the seven focus group interviews (conducted in Vietnamese) and the research journal. Focus group interviews took place immediately after the last teaching session and lasted on average 100 minutes each. The questions for the focus group interviews were aimed to derive reflections of the participants regarding their experiences with the treatment conditions and suggestions for improvement. The interviews transcripts were translated (roughly 7,900 words for the visionary condition and 3,100 words for the motivational condition) and then analysed through content analysis involving initial and secondary coding to identify emerging themes (cf. Dörnyei, 2007b). Two main themes were found in the motivational condition, including effects of the motivational strategies and suggestions for improvement. The emerging main themes found for the visionary condition included ability to visualize, factors facilitating visualization, effects of the visionary techniques, and suggestions for improvement. Sub-themes (to be elaborated in the Results section below) were aslo identified for each main theme in both conditions. Appendix I provides the coded transcipts, main themes, sub-themes (see also Table 7.12) and quotes from the focus group interviews of the motivational condition. Appendix J presents the coded transcipts, main themes, sub-themes (see aslo Table 7.13) and quotes from the focus group interviews of the visionary condition.

The research journal included notes I took during and after each weekly treatment session. As the journal was based on the pre-structured categories (see Table 7.8), it did not take a lot of time to take notes during class. These observations were then quantified on a four-point composite scale (0-3) – 'perceived classroom success' – to evaluate each treatment session based on three aspects: the extent of student engagement, the extent of student learning and over all teacher satisfaction. Table 7.8 contains the specific score descriptors for each category.

Table 7.8: Taxonomy of perceived classroom success

Degree of perceived classroom success[1] (PCS)	Extent of student engagement[2] (C1)	Extent of student learning[3] (C2)	Overall teacher satisfaction (C3)
0	Less than one fourth	Less than one third	Dissatisfied
1	From one fourth to half	From one third to half	Neutral
2	Over half to two thirds	Over half to two thirds	Satisfied
3	Over two thirds	Over two thirds	Very satisfied

[1] For each experimental session; each degree of PCS refers to the combination of C1, C 2, and C3
[2] Amounts of students paying attention and participating in learning during each experimental session
[3] Amounts of students having learned the knowledge of the target language after each experiment session

It should be noted that some degree of bias in favour of the motivational and visionary conditions might occur. Yet the the notes taken during and right after the experiment in a real classroom setting regarding student attention, participation, and learning as well as teacher feelings are somewhat worthy of reporting.

7.3 Results

RQ 1: Do the motivational techniques increase the effectiveness of explicit vocabulary teaching of L2 formulaic sequences?

The descriptive statistics of the test scores across the three testing sessions (pretest, posttest, delayed posttest) are reported in Table 7.9. A repeated measures ANOVA was first conducted to explore differences in the scores at the three testing sessions within each treatment group. Results in Table 7.10 show that the two experimental conditions, i.e. motivational and visionary groups, led to significant gains in learners' knowledge of formulaic language. Post-hoc comparisons (Table 7.10) showed that for the motivational and visionary groups scores in the posttests were significantly higher than those of the pretests and the delayed posttests. The

control group also experienced a significant increase in knowledge of formulaic sequences, with scores in the posttest being significantly higher than those in the pretest. All effect sizes were large. No significant differences were found between the posttest and delayed posttest scores in the control group.

Table 7.9: Descriptive statistics of the test mean scores (max = 1) in the three conditions

	Motivational group (n= 62)			Visionary group (n = 51)			Control group (n = 37)		
	Pretest	Posttest	Delayed[1]	Pretest	Posttest	Delayed	Pretest	Posttest	Delayed
Mean	0.36	0.68	0.63	0.38	0.75	0.71	0.31	0.51	0.53
SD	0.11	0.16	0.20	0.13	0.14	0.19	0.09	0.17	0.19
Range	0.55	0.71	0.82	0.41	0.54	0.73	0.48	0.68	0.75
Minimum	0.14	0.29	0.14	0.20	0.43	0.27	0.18	0.16	0.21
Maximum	0.70	1.00	0.96	0.61	0.96	1.00	0.66	0.84	0.96
Skewness	0.86	-0.18	-0.44	0.44	-0.64	-0.65	1.45	0.27	0.45
Kurtosis	0.69	-0.37	-0.23	-1.30	-0.44	-0.46	4.45	-0.94	-0.27

Note. [1]Delayed = Delayed posttest

Table 7.10: Repeated Measures ANOVAs for the test mean scores (max = 1) of the three testing times (pretest, posttest, and delayed posttests) in the three conditions

		Effect size[b]	
	F[a]		Post hoc[c]
Motivational Group	(1.77, 107. 87) = 121.88***	.666	PO > DE > PR
Visionary group	(2, 100) = 235.14***	.825	PO > DE > PR
Control group	(2, 72) = 41.83***	.537	PO, DE > PR

Note. PR = Pretest, PO = posttest, DE = delayed posttest;

[a]Greenhouse-Geisser values reported when assumption of Sphericity violated, [b]Partial Eta squared.,

[c]LSD; a *comma means a nonsignificant difference;*

**** p < .001*

The results reported above showed that learners acquired knowledge of formulaic sequences in the three conditions and that in the case of the motivational and visionary groups further gains occurred from the posttest to the delayed posttest. To examine the effect of the motivational treatment on the students' mastery of formulaic language, a one-way ANOVA was conducted with relative gains as dependent variable and treatment condition (3 levels) as the independent, between-groups variable. Results in Table 7.11 show that the relative pre-post gains of both motivation-specific treatment conditions significantly exceed those obtained in the control group, thereby providing unambiguous evidence that the motivational techniques applied in this experimental study were successful in facilitating vocabulary learning. Effect sizes were large in the case of pre-post gains. Results of the pre-delayed gains are reported in response to the second research question.

Table 7.11: ANOVAs for mean gains (pre-post gains and pre-delayed gains; SD in brackets) with the relative gains being compared across conditions

	Motivational group		Visionary group		Control group				
	Absolute gains	Relative gains (%)	Absolute gains	Relative gains (%)	Absolute gains	Relative gains (%)	F	Effect size[1]	Post hoc[2]
Pre-Post	0.32 (0.15)	50.77 (22.85)	0.37 (0.13)	60.92 (19.07)	0.20 (0.14)	29.90 (19.07)	23.13***	.239	V > M > C
Pre-Delayed	0.27 (0.20)	41.85 (37.20)	0.33 (0.15)	55.17 (24.88)	0.22 (0.17)	32.36 (25.56)	6.17**	.077	V > M, C

Note. V = Visionary group, M = Motivational group, C = Control group

**$p < .01$, ***$p < .001$

[1]Eta squared; [2]LSD; a comma means a nonsignificant difference

The qualitative data was then turned to and the quantified evaluations of the weekly sessions in the research journal (see Table 7.8) were examined. After tabulating the scores according to the three conditions (visionary, motivational and control), the highest score (9 points) was obtained by the visionary group, followed by the motivational group (6 points) and the control group (3 points). Although analyses of qualitative data – even when quantified, as in the case of the present study – cannot typically offer conclusive comparisons because of the lack of inferential statistical verification, the emerging pattern mirrors the results of the quantitative analyses of the pre-post relative gains reported in Table 7.11, thereby affirming the superiority of the treatment groups relative to the control group. Of course, data obtained from qualitative, non-representative samples cannot be taken to be decisive when it comes to such comparisons, but as complementary information they strengthen the quantitative results.

Finally, the analysis of the interview data revealed interesting patterns and insights about the differences between students' learning experiences in the two modes of motivational treatments (see Tables 7.12 and 7.13).

Table 7.12: Emerging themes in the motivational focus group interviews and percentage of the number of times students mentioning them

Main themes	Sub-themes		N	Percentage
Effects of the motivational strategies			**34**	**100%**
	Positive attitudes towards the motivational learning situations		11	32.3%
	Awareness of the instrumental values of the target items		2	5.5%
	Self-confidence		2	5.5%
	Intended efforts		2	5.5%
	Learning outcomes	*Use*	*3*	*9%*
		Recall	*1*	*3%*
		Recognize	*2*	*6%*

	Subtotal:	6	17.6%
	Limitations of the motivational strategies applied	11	32.3%
Suggestions for improvement		**11**	**100%**
	Reducing the number of items	4	36.4%
	Providing more opportunities for using the target items	4	36.4%
	Using pictures or videos	2	18.2%
	Students setting their own learning goals without being coerced or suggested by the teacher	1	9%

Note. *N* = Numbers of times the patterns were mentioned; N in the sub-themes were mentioned by different students; *Use* = Students said they could use some items (or use them automatically in their essays or conversations outside the experiments); *Recall* = Students said they could remember the learned items very well; *Recognize* = Students said they knew the learned items well; *Self-confidence* = Students said after the treatment they felt more confident at learning vocabulary, or it was not difficult for them to learn the sequences; *Intended efforts* = Students said after the experiment they decided to make plans for their English learning in the future.

Table 7.13: Emerging themes in the visionary focus group interviews and percentage of the number of times students mentioning them

Main themes	Sub-themes	N	Percentage
Ability to visualize		**5**	**100%**
	Being able to visualize vividly	3	60%
	Being able to visualize as	1	20%

	instructed			
	Optimal time for visualization		1	20%
Factors facilitating visualization			**56**	**100%**
	Pictures		9	16%
	Prompted language contexts		6	10.7%
	Congruences between the situations (i.e. pictures or/and prompted language contexts) and the students' current concerns or past experiences	*Current concerns (goals, expectations, interests)*	*24*	*42.9*%
		Past experiences	*6*	*10.7*%
		Subtotal:	30	53.5%
	Peers		3	5.4%
	Students feeling relaxed		3	5.4%
	Importance of frequent reminders		2	3.6%
	Relaxing music		1	1.8%
	Students' willingness to visualize		1	1.8%
	Students' vocabulary knowledge		1	1.8%
Effects of the visionary techniques			**44**	**100%**
	Positive attitudes towards the		13	29.5%

	visionary learning situations			
	Feared possible selves having positive impact on learning motivation		6	13.6%
	Intended efforts		3	6.8%
	Better engagement		3	6.8%
	Improvement in generic visionary skills		3	6.8%
	Learning outcomes	*Use*	*5*	*11.4%*
		Recall	*3*	*6.8%*
		Subtotal:	8	18.2%
	Limitations of the visionary techniques applied		8	18.2%
Suggestions for improvement			**22**	**100%**
	Students selecting pictures or prompted language contexts by themselves		8	36.4%
	Combining target items and prompted language contexts in the same topic, scene or story		6	27.3%
	Using motiving images such as videos or movies to support visualization		4	18.2%
	Using games and competitions		3	13.6%

	Allowing more time for each visualizing episode	1	4.5%

Note. *Prompted language contexts* = The sentence contexts accompanied with the target items; *Engagement* = The students said the techniques helped them concentrate on learning better than before

The positive impact of the motivational conditions was explicitly recognised in the focus groups. For example, concerning the effects of motivational strategies, one of the most frequently mentioned themes was *positive attitudes towards the motivational learning situations*, as one student stated:

> I liked it when the class was divided into two groups to fight each other. In this way people could support each other. Those who knew the answers could have a chance to raise their voices, and those who didn't could listen to the sequences (Participant M12, motivational condition).

Similarly, as illustrated by the first quote below, the game-like character of the goal-setting procedure was also well received, while the overall success of the motivational condition is affirmed by the second quote:

> I did not feel pressured when setting goals and realizing them by playing games. I would have felt more stressed if the teacher had asked me to learn by heart a particular number of items. The games made me feel excited because I had the goals to direct my efforts toward achieving them (Participant M6, motivational condition).

> In the final session, I felt excited because I could remember most items, and I could answer my friend's questions quickly (Participant M15, motivational condition).

The visionary techniques were new to most students, and it was interesting to see whether the preparatory tasks could bring the learners sufficiently on board for the personalised imagery to exert its positive impact. The data from the focus group interviews indicate that this was indeed the case. As can be seen in Table 7.13, one of the most common themes emerging was *effects of the visionary techniques*, with a range of effects being mentioned (as sub-themes), such as

intended efforts or positive learning attitudes towards the visionary learning situations. This was illustrated in the following two quotes, with the second student stating that he even applied the visionary technique in question to other areas of his life successfully.

> The visualizing activities helped me create goals to direct myself to…. I visualized myself talking to people of high positions or travelling abroad. I wanted to speak English better. I have to make efforts to learn better to achieve the goal. And I set goals for myself (Participant V1, visionary condition).

> I found this technique very exciting because I used to learn vocabulary by writing them on paper which was boring. Learning with pictures like this is interesting.… This method is not only applicable to learning English but it can be helpful in directing my future. I created images or a movie in which I was the main character. I also tried to create happy images…. They were powerful. This helped me be more positive…. I saw myself in the future. I had clear directions, and it was motivating. At that time, I could overcome the most difficult moments (Participant V6, visionary condition).

Similarly, as a result of the visionary treatment, students even reported an improvement in generic visionary skills:

> After the experiment, I felt that the knowledge of all the sequences and my ability to visualize had improved. This program was successful to me (Participant V18, visionary condition).

In brief, the results attest to the fact that both motivational techniques appear effective in fostering the effectiveness of explicit teaching of the target formulaic sequences. Regarding suggestions for improvement, participants in both conditions made interesting suggestions concerning the presentation of vocabulary items and the use of visual aids. Participants in the visionary condition suggested using moving images (instead of the static images) such as those in videos or computer games, combining and connecting a series of images and their accompanying target items into a more extended story context (as opposed to learning and visualizing multiple images in separate short contexts), or let the participants themselves select the images and create their own contexts (rather than using preselected images and contexts). For

example, one participant suggested "using moving images… such as watching people travelling in Venice and visualizing ourselves travelling in Venice" (Participant V4, visionary condition). Similarly, the participants in the motivational condition suggested using pictures, movies, or activities allowing for the use of the target items in extended contexts. As one participant explained, "You should use sequences in pictures or larger contexts …you could make videos of funny conversations in which the sequences occur (Participant M5, motivational condition).

RQ2: Are there any differences between the impact of traditional motivational strategies and the visionary techniques utilising mental imagery, and why?

Results in Table 7.11 show that both the pre-post and the pre-delayed gains of the visionary condition were superior to those of the motivational condition. In fact, in the delayed posttest only the learning gains of the visionary group exceeded those of the control group. These findings will be discussed in detail below, but as a preliminary it should be noted that the lack of a difference between the learning gains of the motivational group and the control group in the delayed posttest did not mean that no sustained learning took place in the motivational condition, because – as was discussed in the section describing the research design –the control condition have been used as a successful vocabulary teaching approach (see also Table 7.10); rather these results offer consistent indication that the visionary treatment offered a more effective way of engaging with the target vocabulary items than the motivational condition.

The difference between the visionary and motivational treatments is also reflected by the tabulated scores of the journal data, attesting to the same pattern, and the overall tenor of the focus group participants' accounts was again consistent with these results (see the themes *effects of the motivational strategies* in the Table 7.12 and *effects of visionary techniques* in Table 7.12): while the generally positive appraisal of the motivational group was often qualified by 'buts', the visionary treatment tended to receive more uniform endorsement and more diverse and positive effects.

The following two quotes exemplify the students' reaction in the motivation group:

> I was interested in answering questions in the PowerPoint presentation because the activity motivated me to learn. I felt competitive when answering questions in games. I could answer some questions, so it was pretty interesting. After the experiment, I could

> remember almost all the sequences. But it was still difficult for me to use them in communication such as in writing and speaking. (Participant M3, motivational condition)
>
> I found the introduction of the sequences very helpful. I had always wanted to learn the sequences like these. I set goals and determined to be able to use them all..... But until now I can only use some of them. I haven't been able to use long sequences. (Participant M4, motivational condition)

Moreover, a third student mentioned that for him the same group competition element which was mostly appreciated by others (as illustrated in a previous quote) was problematic:

> Although I could learn the sequences with my classmates in the word card activities, I found it hard to catch up with many of them in the game activities when the groups competed with each other…. They were fast learners. They took part in the games and answered the questions quickly… But the sequences were new to me, so in the games I failed to gain any score for my group. I felt I lagged behind my friends. (Participant M9, motivational condition)

In contrast, the visionary treatment not only generated a motivating climate in the class but was also associated with more effective learning (see the sub-themes *learning outcomes* in Tables 7.12 and 7.13). It is noteworthy, for example, that in the following quote Participant V9 used the term 'automatically' twice, implying successful proceduralization of the lexical items:

> In the recent writing progress test, I wrote the sequences automatically. I didn't have to try hard to think about them but used them quite naturally…. I didn't have intention to use them before I could use them. Maybe because we learned them again and again, and I could automatically use some of these phrases when I had a chance.

Participant V8 directly linked visualization and language use to each other:

> When seeing the pictures relevant to my future career such as being at meetings, I found it easy to visualize. Looking at these pictures, I immediately visualized being a manager or someone like that. I could easily visualize what and how I was talking… And I could speak the sentences easily. I could visualize quite a lot of situations like these.

Participant V14's account is notable not only because it directly related learning to visualisation, but also because of the detailed justification of why she found visualisation appealing:

> Using pictures of familiar situations could help me memorize vocabulary better because they were linked to something I had already known…. I could also visualize my future self-images because I wanted to be like the people in the pictures. I wanted to own that company. I wanted to be like the leader who stood out, chairing the meeting. And I also wanted to be in luxurious places such as the party. I could memorize these situations and images because they were what I wanted... These images gave me strong feelings.

Finally, Participant V38's account of explaining the motivational capacity of visualization is so clear and to the point that if the interviews had not been conducted, it would be difficult to know whether some excessively leading questions or a too explicit introduction was involved in the interview:

> When visualizing my future self-image, it was like a magnet that attracted me to that direction, giving me motivation to move forward to that direction. If I had not visualized, there would have been no goal to direct myself. I think this can also propel me to succeed in learning in the future.

7.4 Discussions

In answer to the first research question, the findings indicated that the application of motivational techniques promoted explicit vocabulary teaching successfully in terms of enhancing the acquisition of formulaic sequences. The significant differences in the learning gains between the experimental and control groups were further supported by qualitative data obtained from focus group interviews and from the research journal. What makes this increase particularly noteworthy is that it represents a positive improvement over and above a highly effective vocabulary teaching practice that was adopted for the control group to serve as a baseline (as also evidenced in the first study presented in Chapter 6 of this thesis). That is, the motivational intervention was shown to have the capacity to enhance the gains achieved by a successful cognitive approach to formulaic language acquisition.

The effectiveness of the motivational treatment observed in the current investigation is consistent with the findings of the past studies that provided empirical confirmation of the

positive impact of motivational strategies on student motivation and learning (most notably Alrabai, 2016; Guilloteaux & Dörnyei, 2008; Moskovsky et al., 2013; Sugita McEown & Takeuchi, 2014), thereby further verifying this intuitively convincing but empirically under-researched link. Visionary techniques have also been reported in the literature to be effective in enhancing language learning motivation (see Dörnyei & Kubanyiova, 2014; Lamb, 2017), but previous intervention programmes did not tend to employ pictures as part of their toolkit to evoke mental imagery. Such visual aids were used because they provided a way of guiding the students' visualisation according to the specific target items, and the positive reception of the use of colour pictures by the learners indicated the feasibility of the method.

The second research question concerned the comparison of two types of motivational intervention, the first employing traditionally established motivational strategies (discussed in Dörnyei, 2001), the second utilising visionary techniques that have emerged from research on the L2 motivational self system over the past decade (see e.g., Dörnyei, 2009; Dörnyei & Kubanyiova, 2014). This comparison produced intriguing results in two respects: First, while it was reassuring to see that both motivation-specific treatment conditions delivered significant increase in motivated learning and subsequent achievement, a marked difference between their effectiveness in favour of the visionary condition was found. Furthermore, not only did visionary strategies lead to quantitatively superior vocabulary learning, as evidenced by the higher pre-posttest relative gains, but they also appeared to result in better retention of target lexical items, as attested to by the pre-delayed relative gains. Qualitative data also complement the test's results; compared to the motivational strategies, the visionary techniques had a higher degree of perceived classroom success recorded in the research journal and a wider range of positive effects as well as fewer limitations reported in the focus group interviews. In other words, visionary strategies delivered all-round better outcomes, and this warrants a more detailed look at what features of these techniques generated the benefits.

Visionary versus traditional motivational strategies

Why did visionary strategies work better than the other, well-established motivational strategies that were used in the motivational condition? There could be at least three main components to a full answer: (a) a wider appeal, (b) deeper learner engagement and (c) cognitive processing advantages.

Wider appeal. The data suggest that the visionary techniques had a wider appeal than some of the motivational strategies applied in the motivation group. As previously mentioned and also indicated in Tables 7.12 and 7.13, the treatment with visionary techniques integrated into the explicit teaching of formulaic sequences tended to have more positive effects than with the motivational strategies. We have already seen an interview extract which indicated that even the generally popular group competition element applied in the motivational condition did not suit every participant, and indeed, while game/quiz-like tasks are likely to appeal to those who are at least reasonably good at answering questions promptly and thereby scoring points for their teams, not everybody will fall into this category, as also explained by Participant M2 in the motivational condition:

> In the PowerPoint games, maybe some friends already knew some sequences because they were hard-working in high school. But I didn't learn much English in high school…. In the games, while others could answer the questions, I couldn't…I didn't want to learn. I let them answer, and I didn't care. My English ability got worse, and my friends' English abilities got better.

In the focus group interviews, other participants also expressed doubts about the goal-setting component due to the pressure of realizing the goals or the feeling of being forced to follow the goal suggested by the teacher in class:

> I didn't like to set goals in class. It was not quite relaxing because I felt pressured to complete the goals. I liked it to be more comfortable. (Participant M17, motivational condition)

> The goal in each learning session was not my goal. It was the goal you introduced and I had to follow. I felt I was forced to set the goal for each learning session. Learning in each session was like a compulsory task that I had to fulfil. I didn't enjoy learning at all….I didn't understand why I had to learn these sequences…I didn't want to learn. It was boring for me. (Participant M13, motivational condition)

Even fun activities such as drawing on colourful sticky notes or drumming on the table (let alone jumping up and down) likely appeal to some students more than some others. That is, while the overall sum of the treatment in the motivational condition had positive effects, as indicated in Table 7.12, see also Appendix I for the quotes, (e.g. making students more comfortable,

increasing their self-confidence and their interest, promoting effort attributions and making them aware of the instrumental values of the target items), not all the constituent tasks were uniform in this respect.

In contrast, and admittedly somewhat unexpectedly, the visionary tasks were reported to feel safer and more commonly engaging by our participants. This may have to do with the versatile nature of visualisation, as mental images can be related to the students' ambitions, expectations, interests or even their concerns and problems. For example, some of the following participants in the focus group interviews said that they liked visualizing their future professional self-images because at that time their career goals were their priorities, and English (as an international language) was important:

> Perhaps when I saw [a picture of] a person speaking to the audience in an event…And I also wanted to be as good as that person. And I visualized that in the future I would also stand in front of the audience speaking… My biggest goal now is my professional life …What will I have to do at work after graduation… I prefer these future situations to those with friends and family. The audience also looked at me admiringly like I admired the person in the event. (Participant V4, visionary condition)

> For me I think the image of myself talking with my colleagues in the office are the most memorable because they are related to my own future… It is certain that in my job, I will communicate with colleagues in my country and in other countries. I will have to use English a lot. I think if in the future I can use English like I imagined I could, it would be very useful in my job. (Participant V19, visionary condition)

Some others expressed their preferences for visualizing communicating with family members or international friends because these images made them feel happy and positive. One student even stated the age of his future self-image:

> The image I remember most was the one in which I was talking to my wife in English. My to-be wife could also speak English...We were travelling together at that time. I could speak English fluently with my wife. We could speak with other people in English. At that time, I could be in my 40s. (Participant V31, visionary condition)

> I like visualizing the situations with friends and family because I contacted with my friends a lot every day... The phrases and sentences about friends and family were easy to use and remember. (Participant V23, visionary condition)
>
> I like both images of friends and family…Visualizing images of friends and family leads to positive and happy images. I often remember optimistic images better than pessimistic ones. (Participant V38, visionary condition)

Some students were confident about their abilities to visualize, stating that they could visualize a wide range of future scenarios, including both personal and professional situations:

> I remember several pictures, for example, a picture at a party. I visualized being at a party… If my friends and I would be happy like that, it would be interesting…When I saw a picture of a man thinking about a lover…. I felt sad when thinking that maybe in the future my lover would also say that. Apart from job-related situations, I could also visualize situations being with my friends and family members. (Participant V1, visionary condition)
>
> I could visualize a lot of situations related to any topics. For example at what age I would take my parents to go on holidays abroad…At a party when I would ask my friends about their jobs…I could visualize anything. (Participant V22, visionary condition)

Yet some other learners related the visualized self-images to past experiences; one participant, for example, stated that recalling memories helped him during the visualisation process, and he found it more challenging to work with scenes that could not be related to such a concrete past dimension:

> I could visualize the situations that were related to my past and experiences… Those that had nothing to do with my past were rather difficult for me to visualize. (Participant V9, visionary condition)

Participant V17's account regarding the importance of past experiences is noteworthy since he recalled a specific target formulaic sequence:

> I remembered the past to I remembered the past to visualize some situations. For example in the past I used to work with my friends, so I could visualize the sequence 'in conjunction with'.

The data from the focus groups interviews also indicated that the number of times the limitations mentioned in relation to the visionary techniques accounted for 18.2% of all the mentionings regarding the effects of the techniques; while those of the motivational strategies made up 32.3% of all the mentionings in relation to the effects of the strategies. In sum, it transpires from this study that if students see the point and if they are given sufficient preparation, they tend to enjoy using their creative imagination.

Deeper learner engagement: In the present study, visionary tasks appeared to display the capacity to engage learners more deeply than the other motivational strategies applied. According to educational psychological theories of student engagement, the notion of engagement is best perceived as a multidimensional construct, comprising a behavioural, a cognitive and an emotional dimension. As Fredricks, Blumenfeld and Paris (2004) describe, behavioural engagement concerns active *participation in academic tasks*, emotional engagement refers to students' *affective reactions* in the classroom (e.g. happiness or anxiety), and cognitive engagement is usually defined in terms of *psychological investment* in one's studies as well as *strategic learning*, especially through using 'deep strategies' that exert more mental effort and create more connection among ideas than surface-level strategy use. The data (see also Tables 7.12 and 7.13) suggest that it is particularly the latter two components – emotional and cognitive engagement – where visionary techniques have an advantage.

The emotional and cognitive engagement is manifest in the data from the focus group interviews of the visionary condition. For example, one participant not only recalled the imagined situation in which his future self met a friend in a pub and they both conversed in English using a prompted language context target formulaic sequence, but also remembered his feeling induced by the imagined scenario. He described the feeling as sad, stating that it was automatic. He tended to be aware that this feeling caused by the imagined situation was true, although the imagined situation was not the actual fact.

> The situation I used the phrase 'from time to time'. I met a friend at the pub and he talked to me in English. I spoke the sentence 'From time to time, I still remember her'.... This situation is special….Because I had some feeling in that situation… If I had imagined talking with my colleague, there would have been nothing special about that. When I talked to my friend, I felt sad. That feeling automatically occurred. I could not explain. (Participant V38)

Another participant said her engagement in the professional images was attributed to the fact that at that time she was priotizing her career preparation.

> I could remember more images at work. Perhaps from now till I am 30, I will focus on work… I will prioritize studies and work….I will think of work more often. So when I saw these images, it seemed that I paid more attention to them ….I remembered more professional images. (Participant V14)

Regarding cognitive engagement, personalising and mentally enacting the use of target lexical items would unquestionably count as a 'deep strategy', leading to what Noel Entwistle has famously called 'deep learning' (e.g., Entwistle, 2013). One participant also explicitly stated that he was engaged in learning during the treatment because he used multiple senses to process the pictures:

> When looking at the pictures, I used multiple senses, so I concentrated on learning. Using multiple senses helped memorize better… This visionary technique is potential, even effective… The pictures made me feel more interested in learning vocabulary…. I am a lazy student. This method was interesting. And I wanted to study vocabulary more than I did in the past. I have learned quite a lot of sequences. (Participant V9)

Positive emotions are known to be correlated with motivated learning behaviours (MacIntyre & Vincze, 2017), and a key characteristic of visualisation is that it can induce intense feelings (e.g. as previously mentioned in the dataset a participant described strong emotionality of meeting an old friend in a bar during a pictorially aided visualisation exercise). Mental imagery can also serve as a visual aid to prepare even for encountering obstacles and setbacks, thereby easing worries and giving students hope, as stated by the following participants:

> I am an imaginative person. I usually visualize many things every day… I think visualizing in the classroom can reduce the pressure of getting grades. (Participant V2)

> I think the potential benefits of visualization are not limited to learning English …. It helped me when I was faced with problems…. When I thought about my future dream, I was very excited. (Participant V18)

Participant V18 also added that he considered English as a communicative tool in the future rather than a subject to learn, stating that: "I don't think I am learning English as a subject at school, but as a tool to use it in the future, gradually turning it into my own language rather than considering it as an academic skill". Given the prevailing English-as-a-subject perception at school in Vietnam whereby the grammar-translation method has been a dominating teaching approach, partly contributing to demotivation (see Section 5.2.3), this English-as-a-communicative-tool perception was noteworthy in terms of sustaining learning motivation. It could be the case that this perception is related to the activities of visualizing his future self-images in multiple communicative situations, with the support of prompted language contexts and visual aids.

Finally, the unease deriving from imagining feared scenarios might also supply extra motivation to increase the intensity of task engagement in order to avoid such undesirable outcomes. Further, one of the visionary techniques used in the treatment for the visionary condition concerned the utilization of the motivational force of feared possible self (see Dörnyei, 2014; Oyserman & Markus, 1990). In the experimental session, the students listened to a story of a newly graduate who applied for a company he desired to work for. He was qualified and passed all other rounds in the selection process but failed in the interview round due to his poor spoken English skills. Such activity tended to invoke affective reactions among the students in the visionary condition during the treatment, as mentioned by some students in the focus group interviews:

> When I heard the story, I didn't think about much about him. I thought about myself…. I thought that I had to be more hard-working, making more efforts…. If I did not improve my English, I would not be able to work for such a company…..in the future I could fail like him….I felt worried about my own failing scenario instead of thinking about his stuff. (Participant V35)

> I also felt motivated. If I work in a professional working environment and I am a professional, I will meet international colleagues and friends coming from all over the world. And so I feel motivated to learn how to speak English fluently. But at the same time I feel worried…a bit fearful…because my English is not good now. (Participant V14)

Cognitive processing advantages. The third area where visionary strategies exceed more traditional motivational strategies is related to cognitive engagement discussed briefly above, but because it draws on Paivio's dual coding theory (e.g. Paivio, 2010), it makes sense to address it separately. The central tenet of Paivio's theory is that the mental representation and processing of lexemes are multimodal (verbal and visual). The relevance of this to the present study is that using mental imagery specifically focusing on verbal targets (i.e. lexis) can create a visual code (in addition to the verbal one) to represent the target item, and external nonverbal stimuli such as pictures can activate and thus strengthen both (i.e. verbal and visual) mental representations. In the visionary procedure of the present study, the participants dealt with the task of learning formulaic sequences within sentence contexts while they were also accompanied by pictures that created visual contexts, and thus the combination of verbal and nonverbal input provided an optimal environment for dual coding to run its full course. In this sense, visionary strategies directly affected the cognitive processes underlying vocabulary acquisition. The cognitive processing advantage is also reflected in the account of one participant in the focus group interviews:

> I liked it when you provided pictures because I could remember the sequences better in the contexts. …For example, the phrase 'in common' in the context of the beach…. A group of friends at the beach …. The sequence 'in common' used with the picture helped me visualize and remember better. When I recall the picture, I can remember the sequence …. I could feel myself at the beach. If I was at the beach, I felt relaxed. (Participant V31)

7.5 Conclusions and limitations

The findings of the present study are twofold. First, the converging quantitative and qualitative results have confirmed that motivational engagement with the process of learning L2 vocabulary – in this case, formulaic sequences – can produce significant learning gains, even in our situation where the control group already represented a successful instructional condition. These results therefore establish a valuable link between heightened motivational states and improved cognitive intake, thereby verifying Laufer and Hulstijn's Involvement Load Hypothesis regarding the benefit of increased engagement in learning. Furthermore, the establishment of direct motivational impact on the acquisition of lexis is consistent with Ushioda's (2016) call for

examining language learning motivation ‘through a small lens’ and offers support to this research direction.

The second important finding of our study concerns the remarkable performance of visionary strategies in enhancing the study of lexis. To put this effectiveness in context, a mini-hierarchy can be built up: the control group represented successful explicit vocabulary teaching, which in turn was improved by adding traditional motivational strategies to create a facilitative environment, which was then further improved on by the use of visionary techniques both in terms of quantity (i.e. more intake) and retention (more sustained mastery, as shown by the delayed posttest). It could be argued that this all-round advantage can be attributed to at least three reasons: (a) the wider (or at least more even) appeal of visualisation tasks in our sample, (b) a deeper level of affective and cognitive engagement, and (c) the capacity of mental imagery and visual aids to create an optimal environment for the dual coding of lexical information.

Still, there are a number of limitations regarding the present study. First, the context where the study was carried out was restricted to an EFL setting with participants being low-proficiency non-English-major first year students; the experimental sessions were embedded into a regular English-preparation course at a university in Vietnam. Thus, the findings should be viewed in terms of this context. Second, the experiment involved the teaching of 56 separate items of formulaic sequences in 56 different short contexts (e.g. sentence contexts), with or without pictorial aids. Although this was to guarantee that the focus was on the explicit learning of the target items, given individual differences in classroom settings (cf. Dörnyei, 2005) learning large amounts of items separately in short and restricted contexts (i.e. sentence contexts) can be a cognitive burden for some students (but not others). Third, the learning activities were a controlled type, with an aim to establish the knowledge of form and meaning of the target formulaic sequences in the low-proficiency students; thus, there is a restriction for creativity and language use among the students. Fourth, the visionary techniques only utilized pictures as visual aids for visualization activities; other means of visualizing support such as movies, videos or virtual reality devices with sounds may facilitate visualization better than pictures.

Chapter 8: Conclusion

The present thesis involved two quasi-experimental studies, exploring two key aspects of SLA: vocabulary and motivation. The first study aimed to examine the optimal combination of explicit and incidental vocabulary learning in a classroom setting, forming the cognitive baseline for the second study. The purpose of the second study was to investigate whether motivation can facililate cognition in terms of fostering the learning of receptive knowledge of form and meaning of the target formulaic sequences, using the cognitive baseline established in the first study as a control condition. Besides applying statistical procedures in both studies, the second study also drew on qualitative data to complement the quantitative test results. The two studies were carried out with independent samples, the first involving 60 first-year university participants and the second 150 students in the same learning environment but a year later. These technology-major participants were from low intermediate to intermediate levels of English proficiency. Each study was conducted over four-weekly-treatment sessions integrated into an existing language program, with three-week delayed posttests.The target formulaic sequences used in both studies were identical: 56 formulaic sequences, selected from 280 formulaic items occuring in both the coursebook materials and the Phrase List by Martinez and Schmitt (2012). The dependent measures were multiple-choice test scores developed with reference to the principles of designing multiple-choice test items proposed by Nagy et al. (1987). This concluding chapter summarizes the findings, discussing the implications, and suggesting directions for future research.

8.1 Summaries of findings

The results from the first study show that the principled explicit instruction integrated into the language program in addition to the incidental exposures to the input was superior to the traditional coursebook-based approaches in terms of increasing the learning of receptive knowledge of form and meaning of target formulaic sequences. This is consistent with the argument that although explicit learning can complement incidental learning to increase language acquisition, the optimal combination of the two learning mechansims is, amongst other factors, contingent on how they are combined (cf. Dörnyei, 2009b). Furthermore, the learning gains from explicit instruction with context sentences were not significantly different from those without context. This is in line with the majority of the previous findings regarding the learning

of single words, indicating the characteristics and nature of the formulaic sequences used in this thesis may bear resemblances to those of individual words.

The results from the second study revealed that deliberate and systematic integration of motivational strategies and mental imagery (or visionary techniques) can facilitate the successful principled approach to explicit teaching of the target formulaic sequences (i.e. the first study) in terms of improving the learning gains of receptive knowledge of form and meaning of the target formulaic sequences. Especially visionary techniques – which are derived from the vision construct concerning the L2 motivational system (Dörnyei, 2005, 2009a) – were effective and were superior to motivational strategies derived from traditional motivational concepts. This confirms the argument that motivation can facilitate cognition (Pintrich, 2003).

8.2 Implications

The aim of ISLA is to investigate possible methods and approaches to teaching and learning, both classroom and independent learning, in order to foster the development of the target language (see Section 2.1). The two quasi-experimental studies presented in this thesis have attempted to address this through methods to enhance cognitive, behavioural and emotional engagement in learning in an EFL classroom setting, developing the receptive knowledge of form and meaning of the target formulaic sequences. Implications for research and pedagogy can be drawn from the findings.

8.2.1 Implications for research

As previously mentioned, the findings of the first study indicated the importance of a systematic approach in integrating the component of explicit vocabulary instruction into an EFL programme, which aimed to prepare English skills for global communication. The second study was the follow-up of the first, adding motivational elements to enhance the successful explicit teaching approach of the first. The implications for future research presented below emphasize on the findings of the second study because they were novel in terms of utilizing motivational forces to increase the effectiveness of a cognitive-based learning approach in an instructed setting.

The findings of the second study show that motivational influences could impact the explicit learning of the target lexis. In other words, motivational forces appear to be able to

mediate cognitive methods in fostering the development and acquisition of specific linguistic features. Thus, motivational influences in ISLA should play an important part in L2 research.

In order to carry out research that examines the impact of motivational influences on facilitating cognitive learning methods, a number of considerations are noteworthy. First, it is important motivational activities or tasks be designed based on established motivational theories or constructs in psychology, neuroscience and/or L2 research. This is to increase the possibility that the motivational forces are sufficiently strong to be capable of motivating learning actions. As mentioned in the previous chapters, the motivational tasks designed for the motivational condition of the second study of this thesis were based on Dörnyei's (2001) taxonomy of motivational strategies, which involve (but not limited to) a range of major psychological theories such as self-determination theory (e.g. Deci & Ryan, 2000), goal-setting theory (e.g. Locke & Latham, 1990, 2002), achievement goal theory (e.g. Eccles & Wigfield, 2002; Elliott & Dweck, 1988), expectancy-value theory (e.g. Eccles, 2009), attribution theory (e.g. Weiner, 1985), or self-efficacy theory (e.g. Bandura, 1997) (see Section 4.1.1). The visionary techniques developed for the visionary condition were based on the vision construct (Dörnyei, 2014; Dörnyei & Kubanyiova, 2014), which is related to the L2 motivational self system, involving future L2 self-images (ideal L2 self and ought-to L2 self). These self concepts in L2 motivation were also partly based on possible self theory by Markus and Nurius (1986) and self-discrepancy theory by Higgins (1987) in the field of psychology.

Second, motivational activities need to be combined with cognitive learning activities of target specific linguistic features and orchestrated in ways that facilitate the effectiveness of these cognitive learning activities. In this way, motivational influences serve as mediating tools for cognitive methods. This is because the purpose of motivational activities/tasks is to motivate learners to learn, and the direct result of the activities/tasks (if successful) is motivated learning behaviours (Csizér & Dörnyei, 2005), which are manifest in improved behavioural, cognitive and/or emotional engagement (cf. Appleton et al., 2008) in other learning activities. This engagement can in turn lead to better learning results. For this reason, before the treatments researchers need to decide on the cognitive learning activities/tasks that can be combined with the motivational activities/tasks. In the second study of this thesis, the cognitive learning activities were the explicit learning of the target formulaic sequences through a number of

methods such as PowerPoint based games, paper and computer-based vocabulary exercises or word cards; motivational activities/tasks were embedded into these activities to increase engagement in learning.

Third, the selection of motivational strategies or techniques and the design of motivational activities/tasks should be based on three critiera - feasibility, appropriateness and student interests - in relation to the target learners and learning contexts (see Section 7.2.3). In this way, main factors concerning learners and learning contexts should be looked at so as to select motivational techniques and design motivational activities in ways that are in accordance with these criteria. There are a range of learner-related factors, such as university majors, language proficiency levels, general needs and interests, ages and genders or year at the university (e.g. first-year or second-year students at university); the main learning-situation factors include specific language features, cognitive strategies teaching approaches (i.e. teaching methods concerning explicit or implicit learning), teachers, class sizes, coursebooks and syllabi, or school facilities and conditions. In other words, upon selecting motivational strategies and designing motivational tasks, researchers need to examine the target learners and learning contexts and ask and answer the following questions:

- Are the motivational activities/tasks feasible?
- Are the motivational activities/tasks appropriate?
- Are the target students interested in taking part in the motivational activities/tasks?

Finally, if motivational activities are designed based on the vision construct (Dörnyei, 2014; Dörnyei & Kubanyiova, 2014), which involves mental imagery and/or the use of visual aids to support visualization, the two following additional conditions are necessary:

- The target specific linguistic features are appropriately contextualized; that is, they are embedded in the contexts which are diverse and simple (i.e. containing simple language use), but appropriate and comprehensible for target students (see Section 6.2.2 for selecting and simplifying the contexts used in the studies of this thesis); the target language features and their accompanying contexts serve as prompted language contexts for the visualizations of communicative situations.
- There should be visual aids, such as pictures, videos or virtual reality devices to support the contextual visualizations. The selection of the visual aids should be based

on a number of criteria (see Section 7.2.3 for these criteria) so that they can effectively support visualizations.

8.2.2 Implications for pedagogy

As the studies in this thesis were quasi-experimental designs, the findings are particularly relevant to pedagogy. Given that one of the schools and teachers' goals is best to develop a specific language feature for their learners during an English programme, the following is a six-step procedure to realize that goal:

1. Understanding the learners and learning contexts

The knowledge of the learners and learning contexts is critical to decisions on the use of motivational techniques to mediate cognitive learning strategies. As mentioned above, learner-related factors such as university majors, general needs and interests, language proficiency levels, ages and genders, or years at the university (e.g. first-year or third-year students at university) should be taken into account because these factors may have an impact on the success or the lack of success of motivational treatments. For example, secondary school students may not be as interested in professional contexts and images as university students. Similarly, first-year students may be more enthusiastic and interested in setting learning goals than students in their last years at university who tend to be occupied with their dissertations. Low proficiency learners tend to have difficulties comprehending texts containing word families beyond their levels. In addition, learning-situation contexts (such as target language features and skills, teachers, cognitive teaching strategies, class sizes, coursebooks and syllabi, or school facilities and conditions) should be looked at when it comes to selecting and designing motivational tasks and materials for teaching and learning. For example, for large class sizes it appears more difficult to organize group competition games while keeping the syllabus covered than for small class sizes.

2. Deciding on the specific language features or skills to develop for students

There are large amounts of language features and skills such as vocabulary, grammar, pronunciation, reading, or listening; within time constraints in classroom, it is important schools and teachers select what to teach so as to achieve optimal learning. Selected language features or skills to teach should be useful for students. For example, it is more relevant to teach vocabulary

of high frequency for low proficiency learners because there appear to be more chances for them to re-encounter these high frequency items in language use than low frequency ones; they tend (to prefer) to get access to the learning materials they comprehend. The target formulaic sequences used in the two studies of the present thesis were taken from the Martinez and Schmitt's (2012) Phrase List - a frequency list of formulaic sequences appropriate for students at a receptive level. Furthermore, these items also occurred in the coursebook materials that they learned alongside with the experiments (the first and second studies of this thesis). This was possible thanks to the corpus analysis procedure carried out to select target items for teaching (see Section 6.2.2). Multiple encounters of the target lexical items increased the chances for these items to be acquired. The target language features can be selected in a way similar to that carried out in the present thesis.

3. Planning a systematic approach to cognitive teaching strategies

A principled approach to cognitive learning of the target specific language feature should be carefully planned prior to the selection and design of motivational tasks/activities. In this thesis, an explicit teaching component was used along with the traditional coursebook-based instruction (which included both explicit and incidental learning approaches). The combination of explicit and incidental encounters could increase the chances that the items can be acquired (Schmitt, 2008). In the present studies, the students were explicitly exposed to the target formulaic sequences at least eight times in addition to more-than-once incidental encounters. The teaching activities varied, including PowerPoint based games, paper and computer-based vocabulary exercises, or word cards; motivational activities/tasks were embedded into these activities to increase the engagement in learning.The explicit teaching procedure spreaded in weekly spaced intervals, over four weeks, and the incidental encounters occurred at anytime during the program. Thus, an approach to cognitive teaching of specific linguistic items should answer such questions as how many target items to teach over a programme, how many times for the items to be explicitly and incidentally encountered, how to spread the encounters, or how to include context in an explicit teaching procedure.

4. Selecting motivational strategies and techniques and designing motivational tasks/activities

The selection of motivational strategies and techniques and the design of motivational activities or tasks could be done following the guidelines elaborated in Section 8.2.1. When designing and

developing motivational tasks/activities it is important to keep in mind that they are meant to be integrated into cognitive learning activities to foster the behavioural, cognitive and emotional engagement in the latter. The combination depends on a variety of learners and learning context factors (as previously mentioned).

5. Applying the integrated motivational and cognitive learning strategies and techniques and measuring students' learning progress

To achieve optimal learning, the applications of these techniques should be flexible and include both motivational strategies and visionary techniques in the same teaching sessions. This is because it was revealed in the second study that both motivational strategies and mental imagery could help explicit teaching in increasing the vocabulary learning efficiency. Further, in the focus group interviews, some students in the visionary condition suggested using games and competitions - a traditional motivational method, while some students in the motivational condition suggested using pictures – which was used in the visionary techniques. However, given the findings of the second study indicated that mental imagery could mediate cognition better than the traditional motivational strategies, developing and applying the former should be the priority in a similar context.

6. Drawing lessons for further improvement

Despite meticulous plans, preparations and implementations, limitations are bound to occur, contingent on the situational contexts, leaving room for further improvement. Thus, schools and teachers can conduct investigations using such instruments as survey questionnaires, focus group interviews or observation schemes to seek feedback and reflections on the motivational and cognitive tasks or activities applied. Once the feedback is collected, adjustments to the selection of the motivational and cognitive strategies and techniques, and the development of relevant activities or tasks can be made so that more effective treatments can be provided in the future.

8.3 Limitations and directions for future research

The findings of this thesis have begun to shed some light on the role of motivation on promoting cognition in ISLA. Taken together, the first chapters that offer literature background are relevant to the thesis purposes presented in Chapter 6 and Chapter 7. It should be noted, though, that in hindsight the details concerning analyses of attentional mechanisms might have been too detailed

for the present purpose even though attention is an important concept in cognitive science. This is because the initial concern of the thesis involved cognitive-related processes, but over the years the research programme changed to also include the examination of the potential role motivational elements in learning. Therefore, Chapter 4 started to focus on L2 motivation literature. Yet, I included the discussion of the attentional mechanisms in Chapter 2 because it adds to the overall scholarship of the work.

There are several limitations regarding the two studies presented in this thesis. First, the study was carried out in an EFL setting with participants being low-proficiency non-English major first year students; the experimental sessions were embedded into a regular English-preparation course at a private university in Vietnam. Most participants (roughly 80%) were male, and their L1 was Vietnamese. Therefore, any generalization that may be inferred from the findings of the studies is limited to this context. These studies can be replicated in other contexts. For example, future samples can be at higher proficicency levels, at a state or public university, younger or older in age, more balanced in gender, in ESL contexts, or of non-Asian origin. Second, the tests used in the studies only measured the receptive knowledge of form and meaning of the formulaic sequences because the participants were at a low-proficiency level. Future research should consider tests that measure other aspects of knowledge of formulaic sequences.

Third, the cognitive learning activities employed in the two studies were an explicit learning approach, and they were a controlled type, with an aim to establish the knowledge of form and meaning of the target formulaic sequences in the low-proficiency students; thus, there is a restriction for creativity and language use among the students. Further research may thus consider whether motivational strategies or techniques would also facilitate meaning-focused or communicative learning activities in similar or different learners and learning contexts. Fourth, the motivational treatments of the second study involved the teaching of 56 separate items of formulaic sequences in 56 different short contexts (i.e. sentence contexts), with or without pictorial aids. Although this was to guarantee that the focus was on the explicit learning of the target items, given individual differences in classroom settings (cf. Dörnyei, 2005) learning large amounts of items separately in short and restricted contexts can be a cognitive burden for some

students (but not others). Future research can reduce the number of target items and combine them into more extended contexts.

In addition, the visionary techniques of the second study only utilized pictures as visual aids for visualization activities; other means of visualizing support such as movies, videos or virtual reality devices with sounds may facilitate visualization better than pictures. Finally, besides mediating the explicit vocabulary learning, it will be interesting to know whether motivational strategies and mental imagery can facilitate the learning of other specific language features or skills such as grammar, pronunciation, listening or reading comprehension.

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Appendices

Appendix A: Target and non-target formulaic sequences and their frequency of occurrence in the coursebook

	Frequency of incidental exposure in coursebook input	Frequency of explicit exposure in exercises

1	account for	1	0
2	all sorts of	1	0
3	as for	1	0
4	catch up	1	0
5	common sense	1	1
6	consist of	1	0
7	consistent with	1	0
8	from time to time	1	0
9	in advance	1	0
10	in common	1	0
11	in conjunction with	1	0
12	in particular	1	0
13	in spite of	1	0
14	in the first place	1	0
15	in time	1	3
16	large scale	1	0
17	look forward to	1	0
18	no wonder	1	0
19	nothing but	1	0
20	on average	1	0
21	take for granted	1	0
22	take into account	1	0
23	that sort of thing	1	0
24	the other day	1	0
25	what if	1	0
26	as if	2	0
27	at once	2	0
28	even though	2	3
29	happen to	2	0
30	in a way	2	0
31	in return	2	0
32	key to	2	0
33	no longer	2	0
34	on the other hand	2	2
35	point of view	2	0
36	provided that	2	1
37	rely on	2	0
38	rid of	2	0
39	short of	2	0
40	turn up	2	0
41	appeal to	3	0
42	go ahead	3	0
43	in case	3	0
44	in contrast	3	0

45	limited to	3	0
46	put up with	3	2
47	when it comes to	3	0
48	after all	4	0
49	in need	4	0
50	it takes	4	0
51	tend to	4	0
52	long term	5	2
53	make sense	5	3
54	manage to	5	0
55	a great deal	6	0
56	bring about	6	3
57	fail to	6	0
58	followed by	6	0
59	supposed to	6	0
60	take up	6	3
61	as a result	7	4
62	carry out	7	4
63	come up with	7	5
64	in other words	7	0
65	those who	7	0
66	about to	8	0
67	likely to	8	0
68	rather than	8	0
69	lead to	9	0

Appendix B: List of 280 formulaic sequences and their frequency of occurrence in the coursebook

No.		Frequency	Formulaic sequences
1	39		no matter
2	39		such as
3	30		think about
4	29		kind of

5	27	work on
6	24	i mean
7	23	what about
8	22	at work
9	22	give up
10	21	instead of
11	21	to me
12	20	based on
13	19	good at
14	18	at least
15	18	no one
16	18	of course
17	17	such a
18	16	get to
19	16	in order to
20	16	make up
21	15	focus on
22	14	all over
23	14	too much
24	13	made up
25	13	so that
26	12	carry out
27	12	take on
28	12	they say
29	11	as a result
30	11	come up with
31	11	deal with
32	11	each other
33	11	look for
34	10	as well
35	10	find out
36	10	get out
37	9	about to
38	9	bring about
39	9	feel like
40	9	happened to
41	9	in fact
42	9	lots of
43	9	take up
44	9	you see
45	8	a number of
46	8	a single
47	8	all the time
48	8	at first

49	8	got to
50	8	likely to
51	8	makes sense
52	8	rather than
53	8	short-term
54	7	at all
55	7	believe in
56	7	by the time
57	7	heard of
58	7	in other words
59	7	long-term
60	7	those who
61	7	to death
62	7	to go
63	6	as long as
64	6	as well as
65	6	carry-on
66	6	fail to
67	6	followed by
68	6	go for
69	6	last night
70	6	make sure
71	6	more and more
72	6	pick up
73	6	supposed to
74	6	think so
75	5	a couple of
76	5	along with
77	5	even though
78	5	in addition
79	5	in mind
80	5	in the way
81	5	manage to
82	5	point of view
83	5	put up with
84	5	set up
85	5	something about
86	4	a variety of
87	4	after all
88	4	at once
89	4	at the time
90	4	can tell
91	4	come across
92	4	ever since

93	4	first of all
94	4	found out
95	4	full-time
96	4	get back
97	4	getting to
98	4	in need
99	4	in the end
100	4	in time
101	4	it takes
102	4	key to
103	4	not only
104	4	on the other hand
105	4	result in
106	4	set off
107	4	that sort of thing
108	4	tend to
109	4	turn up
110	4	work out
111	3	a lot
112	3	at risk
113	3	came to
114	3	care for
115	3	choose to
116	3	due to
117	3	faced with
118	3	for instance
119	3	get away
120	3	get up
121	3	getting into
122	3	go ahead
123	3	go on
124	3	go out
125	3	goes into
126	3	going back to
127	3	in case
128	3	keep up
129	3	lead to
130	3	limited to
131	3	or two
132	3	other than
133	3	part-time
134	3	point out
135	3	provided that
136	3	right now

137	3	so far
138	3	some kind of
139	3	take care of
140	3	taking care
141	3	things like that
142	3	to do with
143	3	took off
144	3	turn out
145	3	up to
146	3	when it comes to
147	3	would you
148	2	account for
149	2	all right
150	2	as if
151	2	as usual
152	2	back up
153	2	came back to
154	2	come on
155	2	common sense
156	2	fill in
157	2	for all
158	2	for good
159	2	for long
160	2	go away
161	2	go back
162	2	got into
163	2	if so
164	2	if you
165	2	if you like
166	2	in a way
167	2	in contrast
168	2	in return
169	2	long before
170	2	look like
171	2	most likely
172	2	next to
173	2	no idea
174	2	no longer
175	2	on the way
176	2	one another
177	2	rely on
178	2	rid of
179	2	set out
180	2	short of

181	2	sight of
182	2	some more
183	2	something like
184	2	take off
185	2	that is
186	2	that much
187	2	the sight
188	2	this stage
189	2	to blame
190	2	too many
191	2	took over
192	2	turn on
193	2	used to
194	2	went back
195	2	whether or not
196	2	worthy of
197	2	get on
198	1	a great deal
199	1	a long way
200	1	all sorts of
201	1	all the way
202	1	and all that
203	1	appeal to
204	1	as for
205	1	at a time
206	1	at the moment
207	1	at this point
208	1	at times
209	1	bring up
210	1	but then
211	1	by the way
212	1	call for
213	1	came across
214	1	came out
215	1	came up with
216	1	carried on
217	1	catch up
218	1	coming to
219	1	consistent with
220	1	consists of
221	1	find themselves
222	1	for life
223	1	for sale
224	1	found himself

225	1	from time to time
226	1	gave up
227	1	go through
228	1	goes off
229	1	going for
230	1	going to
231	1	got back
232	1	got up
233	1	greater than
234	1	head to
235	1	how about
236	1	if only
237	1	in advance
238	1	in common
239	1	in conjunction with
240	1	in detail
241	1	in particular
242	1	in spite of
243	1	in the first place
244	1	in the meantime
245	1	known to
246	1	large-scale
247	1	led by
248	1	long ago
249	1	look after
250	1	look to
251	1	looking forward to
252	1	move on
253	1	next-door
254	1	no wonder
255	1	not even
256	1	nothing but
257	1	old-fashioned
258	1	on average
259	1	on board
260	1	on his own
261	1	once again
262	1	or so
263	1	out of
264	1	out there
265	1	prove to
266	1	said to
267	1	take for granted
268	1	take into account

269	1	thanks to
270	1	to the point
271	1	to-date
272	1	touch of
273	1	turn into
274	1	turning back
275	1	up and down
276	1	well being
277	1	what if
278	1	would say
279	1	yet another
280	1	the other day

Appendix C: Examples of the occurrences of the target items 'come up with' (target item #63) and 'carry out' (target item #62) in the coursebook exercises

(Saslow & Ascher, 2006: 114-115)

B. Vocabulary. Phrasal verbs to discuss global issues.

…

Come up with: to think of an idea, plan, reply, etc.

They need to come up with a new plan to shelter the homeless.

…

Carry out: to do something that needs to be organized and planned.

It's time the president carried out her plan to vaccinate all school-age children.

C. There are seven errors with phrasal verbs in the article. Make corrections.

UN hunger relief

In order to assist local hospital in their battle against acute malnutrition, the UN World Food Program is carrying through operations in the southern region, where thousands of children have been going without proper food or sanitary conditions. The terrible hardship these children have had to put on with is the result of extreme poverty brought by ongoing drought conditions and the increasing number of people who have been recently laid away in the region because of factory closings. The poorest and most isolated families have run away of money to buy the staples they need to feed their children. The program has come down with a plan to provide emergency rations to these families.

D. Fill in the blanks with appropriate forms of phrasal verbs from the Vocabulary.

Drug discovery plan to tap and help rain forests

In Madagascar, off the coast of Africa, as farmers (1)…… usable land, they burn and destroy the rain forests to make more room for farming. If action is not taken, Madagascar's rain forests will soon be (2)…….

A team of international scientists have (3)……. an interesting idea to help save the rain forests. Led by researcher Patricia Wright, they are currently negotiating agreements with local government officials to (4)……. research in the area through a program called "The Drug Discovery and Biodiversity Program." The program will study local traditional healing methods from scientific point of view. Researchers believe the rain forests of Madagascar may be home to sources of new drugs that will fight the numerous illnesses that millions of people (5)……. each year, such as malaria, AIDs and even the common cold. They are confident their plan will (6)……. much needed economic growth in the area.

Note. Underlining added to highlight the target items' use in the textbook.

Appendix D: Tokens beyond BNC 2000 word families

1	agriculture
2	rebels
3	democracy
4	innovations
5	spite

6	discipline
7	cinema
8	loneliness
9	alcohol
10	junior
11	mysterious
12	protested
13	coa
14	exporters
15	pills
16	recipe
17	recipes
18	herb
19	shareholder
20	dividends
21	conjunction
22	pollution
23	congestion
24	spite
26	invention
27	genes
28	tomato
29	angry
30	loyalty
31	windsurfing

Appendix E: The pretests

PART 1 (Cloze test)

Choose the best answer and write your answers to the Answer Sheet

1. The ability to focus on single task is a (an)___ achievement in any job.
A. in addition
B. appeal to
C. account for
D. key to
E. first of all
F. important to

2. They ___ coming back home to visit their parents.
A. look ahead
B. find out
C. point out
D. get away
E. happen to
F. look forward to

3. ___ he left school at 17, he still managed to become a prime minister.
A. As long
B. Regard of
C. Going ahead
D. At once
E. At least
F. Even though

4. They still got out ___ the rain.
A. in spite of
B. look like
C. lots of
D. for good
E. as usual
F. although

5. Controlling speed limits should ___ fewer accidents on the roads.
A. look to
B. bring on
C. not only
D. other than
E. in case
F. lead to

6. They ___ finish on time.
A. looked forward to
B. managed to
C. set up
D. take into account
E. to blame
F. administration on

7. The couple was ___ the police officers.
A. followed by
B. at work
C. at a time
D. as for
E. found out
F. go after

8. He did not write very well. As a result, ___ him a long time to write an essay.
A. tended to
B. it brought
C. they said
D. at all
E. you saw
F. it took

9. China will not be___ win US easily.
A. turn into
B. on their own
C. look for
D. look forward to
E. likely to
F. probably to

10. Making a lot of money can ___ motivate me to work harder.
A. no longer
B. so far
C. to do with
D. short of
E. to date
F. setting up

71. The team ___ four Europeans and two Asians.
A. due to
B. along with
C. as if
D. accounting for
E. consists of
F. takes into

12. ___ manufacturers start to produce the same goods, small businesses will not be able to keep up.
A. Something like
B. That is
C. No wonder
D. Large-scale
E. Of course
F. Great size

13. For me, it doesn't ___ to work over time.
A. make up
B. come up with
C. come across
D. make sense
E. make sure
F. much logical

14. It is reported that ___, incomes have improved the region.
A. in detail
B. on average
C. kind of
D. likely to
E. short-term
F. very close

15. I got fed up with waiting for him to do it, so I just ___ and did it myself.
A. took care of
B. short of
C. rid of
D. went ahead
E. managed to
F. went for

16. His skills are not___ dealing with figures.
A. turn off
B. limited to
C. next to
D. noting but
E. in the end
F. stop at

17. You should be thankful to__ have helped you through your hard time.
A. no one
B. those who
C. find themselves
D. sort of thing
E. next door
F. people person

18. I want to have money, but ___ , I'm not willing to work the extra hours to get it.
A. at risk
B. rather than
C. by the time
D. on the other hand
E. come back to
F. regardless of

19. My son arrived __ for the start of the match.
A. such a
B. for life
C. in time
D. when it comes to
E. yet another
F. in second

20. Many of the learners are___ have interviews with arts colleges.
A. in mind
B. next to
C. focus on
D. in a way
E. in fact

21. If my luggage does not __, I'm going to demand full compensation!
A. take up
B. work out
C. turn up
D. fail to
E. to go
F. take place

22. He did two quick tricks before he left ___ disappoint the children.
A. such as
B. thanks to
C. rather than
D. provided that
E. one another
F. on behalf of

23. You can enter the UK for a period of 6 months ___ you can support yourself financially during your stay.
A. for instance
B. at this point
C. provided that
D. at once
E. by the way
F. if only

24. Aaron is not a doctor and ___ he can't make individual health recommendations for you.
A. if you like
B. give up
C. as a result
D. in advance

25. It's amazing to see all the foreign things that we ___ now.
A. choose to
B. happen to
C. good at
D. take for granted
E. for sale
F. no doubt

26. The charity___ public donations.
A. keeps up
B. about to
C. known to
D. relies on
E. most likely
F. based on

27. They ___ be good at fixing machines.
A. come across
B. faced with
C. tended to
D. carried out
E. at the time
F. possibly to

28. I do like her - __, she is my sister.
A. come out
B. can tell
C. for all
D. in spite of
E. after all
F. whole of

29. You're such a cynic! ___ it's true?
A. Something about
B. Said to
C. Out there
D. Supposed to
E. What if
F. Setting out

30. We are ___ sugar so please buy some when you are at the store.
A. limited to
B. came out
C. not even
D. no longer
E. short of
F. outside of

31. I heard the good news ___.
A. even though
B. common sense
C. old-fashioned
D. the other day
E. in contrast
F. a while

32. Have you managed to get___ your old Volvo car yet?
A. right now
B. take for granted
C. in particular
D. rid of
E. to death

F. about to

E. followed by
F. for all

F. clear from

33. People join groups for ___ motivation, learning and support.
A. and all that
B. all sorts of
C. all the way
D. find out
E. variety with
F. on average

37. Did you ___ listen to watch The Ellen Show last night on the Internet?
A. likely to
B. pick up
C. result in
D. happen to
E. take place
F. some more

41. The book was considered so unlikely to ___ children that it was rejected by 26 publishers before one finally accepted it.
A. more and more
B. move on
C. supposed to
D. appeal to
E. request with
F. find out

45. He get rid of his anger ___ that does not harm anyone.
A. deal with
B. each other
C. as well
D. in conjunction with
E. for a method
F. in a way

34. The program was developed by Toyota, __ Sony and Hitachi.
A. going through
B. in conjunction with
C. consists of
D. due to
E. connected with
F. no longer

38. They want to ___ a plan to find foreign investors.
A. carry out
B. make sense
C. on the way
D. so that
E. taking care
F. bring on

42. China is quickly ___ with developed countries.
A. feeling like
B. getting to
C. catching up
D. even though
E. in common
F. touching on

46. They could___ a way to slow it down.
A. get on
B. going for
C. worth of
D. turn up
E. arrive for
F. come up with

35. He gets rid of his anger ___ that does not harm anyone.
A. deal with
B. each other
C. as well
D. in conjunction with
E. for a method
F. in a way

39. When I sit down to write, all my thoughts come ___, and I don't know where to begin.
A. bring up
B. long before
C. at once
D. likely to
E. on the other hand
F. one time

43. If I want to go on vacation, I have to request time off from work___.
A. things like that
B. to the point
C. sort of thing
D. or so
E. in advance
F. for progress

47. If she helps him, he might do things for her ___.
A. in a way
B. turn back
C. in return
D. along with
E. all right
F. if so

36. Bring a map ___ you get lost.
A. up and down
B. no idea
C. such as
D. supposed to
E. in case
F. only if

40. Their economy has expanded greatly, while ours, ___, has declined.
A. tend to
B. other than
C. turning back
D. what if
E. sight of
F. in contrast

44. The ___construction of countries was damaged by the war.
A. long-term
B. for long
C. no matter
D. supposed to
E. such a
F. period for

48. You should be willing to see other people's ___.
A. all right
B. point of view
C. to the point
D. those who
E. they say
F. thinking of

49. ___ food, you can always count on finding someplace that serves Indian, Mexican, or Japanese in almost any big city.
A. They say
B. Going to
C. Heading to
D. Taking for granted
E. I mean
F. When it comes to

50. They can't prevent it from happening ___ .
A. all sorts of
B. as long as
C. as well as
D. consistent with
E. for the beginning
F. in the first place

51. Western cultures ___ consider the different ways that other cultures define and reward intelligence.
A. take off
B. short of
C. point of view
D. fail to
E. neglect on
F. disappoint about

52. I do not want to let ___ happen.
A. one another
B. a variety of
C. once again
D. those who

53. Surfing is safe if you use your___.
A. common sense
B. no matter
C. focus on
D. appeal to
E. up and down
F. used to

54. They did not ___ the risk factors when making the plan.
A. consistent with
B. choose to
C. come to
D. take into account
E. catch up with
F. check in

55. My mother was walking down the street, stopping ___ to look at a dress in the window.
A. rather than
B. some kind of
C. think about
D. on board
E. from time to time
F. out of

56. They are not a good team; ___ they've got so many problems.
A. no wonder
B. what about
C. think so

57. They need ___money to finish the project.
A. a variety
B. a great deal
C. large-scale
D. common sense
E. a single
F. over and over

58. Successful people have many habits __.
A. back up
B. at once
C. in common
D. for general
E. in the way
F. if only

59. He wants them to know the joy that comes from helping someone ___.
A. or two
B. no matter
C. requires about
D. in need
E. no longer
F. well-being

60. The children are ___ be at school by 8.00 a.m.
A. set off
B. supposed to
C. made up

61. Black and Asian people___ over 7% of the UK population.
A. set out
B. come up with
C. go on
D. account for
E. for long
F. think through

62. They are not telling the truth. ___, they are not reliable.
A. In detail
B. In time
C. In return
D. Kind of
E. In other words
F. Mean that

63. Are you looking for something ___?
A. up to
B. sight of
C. in a way
D. common with
E. in particular
F. as special

64. Such things could lead to __ trouble.
A. the sight
B. touch of
C. nothing but

E. in order to
F. that sort of thing

D. rid of
E. no idea
F. to the amazement

D. key to
E. worth of
F. requirement of

D. what if
E. this stage
F. on the contrary

65. She behaved ___ he wasn't there.

A. as if
B. a long way
C. as for
D. all the time
E.at first sight
F. as well

66. She ___ a lot of complaining from her friend.
A. chose to
B. came on
C. puts up with
D. about to
E. consistent with
F. patience of

67. This century ___ revolutionary changes in our lifestyles.
A. limited to
B. along with
C. brought about
D. appealing to
E. as if
F. made happen

68. If you are interested in martial arts, you can ___karate from Japan, kung fu from China, tae kwon do from Korea,
A. fail to
B. at least
C. faced with
D. account for
E. take up
F. bring up

69. We do not consider his behavior to be ___ the holding of a high-ranking position.
A. most likely
B. in the meantime
C. on board
D. consistent with
E. kept up
F. depend on

PART 2 (Translation test)
Choose the best answer

70. khi nói đến
A. supposed to
B. what about
C. look forward to
D. when it comes to
E. would say
F. add up to

71. bắt kịp, tiến kịp
A. look forward to
B. catch up
C. come up with
D. take up
E. make up
F. involve in

72. bí quyết, yếu tố quan trọng
A. make sense
B. prove to
C. tend to
D. well being
E. key to
F. on basis

73. mặc dù, dù có
A. rather than
B. in contrast
C. in advance
D. in spite of
E. in fact
F. in addition

74. mặt khác, ngược lại
A. in other words
B. on the other hand
C. on average
D. point of view
E. on the way
F. on the one side

75. tính đến, xem xét tới
A. provided that
B. take up
C. take into account
D. take on
E. take for granted
F. draw out of

76. nghĩ ra
A. make senses
B. come up with
C. carry out
D. you see
E. put up with
F. second thought

77. dẫn đến
A. carry out
B. draw on
C. key to
D. turn into
E. next to
F. lead to

78. mất (bao lâu thời gian)
A. from time to time
B. make up
C. in time
D. it takes
E. keeps up
F. in need of

79. thay vì, chứ không phải là
A. nothing but
B. compared to
C. provided that
D. not even
E. greater than
F. rather than

80. (điểm) chung
A. common sense
B. yet another
C. in particular
D. in common
E. in the end
F. the point that

81. sự tư duy, sự hiểu biết đúng sai căn bản
A. account for
B. in common
C. well being
D. to the point
E. common sense
F. think twice

82 có vẻ như, thường hay
A. in common
B. as usual
C. appeal to
D. too many
E. used to
F. likely to

83. quy mô lớn, lớn
A. a great deal
B. large-scale
C. in advance
D. make sure
E. next-door
F. extent of

84. phụ thuộc, trông cậy vào
A. in conjunction with
B. take care
C. turn up
D. rely on
E. move on
F. that depends

85. nói cách khác
A. on the other hand
B. the other day
C. in spite of
D. in other words
E. would say
F. meaning that

86. không thực hiện, không làm được điều gì
A. nothing but
B. fail to
C. limited to
D. set out
E. used to
F. run out

87. hợp lý, có lý
A. account for
B. likely to
C. make sense
D. something like
E. make sure
F. make up one's mind

88. dẫn đến
A. carry out
B. draw on
C. key to
D. turn into
E. next to
F. lead to

89. thiếu, hết
A. no longer
B. not even
C. rid of
D. short of
E. sight of
F. cut down

90. những người mà
A. in other words
B. they say
C. all sorts of
D. those who
E. in mind
F. people person

91. Mặc dù, dù cho
A. as if
B. along with
C. no wonder
D. even though
E. not even
F. only if

92. trong trường hợp
A. in a way
B. in case
C. in advance
D. in the way
E. in fact
F. on condition

93. trông đợi, mong đợi
A. no wonder
B. look forward to
C. when it comes to
D. move on
E. look for
F. look down to

94. sau cùng thì, sau đó thì
A. as a result
B. after all
C. when it comes to
D. but then
E. look after
F. following with

95. đến, có mặt
A. look forward to
B. face to face
C. catch up
D. turn out
E. turn on
F. turn up

96. bị theo sau bởi, tiếp nối bởi
A. come up with
B. go back to
C. supposed to
D. followed by
E. by the way
F. get on with

97. ngược lại, trái với
A. in return
B. once again
C. in particular
D. in contrast
E. in spite of
F. on the opposite

98. cố gắng làm được điều gì
A. catch up
B. deal with
C. lead to
D. manage to
E. come to
F. get along with

99. bỏ đi, loại bỏ
A. fail to
B. rid of
C. short of
D. set out
E. consists of
F. take away

100. coi là đương nhiên, coi nhẹ
A. take for granted
B. fail to
C. take into acccounts
D. take off
E. take up
F. of course

101. không gì ngoài
A. nothing but
B. no longer
C. no wonder
D. whether or not
E. but then
F. next to

102. dài hạn
A. in time
B. all the time
C. a great deal
D. long-term
E. long before
F. long for

103. không còn…nữa
A. rid of
B. no matter
C. nothing but
D. not only
E. no longer
F. no sooner

104. đủ dạng, rất nhiều
A. large-scale
B. all sorts of
C. a number of
D. all over
E. long-term
F. good-sized

105. điều gì xảy ra nếu
A. what if
B. happen to
C. make sense
D. as if
E. what about
F. to what extent

106. cứ làm, thẳng tiến
A. no wonder
B. go ahead
C. lead to
D. get to
E. go through
F. to-do

107. quan điểm, ý kiến
A. take into account
B. think so
C. that sort of thing
D. point of view
E. point out
F. come into view

108. nói chung, trung bình
A. common sense
B. on average
C. on the other hand
D. as usual
E. on board
F. as a rule

109. bất ngờ, bất chợt
A. at once
B. take place
C. fail to
D. come across
E. look to
F. happen to

110. hấp dẫn, thu hút
A. no wonder
B. call for
C. likely to
D. move on
E. look to
F. appeal to

111. kịp giờ
A. from time to time
B. fill in
C. in the first place
D. due to
E. in time
F. period of time

112. cứ như là
A. as if
B. likely to
C. rather than
D. if so
E. as long as
F. compared to

113. nhiều, rất nhiều
A. large-scale
B. a couple of
C. more and more
D. a great deal
E. a number of
F. extent of

114. trước, trước đó
A. in the first place
B. in a way
C. in advance
D. go ahead
E. in contrast
F. go forward

115. theo cách
A. key to
B. in order to
C. in advance
D. point of view
E. in a way
F. to some degree

116. miễn là
A. in spite of
B. no matter
C. take into account
D. provided that
E. that much
F. no charge

117. mang lại, mang đến
A. appeal to
B. bring up
C. it takes
D. come to
E. bring about
F. get along with

118. chiếm (tỉ lệ)
A. it takes
B. up to
C. call for
D. account for
E. take into account
F. take on

119. để đổi cho
A. account for
B. in case
C. in common
D. instead of
E. in return
F. go back to

120. đối với
A. look forward to
B. to do with
C. lead to
D. as for
E. look for
F. in favor of

121. có xu hướng, thường
A. lead to
B. used to
C. about to
D. tend to
E. thanks to
F. care for

122. phù hợp, thích hợp
A. rely on
B. deal with
C. in conjunction with
D. keep with
E. consistent with
F. according to

123. sắp sửa làm gì
A. at once
B. due to
C. appeal to
D. at the moment
E. about to
F. next to

124. cùng với, hợp tác cùng
A. in common
B. in conjunction with
C. common sense
D. to do with
E. put up with
F. link to

125. ngay lập tức
A. in time
B. at a time
C. no longer
D. as long as
E. at once
F. one time

126. ngày hôm nọ
A. from time to time
B. yet another
C. in time
D. the other day
E. one another
F. day in day out

127. bao gồm, gồm có
A. it takes
B. all over
C. all sorts of
D. consist of
E. kind of
F. to conclude

128. kết quả là, do vậy
A. on average
B. finish in
C. after all
D. so that
E. as well as
F. as a result

129. thực hiện, triển khai
A. manage to
B. carry out
C. take for granted
D. bring up
E. point out
F. bring out

130. thỉnh thoảng, đôi lúc
A. the other day
B. by the time
C. in time
D. from time to time
E. up and down
F. for a while

131. kiểu, điều tương tự
A. short of
B. a variety of
C. on the other hand
D. sort of thing
E. all sorts of
F. in kind

132. chịu đựng
A. fail to
B. put up with
C. come up with
D. fail to
E. to do with
F. bear in mind

133. cần giúp đỡ, gặp khó khăn
A. short of
B. come out
C. on the other hand
D. in need
E. in return
F. cut down

134. thảo nào, trách gì
A. take for granted
B. no wonder
C. no longer
D. in mind
E. no idea
F. find fault

135. ban đầu, lúc đầu
A. at once
B. all the time
C. in the meantime
D. in the first place
E. in the way
F. for the first time

136. cụ thể, đặc biệt
A. in advance
B. in spite of
C. in particular
D. known to
E. in the meantime
F. as individual

137. cần phải, nên phái
A. in need
B. take on
C. rely on
D. supposed to
E. prove to
F. in shortage of

138. bắt đầu theo đuổi một sở thích
A. in the first place
B. take off
C. turn up
D. if you like
E. take up
F. at the beginning of

Appendix F: The teaching procedure for the three groups over the language course (study 1)

Group	Week 2	Week 3	Week 4	Week 5
Sentence-context	Explicit teaching of experimental items with context sentences + meaning-focused coursebook input and exercises	Explicit teaching of experimental items with context sentences + meaning-focused coursebook input and exercises	Explicit teaching of experimental items with context sentences + meaning-focused coursebook input and exercises	Explicit teaching of experimental items with context sentences + meaning-focused coursebook input and exercises
No-context	Explicit teaching of experimental items with no context + meaning-focused coursebook input and exercises	Explicit teaching of experimental items with no context + meaning-focused coursebook input and exercises	Explicit teaching of experimental items with no context + meaning-focused coursebook input and exercises	Explicit teaching of experimental items with no context + meaning-focused coursebook input and exercises
Control	Regular classroom activities + meaning-focused coursebook input and exercises	Regular classroom activities + meaning-focused coursebook input and exercises	Regular classroom activities + meaning-focused coursebook input and exercises	Regular classroom activities + meaning-focused coursebook input and exercises

Appendix G: The teaching procedure for the three groups over the language course (study 2)

Group	Weeks 2-5
Motivational group	Explicit teaching of experimental items *with motivational strategies* + meaning-focused coursebook input and exercises
Visionary group	Explicit teaching of experimental items *with visionary techniques* + meaning-focused coursebook input and exercises
Control group	Explicit teaching of experimental items *with no principled motivational techniques* + meaning-focused coursebook input and exercises

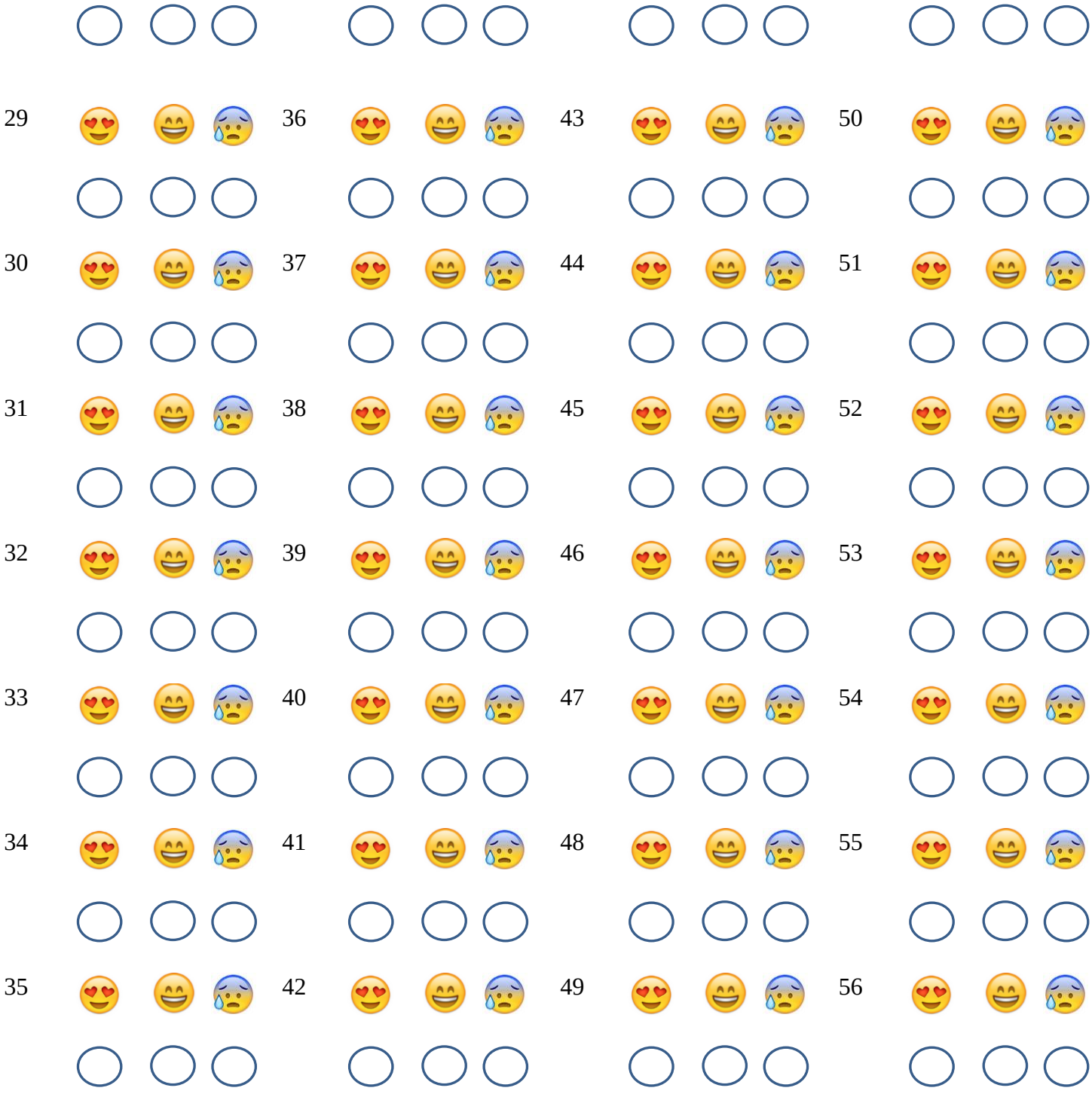
Appendix H: Handouts for the treatments in the visionary condition

Handout 1

Section 1: Power Point presentation (L2 – L1)

Power Point presentation: Imagine that you were one of the persons in each situation in the picture. You were speaking the English sentence, using the new phrase, how would you feel?
Express your emotions by putting a cross (**X**) on the oval, under one of the three emoticons for each sentence and picture presented.

1	😍	😁	😰	8	😍	😁	😰	15	😍	😁	😰	22	😍	😁	😰								
	◯	◯	◯		◯	◯	◯		◯	◯	◯		◯	◯	◯								
2	😍	😁	😰	9	😍	😁	😰	16	😍	😁	😰	23	😍	😁	😰								
	◯	◯	◯		◯	◯	◯		◯	◯	◯		◯	◯	◯								
3	😍	😁	😰	10	😍	😁	😰	17	😍	😁	😰	24	😍	😁	😰								
	◯	◯	◯		◯	◯	◯		◯	◯	◯		◯	◯	◯								
4	😍	😁	😰	11	😍	😁	😰	18	😍	😁	😰	25	😍	😁	😰								
	◯	◯	◯		◯	◯	◯		◯	◯	◯		◯	◯	◯								
5	😍	😁	😰	12	😍	😁	😰	19	😍	😁	😰	26	😍	😁	😰								
	◯	◯	◯		◯	◯	◯		◯	◯	◯		◯	◯	◯								
6	😍	😁	😰	13	😍	😁	😰	20	😍	😁	😰	27	😍	😁	😰								
	◯	◯	◯		◯	◯	◯		◯	◯	◯		◯	◯	◯								
7	😍	😁	😰	14	😍	😁	😰	21	😍	😁	😰	28	😍	😁	😰								



How many happy moments do you have? _____
How many happy moments does your partner have? _____

Handout 2

Session 2: Power Point presentation (L1 – L2)

Imagine that you were in the situation presented, speaking English in a conversation, using the phrase you have learned.
Visualize the way you were dressing, using your body language (e.g. eyes, shoulder, or hands), and your facial expressions.
Visualize the surrounding environment (e.g. tables, chairs, walls, or posters).
Imagine the tone of your voice (e.g. you lower, emphasize, or raise your voice when speaking)
You may need to close your eyes to visualize the images.
How would you feel?
Show your emotions by putting a cross (**X**) at one of the two expressions numbered from 1-56 for 56 sentences.

1	Happy and excited	☐	7	Happy and excited	☐	13	Happy and excited	☐	19	Happy and excited	☐
	Sad and disappointed	☐		Sad and disappointed	☐		Sad and disappointed	☐		Sad and disappointed	☐
2	Happy and excited	☐	8	Happy and excited	☐	14	Happy and excited	☐	20	Happy and excited	☐
	Sad and disappointed	☐		Sad and disappointed	☐		Sad and disappointed	☐		Sad and disappointed	☐
3	Happy and excited	☐	9	Happy and excited	☐	15	Happy and excited	☐	21	Happy and excited	☐
	Sad and disappointed	☐		Sad and disappointed	☐		Sad and disappointed	☐		Sad and disappointed	☐
4	Happy and excited	☐	10	Happy and excited	☐	16	Happy and excited	☐	22	Happy and excited	☐
	Sad and disappointed	☐		Sad and disappointed	☐		Sad and disappointed	☐		Sad and disappointed	☐
5	Happy and excited	☐	11	Happy and excited	☐	17	Happy and excited	☐	23	Happy and excited	☐
	Sad and disappointed	☐		Sad and disappointed	☐		Sad and disappointed	☐		Sad and disappointed	☐
6	Happy and excited	☐	12	Happy and excited	☐	18	Happy and excited	☐	24	Happy and excited	☐
	Sad and disappointed	☐		Sad and disappointed	☐		Sad and disappointed	☐		Sad and disappointed	☐

25	Happy and excited	☐	33	Happy and excited	☐	41	Happy and excited	☐	49	Happy and excited	☐
	Sad and disappointed	☐		Sad and disappointed	☐		Sad and disappointed	☐		Sad and disappointed	☐
26	Happy and excited	☐	34	Happy and excited	☐	42	Happy and excited	☐	50	Happy and excited	☐
	Sad and disappointed	☐		Sad and disappointed	☐		Sad and disappointed	☐		Sad and disappointed	☐
27	Happy and excited	☐	35	Happy and excited	☐	43	Happy and excited	☐	51	Happy and excited	☐
	Sad and disappointed	☐		Sad and disappointed	☐		Sad and disappointed	☐		Sad and disappointed	☐
28	Happy and excited	☐	36	Happy and excited	☐	44	Happy and excited	☐	52	Happy and excited	☐
	Sad and disappointed	☐		Sad and disappointed	☐		Sad and disappointed	☐		Sad and disappointed	☐
29	Happy and excited	☐	37	Happy and excited	☐	45	Happy and excited	☐	53	Happy and excited	☐
	Sad and disappointed	☐		Sad and disappointed	☐		Sad and disappointed	☐		Sad and disappointed	☐
30	Happy and excited	☐	38	Happy and excited	☐	46	Happy and excited	☐	54	Happy and excited	☐
	Sad and disappointed	☐		Sad and disappointed	☐		Sad and disappointed	☐		Sad and disappointed	☐
31	Happy and excited	☐	39	Happy and excited	☐	47	Happy and excited	☐	55	Happy and excited	☐
	Sad and disappointed	☐		Sad and disappointed	☐		Sad and disappointed	☐		Sad and disappointed	☐
32	Happy and excited	☐	40	Happy and excited	☐	48	Happy and excited	☐	56	Happy and excited	☐
	Sad and disappointed	☐		Sad and disappointed	☐		Sad and disappointed	☐		Sad and disappointed	☐

Handout 3

Session 3: Word card (L2 – L1)
Look at the other side of the word card that your friend has shown to you.
Imagine that you were speaking English in a conversation with your friend(s), colleague(s)/ or partner, using the sentence in the word card.
Imagine the country.
Visualize the way you were dressing, using your body language (e.g. eyes, shoulder, or hands), and your facial expressions.
Imagine the surrounding environment (e.g. tables, chairs, walls, or posters).
Imagine the tone of your voice (e.g. you lower, emphasize, or raise your voice when speaking)
You may need to close your eyes to visualize the images.
How would you feel?
STUDENT A: Miming the sentences to your partner, express your emotions, using the body language and facial expressions.
STUDENT B: Draw your partner's emotion, indicating he/she is happy or sad.

If your parter seems happy, you can draw . If your partenr seems sad, you can draw 
Your partner's name:_____

1	7	13	19	25	31	37	43	49	55
2	8	14	20	26	32	38	44	50	56
3	9	15	21	27	33	39	45	51	
4	10	16	22	28	34	40	46	52	
5	11	17	23	29	35	41	47	53	
6	12	18	24	30	36	42	48	54	

How many happy moments does your partner have? _____

Handout 4

Session 4: Word card (L1 – L2)

Imagine that you were one of the persons in each picture in the card. You were speaking the English sentence in card, using the phrase you learned.

STUDENT A: Express your emotions to your partner by using the body language and facial expressions.
STUDENT B: State on your partner's emotions. Please write 'H' for happy feelings 'E' for exciting feelings, 'D' for disappointing feelings or 'S' for sad feelings next to the numberred boxes.

Your partner's name:_____

1.	15.	29.	43.
_____	_____	_____	_____
2.	16.	30.	44.
_____	_____	_____	_____
3.	17.	31.	45.
_____	_____	_____	_____
4.	18.	32.	46.
_____	_____	_____	_____
5.	19.	33.	47.
_____	_____	_____	_____
6.	20.	34.	48.
_____	_____	_____	_____
7.	21.	35.	49.
_____	_____	_____	_____

8.	22.	36.	50.
_____	_____	_____	_____
9.	23.	37.	51.
_____	_____	_____	_____
10.	24.	38.	52.
_____	_____	_____	_____
11.	25.	39.	53.
_____	_____	_____	_____
12.	26.	40.	54.
_____	_____	_____	_____
13.	27.	41.	55.
_____	_____	_____	_____
14.	28.	42.	56.
_____	_____	_____	_____

How many possitive feelings does your partner have? _____

Matching exercises for the computer-based version

(Pictures are not presented here due to limited space, but they are used for the contexts on the computer-based version)

Session 1 (L2 - L1)

(Pictures, though presented in the computer-based version, are not presented in this appendix due to the limited space)

GROUP 1

1. His support cannot be *taken for granted.*
2. *As for* my past, I'm not telling you anything.
3. I was suddenly cold *in spite* of the sun.
4. *On the one hand* I'd like a job that pays more, but on the other hand I enjoy the work I'm doing at the moment.
5. We are a team of engineers working *in conjunction with* each other on the product.
   In our company, software engineers *account for* 50% of the employees.
6. I got home just *in time* - it's starting to rain.

kết hợp với, cùng với

mặc dù

chiếm (tỉ lệ)

kịp giờ

đối với

mặt khác

cho là hiển nhiên, coi nhẹ

GROUP 2

1. We are enjoying ourselves *a great deal* at the party.
2. We helped the new general manager *in return* for his promise to support the employees.
3. Will Western industry ever *catch up* with Japanese technologies?
4. *It took* three hours to get to work this morning.
5. Discipline seems to be the *key to* my success.
6. I had experienced *nothing but*
   cold and loneliness in the midst of kindness.
7. As long as you have *common sense* and pay some attention in his class, you should do fine.

để đổi lại

không gì ngoài

rất nhiều

bắt kịp, tiến kịp

sự tư duy, sự hiểu biết đúng sai căn bản

mất (thời gian)

bí quyết, yêu tố quan trọng

GROUP 3

1. I feel fine and, *as a result*, he hopes to start playing football again this week.
2. It's a programme designed to *appeal to* young people.
3. Is there something *in particular* that you've been worried about in the last month or so?
4. The report also notes the *large scale* investment in tourist facilities.
5. That was one more reason I didn't *look forward to* his visit.
6. The children are *supposed to* be at school by 8.45 a.m.
7. Didn't I see you in the post office *the other day*?

quy mô lớn, diện rộng

ngày hôm nọ

mong đợi, trông đợi

kết quả là, do đó

đặt biệt, cụ thể

cần phải

hấp dẫn, thu hút

GROUP 4

1. Managing people is a specific skill set, *after all.* — nghĩ ra
2. Some of my colleagues put *all sorts of* information on social media. — theo cách
3. I *happen to* think he's right. — thực hiện, triển khai
4. You can study *in a way* that suits you, either part-time or full-time. — ngay lập tức
5. I knew *at once* that I'd like it here. — bất ngờ, chợt
6. I wish he could afford to *carry out* his plan. — đủ dạng, rất nhiều
7. We've *come up with* some amazing scheme to double our income. — cuối cùng, sau cùng

GROUP 5

1. *From time to time* I still think of her. — tính đến, xem xét
2. I want them to know the joy that comes from helping someone *in need.* — nhìn chung, tính trung bình
3. Does the recruitment of staff *take into account* both grade and skill requirements? — cố gắng thực hiện được
4. He was economical with the truth - *in other words,* he was lying. — thỉnh thoảng, đôi lúc
5. Reducing speed limits should *lead to* fewer deaths on the roads. — cần giúp đỡ, gặp khó khăn
6. I *managed to* get the tickets I wanted. — nói cách khác
7. *On average,* our employees stay with us for over four years. — dẫn đến

GROUP 6

1. I think I'd like to stay at home this evening *rather than* go out. — thiếu, hết
2. We're a bit *short of* coffee - I must get some more. — đều gì xảy ra nếu
3. You should study alone *provided that* you have intrapersonal intelligence. — xuất hiện
4. Do you think many people will *turn up*? — thay vì, chứ không phải
5. *What if* you don't pass your exams? — kiểu như vậy
6. I'm rather good at *that sort of thing* when I want to be. — có lý, hợp lý
7. It *makes sense* to buy a large packet because it works out cheaper in the end. — miễn là

GROUP 7

1. Should we get *rid of* the employees who are not doing their job? — những người mà
2. The trousers shrank when I washed them, but they weren't really big enough *in the first place*. — tin tưởng, phụ thuộc vào
3. Places on the bus are *limited to* fifty - so book early! — bỏ, vứt bỏ
4. Do remind me because I'm *likely to* forget. — lúc đầu, ngay ban đầu
5. The success of this project *relies on* everyone making an effort. — thảo nào, trách gì
6. *Those who* want to be president will have to wait until then. — có vẻ như, thường
7. *No wonder* the children are excited, - this is the first time they've — hạn chế ở, chỉ được ở (mức)

been abroad.

Matching exercises for the paper-based version
Session 2 (L2 - L1)

GROUP 1

1. ___ manufacturers start to produce the same goods.
2. ___ a recipe, you pick these recipes up and that's a stupid herb.
3. She'd ___seeing me on Friday.
4. Women ___ only one in four junior managers.
5. A job-sharing policy should be devised ___ staff organisations.
6. What are you doing out of bed - you're ___ be asleep.
7. I heard a programme___.

___ ___ in conjunction with
___ ___ the other day
___ ___ large-scale
___ ___ account for
___ ___ supposed to
___ ___ look forward to
___ ___ as for

GROUP 2

1. I believed house prices, the ___ recovery in the market would firm by the end of the year.
2. Well, putting the genes of a fish into a tomato can lead to___ trouble.
3. A person is intelligent only if that person has___.
4. The king and his brother are seen___.
5. We have done many things to help out those ___.
6. The traffic project fails to ___ the effects of increasing congestion.
7. ___, we must identify a unique way of representing each pattern of communication.

___ ___ nothing but
___ ___ in need
___ ___ in other words
___ ___ key to
___ ___ common sense
___ ___ take into account
___ ___ from time to time

GROUP 3

1. ___her attempt to preserve her balance, she fell.
2. ___, we cannot regard artistic invention as unrelated to the times in which it occurs.
3. If we don't hurry up, we won't be___ to catch the train.
4. The newly appointed CEO is ___ change all that.
5. They bought the tickets ___ so that they could get a good seat.
6. Economically developed countries ___ reduce pollution levels.
7. They had many tastes___.

___ ___ fail to
___ ___ on the other hand
___ ___ in time
___ ___ in spite of
___ ___ in common
___ ___ about to
___ ___ in advance

GROUP 4

1. I think I'll opt for this one ___.
2. There are___ ways of sending messages.
3. My partners___ like cleaning.
4. I can form sentences___ that people do understand me.
5. I plan to increase shareholder dividends___.
6. At the moment production is ___ in a factory.
7. My colleagues always ___ such good ideas.

___ ___ come up with
___ ___ at once
___ ___ in a way
___ ___ happens to
___ ___ carried out
___ ___ all sorts of
___ ___ after all

GROUP 5

1. I don't drink a ___ of alcohol.
2. We get many benefits ___ for our taxes.
3. I was off school for a while and I am trying to ___.
4. ___ us all day to drive home.
5. An aggressive management style___ an increase in staff turnover.
6. We somehow ___ sell the product to the American market.
7. When I first started with the company, I worked ___ 80 hours a week.

___ ___ on average
___ ___ led to
___ ___ great deal
___ ___ catch up
___ ___ managed to
___ ___ it took
___ ___ in return

GROUP 6

1. He is not___ win this battle easily.
2. Do you think she'll ___ on Monday?
3. ___ the train's late?
4. It may ___ to refer this in the next meeting.
5. I ___ you for good advice.
6. ___ he is so tired after staying up all night.
7. It is time for me to get angry and fight back at ___are fighting me.

___ ___ make sense
___ ___ those who
___ ___ what if
___ ___ no wonder
___ ___ likely to
___ ___ turn up
___ ___ rely on

GROUP 7

1. I can't wait to get___ that carpet.
2. Thankfully, he wasn't hurt, but he never should have been there ___.
3. My talents are not ___ numbers.
4. Most of this is about repeat projects ___ new, original ones.
5. The cities are desperately___ food.
6. We've already seen ___ happening.
7. ___ there are enough seats, anyone can come on the trip.

___ ___ limited to
___ ___ that sort of thing
___ ___ provided that
___ ___ short of
___ ___ in the first place
___ ___ rid of
___ ___ rather than

GROUP 8

1. When we learned of the mysterious sickness, we protested. ___, the cocoa exporters cut down the use of the toxic pills.
2. What___ me about his painting is the Ts he uses.
3. Are you looking for anything ___?
4. His loyalty was ___.
5. She could ___ contain her emotion, but going down on her knees she wept as quietly as she could.
6. Change___ come from rather specific areas.
7. ___ a present, I'm stuck.

___ ___ tends to

___ ___ in particular

___ ___ as a result

___ ___ appeals to

___ ___ when it comes to

___ ___ taken for granted

___ ___ no longer

Appendix I: The coded transcripts, main themes, sub-themes and quotes from the focus group interviews of the motivational condition

Initial coding

Note:

- The sign "…" indicates the participants' irrelevant ramblings (e.g. the advantages of travelling).
- The sign "xxx" indicates the participants' unclear or incomprehensible ideas.

Class ID: 1116

Interviewer: What is your opinion on the experimental sessions of learning the English sequences?

Awareness of instrumental values	DTV: ...Learning the sequences was useful for speaking and writing…I could only remember the sequences in the first few days of learning xxx. You only met us once a week, so the sequences I learned in separate sentences were forgotten after the next six days...	
	You should give us easy reading texts in which the sequences are included so that we understand the reading texts….And I can use them in writing tasks xxx. Use the sequences in speaking…	Suggestions for improvement
	NPTA: I think I was not very excited during the learning sessions….	
Limitations of the motivational strategies	There was too much knowledge I had to learn in each session while I almost knew nothing about English…(the others laughed and she said "Silence!"…). When you gave me such an amount of knowledge, it was difficult for my brain to absorb…I felt pressured ….I only learned in some intermittent lessons…. I had to make sentences based on the given sentences with some changes xxx.	
Limitations of the motivational strategies	Each session was one week away from another, so every time I learned again, I often forgot everything had learned in the previous lesson. I felt it was not very effective...I felt pressured when I couldn't answer my friend's questions…	
Lessons not satisfying learners' personal learning purposes	DTV: This is my view. Actually I tried to learn English at school to communicate with foreigners, but I couldn't do that. And I change my purpose to learn English is to pass this subject. When you gave me too many sequences, I didn't know what they were for. Generally I could only remember them (i.e. maybe he meant he could recognize the meaning of the sequences). And I am not sure whether I can write them (i.e. recalling the form and meaning). My only purpose was to pass this subject xxx. I could not use the sequences in long sentences….So I did not know the purpose of learning those sequences. …The sequences were not related to the topics we learned in other lessons… I could not apply much of the knowledge of these sequences (The two purposes of learning of this	

student are to use the sequences to pass the exam, and to use the sequence in language production tasks such as writing or speaking. He didn't see these purposes to be realized in the experimental sessions).

Positive attitudes toward learning experiences

Interviewer: What did you like or dislike about the experimental sessions?

DNQ: … I was interested in answering questions in the PowerPoint presentation because the activity motivated me to learn. I felt competitive when answering questions in games. I could answer some questions, so it was pretty interesting. After the experiment, I could remember almost all the sequences. But it was still difficult for me to use them in communication such as in writing… and speaking.

Ss don't find learning effective if they can't use the items

Positive effects of the motivational technique

VPD: …Yes…I pretty like learning English. But my purpose of learning English is to communicate …and to sing songs. These learning sessions did not allow me to do this. I could not realize my learning purposes. I could only learn grammar xxx. I wanted to speak and to communicate more in class…. But I was interested in the competitive activities of this experiment. I liked it because I could answer more questions than my friend could. I thought that my English ability was better than him, so I felt good…. But I still wanted to be in certain communicative situations and to speak longer. Generally now I know the meaning of almost all the sequences we learned, but I don't know how to use them in certain contexts. I don't know when I should use them…I only know them and that's it. I can't use them, so it's not very useful…

Lessons do not satisfy learners' personal learning purposes

Interest in the competitiveness

DTV: In the PowerPoint games, maybe some friends already knew some sequences because they were hard-working in high school. But I didn't learn much English in high school….. In the games, while others could answer the questions, I couldn't…I didn't want to learn. I let them answer, and I didn't care. My English ability got worse, and my friends' English abilities got better. …

Ss don't find learning effective if they can't use the items

Interviewer: How to improve the experiment?

Limitations of the motivational strategies

DNV: We should reduce the number of the sequences. Instead of learning too many sequences, we should learner fewer. I didn't know most of the sequences you introduced. ..When the friends could answer your questions that I didn't know. I didn't care. After each session, I could remember some sequences. Because I was impressed by these sequences, I could still learn them over time. I often watch movies with English subtitles. Sometimes some sequences occur in the subtitles, I could remember them better. If I didn't have any impression of the sequences, I still forget them no matter how many times they were repeated…. I think I haven't encountered enough times to be able to remember these items…I think like mathematics, we know the formulas. We know the vocabulary. We need examples and practice again and again and it

Limitations of the motivational strategies applied

will become automatic…

Interviewer: What is the overall evaluation of the experiment?

DNV: My personal view is that when you first introduced the sequences, I found the introduction of the sequences very helpful. I had always wanted to learn the sequences like these. I set goals and determined to be able to use them all..... But until now I can only use some of them. I haven't been able to use long sequences. I think all of the sequences could be used in everyday conversations. I have opposite opinion with Dai because the PowerPoint games and word card activities did stimulate me to think…It's true like Dai said that I felt bad when others could answer the questions but I couldn't, but that gave me more motivation to learn them…

Awareness of instrumental values

Class ID: 1118

Interviewer: What is your opinion on the experimental sessions of learning the sequences?

Positive attitudes toward the learning experience

HVT: …56 sequences were a pretty large number …It could be fast when learning in class but I couldn't remember them all… I could only learn some in the first session, and the amount I learned gradually improved in the next sessions…

LLD: I didn't have opportunities to use these sequences… I couldn't automatically use them… So I could only remember them for a short time xxx.

HDD: …. Although I could learn the sequences with my classmates in the word card activities, I found it hard to catch up with many of them in the game activities when the groups competed with each other…. They were fast learners. They took part in the games and answered the questions quickly… But the sequences were new to me, so in the games I failed to gain any score for my group xxx. I felt I lagged behind my friends. …. Each learning session was one-week away from each other. After the first session of learning the sequences, I didn't meet or use them at home….I forgot them. In the following week, I started again and these sequences were new to me again….

Ss don't find learning effective if they can't use the items

Limitations of the motivational strategies applied

Self-efficacy

Positive attitudes towards failure to answer questions in group games

TDA: You should divide the sequences into smaller numbers…And we should learn with the word cards first…and playing games in the PowerPoint presentations later….The explanations for the sequences should be in English instead of Vietnamese…

DPT: …One point in this experiment is the repetitions. But I think the repetitions had both good and bad sides xxx. They could cause boredom, but they helped me memorize the sequences better.... But I think that there was little application. You should add other activities such as writing essays using the sequences...

Interviewer: What do you think of the goal setting activities over the sessions?

TDK: I wrote the goals on the yellow sticky notes, but it was only the goal for that session. After the session and after the games, I

Ss don't find learning effective if they can't use the items	almost realized the goal I set. But I didn't set the goal for the following day to keep what I learned….After that day, I didn't pay attention to them anymore. I didn't try to memorize them, and then I forgot them….	
No effectiveness	NDT2: The goal in each learning session was not my goal. It was the goal you introduced and I had to follow. I felt I was forced to set the goal for each learning session. Learning in each session was like a compulsory task that I had to fulfil. I didn't enjoy learning at all….I didn't understand why I had to learn these sequences xxx. I didn't want to learn. It was boring for me… (This girl talked loudly and angrily in the interview, and other Ss clapped their hands after her comments and laughed. I asked others whether they agreed with her, and one said he couldn't hear what she said…Another said she spoke very fast….and she continued talking)…Ss should set the goals for themselves instead of being forced to set goals by another person…	
	HVT: …I think learning goals in the sessions were the short-term goals, and it caused pressure on me….The goals should be set for long-term. They should make us comfortable….The long-term goal could be the overall goal of learning 56 sequences in all of your teaching sessions….It would be easier…	
	Interviewer: What do you think of the game sessions?	
	HDD: You used the game twice and changed the format a little… When the class was divided into two groups, with this format, only good Ss could answer the questions faster. And the slow Ss like me couldn't answer the question and follow the games. If we took part in the game, we were quickly defeated and couldn't follow …So I could see the excitement in the group who answered the questions quickly. The weaker group would gradually lose their interest in the game and learning…. The group should be organized in the way that everyone had to contribute. And everyone had to be responsible for the success or failure of the group. In this way, the weak Ss did not make efforts, but they depended on the other Ss….	Limitations of the motivational strategies applied Suggestions for improvement Feel pressured when setting goals
	HVT: Minh Anh (the best student in the class) was the center of the class, and people depended on her….	
	TDK: The format of the game can be changed, but the game should involve everyone…It should be able to create exciting atmosphere, use actions, and use competition. Everyone should be excited…	
	TDA: ….I could only remember the sequences in the third and the fourth sessions…If we didn't know the sequences, it would be pretty difficult to remember them….	Negative attitudes towards failure to answer questions in group games
	LLD: …I thought overall, this learning method was not quite effective to me….	
	HDD: I could now only remember well and use about ten sequences. I couldn't use other sequences… During learning, I felt pressured …	
	Class ID: 1120	

	Interviewer: Could you tell me about the learning experience in the experimental sessions?	
	NDT: I liked it when the class was divided into two groups to fight each other. In this way people could support each other. Those who knew the answers could have a chance to raise their voices, and	Positive attitudes towards learning experiences
Ss don't find learning effective if they can't use the items	those who didn't could listen to the sequences	
	SND: I liked the game sessions, because everyone wanted to become a winner…. I paid attention to learning the sequences.	
	Instead of using normal ways of learning, we learned in the way that we kind of fought each other. In this way, I had to concentrate better to give the answer first. If I couldn't answer, other people in the	Positive attitudes towards the group games
Positive attitudes towards learning experiences	group would do. The whole group supported each other… This way drew my attention better than normal ways of learning.	Positive attitudes towards the learning experiences
	DPQ: …I like new things, and the learning experience was new to me. I felt excited about this method of learning vocabulary….	
	Previously I was also interested in learning vocabulary and tried hard to learn. I liked it when I had a chance to learn only vocabulary during the whole lessons….I completed my goals… I had to learn vocabulary on a website as homework, but I couldn't remember them for about two days then I forgot most of them.	
	Interviewer: Did you set goals to learn vocabulary previously?	
	SND: …I set goals to learn vocabulary the night before an exam. After that, I often forget. xxx. I could remember for only one or two days…	Positive attitudes towards the learning experience
	VNTT: I used to set goals to learn vocabulary…. but I thought it was useless. This may be because I often forgot the items I learned and I could not apply them….	
	DNCH: When I was happy, I set goals. But when I was bored, I didn't do so.	
	NDT: Yes. But actually it was not effective xxx. I felt rather pressured. If I couldn't complete them, I felt bad. If I set a specific goal, I would do my best, just to complete the goal. But I thought that it was not effective, so I stopped doing so.	
	KTQ: I tried to learn new vocabulary, but it was useless because	
Previous experience in setting vocabulary-learning goal	most of the vocabulary I learned was not tested in the exams. For example, in the last semester, I had to learn a lot of new vocabulary, but only three or four words were tested in the exam. Learning words and phrases is difficult for me because I tend to forget what I have learned. The chances for using them are rather limited. Thus, remembering them is difficult.	
	Interviewer: After the lecture about the benefits of learning high-frequency lexical sequences, did you feel it was necessary to master them?	
Awareness of instrumental values	Voices from the group: yes, yes, yes…	
	Interviewer: Were you determined to learn those 56 sequences?	
Intended efforts	Voices from the group: yes, yes, yes…	

	Interviewer: How did you feel about the learning experience?	
Positive attitudes towards goal setting	TDN: I didn't like to set goals in class. It was not quite relaxed because I felt pressured to complete the goals. I liked it to be more comfortable.	Limitations of the motivational strategies applied
	SND: But if I am not put under pressure to complete a goal, I am more likely to give up the goal halfway….	
	TLT: When we set goals in class, I felt that I had a responsibility to complete them… but I didn't feel much pressure because we were playing games….	Positive attitudes towards the learning experiences
Interest in setting goals in class	TDN: When you suggested the goal for us in the first session, I followed the suggestion to see if it was effective. Then I found that the goal was not effective and impossible for me. Then I set my own goals in other sessions… I changed the number of items so that I could manage to achieve them.	Positive attitudes towards goal setting
Change the suggested goal	DPQ: … I also set my own goals to learn during the sessions. I did not feel I was forced to learn….	
	VNTT: I didn't pay much attention to the goals xxx. I wrote my goals on the notes, but I didn't force myself to achieve them. I preferred to be relaxed when learning and I was happy with whatever results I could achieve at the end of the session.	Positive attitudes towards the learning experiences
Change the suggested goal	VNVQ: ….I reduced the number of items so that I could achieve my goals...Normally it takes me a quite a lot of time to learn vocabulary xxx. Setting modest goals was better….	Positive attitudes towards goal setting
	DNCH: …It was not difficult to remember the sequences, but I was not sure to use the sequences in sentences because I was not sure about my grammar. When I spoke a sentence with my friend, he could accept that it was correct, but in fact it could be incorrect…	Self-efficacy
	Interviewer: What did you enjoy during learning?	
	VNVQ: interactions with friends…	
Positive effects of the motivational technique on the learning outcomes	DPQ: …I didn't take learning seriously in the final session xxx. It was for fun because I didn't feel much pressured….I had known almost all sequences but only two…Learning was pretty easy then…. I did not feel pressured when setting goals and realizing them by playing games. I would have felt more stressed if the T had asked me to learn by heart a particular number of items. The games made me feel excited because I had the goals to direct my efforts toward achieving them	Positive attitudes towards the learning experience
	SND: In the final session, I felt excited because I could remember most items, and I could answer my friend's questions quickly	
Positive effects of the motivational technique	VNTT: I haven't able to use those sequences…I could only understand their meaning…	Ss don't find learning effective if they can't use the items
	Interviewer: Did you automatically use any of the sequences in the writing and speaking tasks apart from the experimental sessions?	
	Voices from the group: No, no, no	
	DPQ: Last night I joined an English speaking club, I could use the sequence "come up with"…	Positive attitudes

	VNVQ: I could use about 5-6 sequence, but with intention. I thought about them before making sentences about them…. *Interviewer: What can we do to improve the experiment?* DPQ: ….I would like to learn pronunciation….	towards the learning experiences
	VNTT: ..I would like to have more listening of those sequences and sentences TLT: There were too many phrases to be learned in each session…..I often learn only about 10 words at one time…. TBD: You should add pictures to the sequences when you presented them….	Suggestions for improvement – add audio
Positive effects of the motivational technique	DNCH: You should use sequences in some situations and pictures…you could make videos of funny conversations in which the sequences occur…	Suggestions for improvement – add pictures
	NDT: You could use that method (Thuc and Duong's suggestion). And you could reduce the number of items to 15 for each learning session, and add 15 more items to the following learning sessions….	Suggestions for improvement – reducing items
Positive effects of the motivational technique	KTQ: We could not remember if we learned 15 sequences only once…We can combine your method and include more writing xxx. Writing helps use memorize ….We should not use computers a lot…	
	SND: We should apply more….Making sentences…Creating situations in one day and new situations on another day xxx. To make sure that we know how to use them… *Interviewer: Did you feel more interested in learning these phrases during and after the experiment?* Voices from Ss: yes, yes, yes…	Suggestions for improvement – more production tasks
	KTQ: I felt motivated to learn English vocabulary, and I want to learn these sequences one more time to remember them better.. (He then asked to acquire one set of word cards) NDT: Although my grammar is poor but if I know the meanings of the vocabulary, I could guess the meaning of the sentence….	Intended efforts
	DPQ: After the learning sessions, I felt that the learning was effective, so I plan to learn more vocabulary. I downloaded a vocabulary learning app. xxx. Because I succeeded in learning these 56 sequences, I feel more confident that I can learn more vocabulary….Normally in class I don't have many opportunities to learn vocabulary…. (The interviewer thanking the participants)	Intended efforts Positive effects of the motivational technique

Emerging themes and quotes

1. Effects of the motivational strategies

Positive attitudes towards the learning experiences

- I also set my own goals to learn during the sessions. I did not feel I was forced to learn.
  I didn't take learning seriously in the final session xxx. It was for fun because I didn't feel much pressured….I had known almost all sequences but only two…Learning was pretty easy then.
  I did not feel pressured when setting goals and realizing them by playing games. It was more pressured when a T asked me to learn by heart a particular number of items. The games made me feel excited because I had the goals to direct my efforts toward achieving them.
  After the learning sessions, I felt that the learning was effective, so I plan to learn more vocabulary. I downloaded a vocabulary learning app. xxx. Because I succeeded in learning these 56 sequences, I feel more confident that I can learn more vocabulary….Normally in class I don't have many opportunities to learn vocabulary…. PARTICIPANT M6
- When you suggested the goal for us in the first session, I followed the suggestion to see if it was effective. Then I found that the goal was not effective and impossible for me. Then I set my own goals in other sessions… I changed the number of items so that I could manage to achieve them. PARTICIPANT M17
- I didn't pay much attention to the goals….I wrote my goals on the notes, but I didn't force myself to achieve them. I preferred to be relaxed when learning and I was happy with whatever results I could achieve at the end of the session. PARTICIPANT M21
- I reduced the number of items so that I could achieve my goals...Normally it takes me a quite a lot of time to learn vocabulary xxx. Setting modest goals was better….
  I reduced the number of items so that I could achieve my goals...Normally it takes me a quite a lot of time to learn vocabulary xxx. Setting modest goals was better…. PARTICIPANT M22
- In the final session, I felt excited because I could remember most items, and I could answer my friend's questions quickly... PARTICIPANT M15
- It was not difficult to remember the sequences, but I was not sure to use the sequences in sentences because I was not sure about my grammar. When I spoke a sentence with my friend, he could accept that it was correct, but in fact it could be incorrect… PARTICIPANT M5
- …I set goals and determined to be able to use them all.
  My personal view is that when you first introduced the sequences, I found the introduction of the sequences very helpful. I had always wanted to learn the sequences like these. I set goals and determined to be able to use them all..... But until now I can only use some of them. I haven't been able to use long sequences. I think all of the sequences could be used in everyday conversations. I have

opposite opinion with Dai because the PowerPoint games and word card activities did stimulate me to think…It's true like Dai said that I felt bad when others could answer the questions but I couldn't, but that gave me more motivation to learn them… PARTICIPANT M1

- When we set goals in class, I felt that I had a responsibility to complete them… but I didn't feel much pressure because we were playing games…. PARTICIPANT M16
- I liked it when the class was divided into two groups to fight each other. In this way people could support each other. Those who knew the answers could have a chance to raise their voices, and those who didn't could listen to the sequences …. Although my grammar is poor but if I know the meanings of the vocabulary, I could guess the meaning of the sentence…. PARTICIPANT M12
- I felt motivated to learn English vocabulary, and I want to learn these sequences one more time to remember them better... (He then asked to acquire one set of word cards) PARTICIPANT M10
- One point in this experiment was the repetitions. But I think the repetitions had both good and bad sides xxx. They could cause boredom, but they helped me memorize the sequences better. PARTICIPANT M7

Awareness of instrumental values

- Learning the sequences was useful for speaking and writing. PARTICIPANT M2
- My personal view is that when you first introduced the sequences, I found the introduction of the sequences very helpful. I had always wanted to learn the sequences like these. I set goals and determined to be able to use them all..... But until now I can only use some of them. I haven't been able to use long sequences. PARTICIPANT M4

  Interviewer: After the lecture about the benefits of learning high-frequency lexical sequences, did you feel it was necessary to master them?

  Voices from the group: yes, yes, yes…

Self-confidence

- It was not difficult to remember the sequences,…. PARTICIPANT M5
- After the learning sessions, I felt that the learning was effective, so I plan to learn more vocabulary. I downloaded a vocabulary learning app. xxx. Because I succeeded in learning these 56 sequences, I feel more confident that I can learn more vocabulary….Normally in class I don't have many opportunities to learn vocabulary…. PARTICIPANT M6

Intended efforts

- I felt motivated to learn English vocabulary, and I want to learn these sequences one more time to remember them better. PARTICIPANT M10

- After the learning sessions, I felt that the learning was effective, so I plan to learn more vocabulary. I downloaded a vocabulary learning app. xxx. Because I succeeded in learning these 56 sequences, I feel more confident that I can learn more vocabulary….Normally in class I don't have many opportunities to learn vocabulary…. PARTICIPANT M6
  (Interviewer: Did you feel more interested in learning these phrases during and after the experiment?

  Voices from Ss: yes, yes, yes…)
  I haven't able to use those sequences…I could only understand their meaning… PARTICIPANT M21

Learning outcomes

- I was interested in answering questions in the PowerPoint presentation because the activity motivated me to learn English. I liked it when answering questions with my friends because I could understand the sequences and their positions in sentences….I felt competitive when answering questions in games. I could answer some questions, so it was pretty interesting. I felt competitive with others... After the experiment, I could remember almost all the sequences. But it was still difficult to use them in English communication such as in writing and speaking… I could also use some sequences in other speaking and writing sessions, but not many…. PARTICIPANT M3
- In the final session, I felt excited because I could remember most items, and I could answer my friend's questions quickly... PARTICIPANT M15
- I didn't take learning seriously in the final session xxx. It was for fun because I didn't feel much pressured….I had known almost all sequences but only two…Learning was pretty easy then.
  Last night I joined an English speaking club, I could use the sequence "come up with"… PARTICIPANT M6
- I could use about 5-6 sequence, but with intention. I thought about them before making sentences about them…. PARTICIPANT M22
- Although my grammar is poor but if I know the meanings of the vocabulary, I could guess the meaning of the sentence…. PARTICIPANT M12
- I could now only remember well and use about ten sequences. I couldn't use other sequences… During learning, I felt pressured … PARTICIPANT M9
-

Limitations of the motivational strategies applied

- I think learning goals in the sessions were the short-term goals, and it caused pressure on me….The goals should be set for long-term. They should make us

comfortable….The long-term goal could be the overall goal of learning 56 sequences in all of your teaching sessions….It would be easier… PARTICIPANT M8

- I didn't like to set goals in class. It was not quite relaxing because I felt pressured to complete the goals. I liked it to be more comfortable. PARTICIPANT M17
- The goal in each learning session was not my goal. It was the goal you introduced and I had to follow. I felt I was forced to set the goal for each learning session. Learning in each session was like a compulsory task that I had to fulfil. I didn't enjoy learning at all….I didn't understand why I had to learn these sequences…I didn't want to learn. It was boring for me. PARTICIPANT M13
- In the PowerPoint games, maybe some friends already knew some sequences because they were hard-working in high school. But I didn't learn much English in high school…. In the games, while others could answer the questions, I couldn't…I didn't want to learn. I let them answer, and I didn't care. My English ability got worse, and my friends' English abilities got better. …
  This is my view. Actually I tried to learn English at school to communicate with foreigners, but I couldn't do that. And I change my purpose to learn English is to pass this subject. When you gave me too many sequences, I didn't know what they were for. Generally I could only remember them. And I am not sure whether I can write them. My only purpose was to pass this subject xxx. I could not use the sequences in long sentences….So I did not know the purpose of learning those sequences. …The sequences were not related to the topics we learned in other lessons… I could not apply much of the knowledge of these sequences. PARTICIPANT M2
- Although I could learn the sequences with my classmates in the word card activities, I found it hard to catch up with many of them in the game activities when the groups competed with each other…. They were fast learners. They took part in the games and answered the questions quickly… But the sequences were new to me, so in the games I failed to gain any score for my group xxx. I felt I lagged behind my friends. PARTICIPANT M9
- I think I was not very excited during the learning sessions…. There was too much knowledge I had to learn in each session while I almost knew nothing about English…(the others laughed and she said "Silence!"…). When you gave me such an amount of knowledge, it was difficult for my brain to absorb…I felt pressured ….I only learned in some intermittent lessons…. I had to make sentences based on the given sentences with some changes xxx. Each session was one week away from another, so every time I learned again, I often forgot everything had learned in the previous lesson. I felt it was not very effective...I felt pressured when I couldn't answer my friend's questions… PARTICIPANT M14
  <u>Ss don't find learning effective if they can't use the items</u>

- I thought overall, this learning method was not quite effective to me….
- I didn't have opportunities to use these sequences… I couldn't automatically use them… So I could only remember them for a short time xxx. PARTICIPANT M11
- I tried to learn new vocabulary, but it was useless because most of the vocabulary I learned was not tested in the exams. For example, in the last semester, I had to learn a lot of new vocabulary, but only three or four words were tested in the exam. Learning words and phrases is difficult for me because I tend to forget what I have learned. The chances for using them are rather limited. Thus, remembering them is difficult. PARTICIPANT M10
- Yes…I pretty like learning English. But my purpose of learning English is to communicate …and to sing songs. These learning sessions did not allow me to do this. I could not realize my learning purposes. I could only learn grammar xxx. I wanted to speak and to communicate more in class…. But I was interested in the competitive activities of this experiment. I liked it because I could answer more questions than my friend could. I thought that my English ability was better than him, so I felt good…. But I still wanted to be in certain communicative situations and to speak longer. Generally now I know the meaning of almost all the sequences we learned, but I don't know how to use them in certain contexts. I don't know when I should use them…I only know them and that's it. I can't use them, so it's not very useful… PARTICIPANT M23

2. Suggestions for improvement

Reducing the number of items

- There were too many phrases to be learned in each session…..I often learn only about 10 words at one time…. PARTICIPANT M16
- I could now only remember well and use about ten sequences. I couldn't use other sequences… During learning, I felt pressured … PARTICIPANT M9
- You could use that method (Thuc and Duong's suggestion). And you could reduce the number of items to 15 for each learning session, and add 15 more items to the following learning sessions…. PARTICIPANT M12
- We should reduce the number of the sequences. Instead of learning too many sequences, we should learner fewer. I didn't know most of the sequences you introduced. ..When the friends could answer your questions that I didn't know. I didn't care. PARTICIPANT M1

Providing more opportunities for using the target items

- You should give us easy reading texts in which the sequences are included so that we understand the reading texts….And I can use them in writing tasks xxx. Use the sequences in speaking… PARTICIPANT M2

- We could not remember if we learned 15 sequences only once…We can combine your method and include more writing xxx. Writing helps use memorize ….We should not use computers a lot… PARTICIPANT M10
- We should apply more….Making sentences…Creating situations in one day and new situations on another day xxx. To make sure that we know how to use them… PARTICIPANT M15
- You should add other activities such as writing essays using the sequences..... But I think that there was little application. PARTICIPANT M7

Using pictures or videos

- You should add pictures to the sequences when you presented them…. PARTICIPANT M18
- You should use sequences in some situations and pictures…you could make videos of funny conversations in which the sequences occur… PARTICIPANT M5

Students setting goals for themselves

- Ss should set the goals for themselves instead of being forced to set goals by another person… PARTICIPANT M13

Previous experience in setting vocabulary-learning goal

- I used to set goals to learn vocabulary…. but I thought it was useless. This may be because I often forgot the items I learned and I could not apply them. PARTICIPANT M21
- Interviewer: Did you set goals to learn vocabulary previously?
  I set goals to learn vocabulary the night before an exam. After that, I often forget. xxx. I could remember for only one or two days. PARTICIPANT M15
- When I was happy, I set goals. But when I was bored, I didn't do so. PARTICIPANT M5
- Yes. But actually it was not effective xxx. I felt rather pressured. If I couldn't complete them, I felt bad. If I set a specific goal, I would do my best, just to complete the goal. But I thought that it was not effective, so I stopped doing so. PARTICIPANT M12

Interview data for the motivational condition

Participant ID	Name	Class ID
Participant M1	DNV	1116
Participant M2	DTV	1116
Participant M3	DNQ	1116
Participant M4	DNV	1116

Participant M5	DNCH	1120
Participant M6	DPQ	1120
Participant M7	DPT	1118
Participant M8	HVT	1118
Participant M9	HDD	1118
Participant M10	KTQ	1120
Participant M11	LLD	1118
Participant M12	NDT	1120
Participant M13	NDT2	1118
Participant M14	NPTA	1116
Participant M15	SND	1120
Participant M16	TLT	1120
Participant M17	TDN	1120
Participant M18	TBD	1120
Participant M19	TDA	1118
Participant M20	TDK	1118
Participant M21	VNTT	1120
Participant M22	VNVQ	1120
Participant M23	VPD	1116

Note. The names and classe IDs of the participants were coded to maintain the anonymity.

Appendix J: The coded transcripts, main themes, sub-themes and quotes from the focus group interviews of the visionary condition

Initial coding

Note:

- The sign "…" indicates the participants' irrelevant ramblings (e.g. the advantages of travelling).
- The sign "xxx" indicates the participants' unclear or incomprehensible ideas.

Class ID: 1113

Interviewer: Could you visualize your future self-images speaking English during the experimental sessions?

Ability to visualize — Group: Yes, yes, yes …

HDV: Er…Yes. I imagined what you instructed me to….

Interviewer: What did you visualize, for example?

HDV: Ah, that day I visualized myself at work in the future… I visualized myself kind of talking to my colleagues...

Ability to visualize

Interviewer: Could you see the surroundings and the T?

Vividness — HDV: Yes. I could also see the surroundings in the office. For example, I was

	in the office. I was standing with a colleague.
	Interviewer: Could you see yourself speaking English confidently and seriously?
	HDV: Yes.
	Interviewer: Can you still keep that self-image now?
Importance of frequent reminders	HDV: Yes. But it is not clear now because this was the first time I'd imagined my future selves…
	Interviewer: What about others? (encouraging the participants to say)
	TTT: Yeah…I could imagine the surroundings, the furniture, xxx, my future selves speaking English. I could see the T of the surroundings as well. But the
Importance of frequent reminders	image got blur gradually because I didn't imagine quite often. …
	Interviewer: Ok…(telling about the types of visual images used to aid visualizing)
	BNA: I imagined most vividly the image of myself talking with my foreign
Current concerns (interest)	friends. These images are the most memorable.
	Interviewer: Why the foreign friends?
	BNA: Because I have been talking with some foreign friends I knew from games and social network chats. So I could imagine talking directly to them. (exclamations by the listeners). At that time, I visualized myself speaking English fluently…(laughs and chats)
	Interviewer: What about others?
Future desired communication does not need to occur in English-speaking countries	HDV: For me I think the image of myself talking with my colleagues in the office are the most memorable because they are related to my own future, uh… It is certain that in my job, I will communicate with colleagues in my country and in other countries. I will have to use English a lot...Er…I think if in the future I can use English like I imagined I could, it would be very useful in my job…
	Interviewer: So what currently concerns you is the job rather than friends or family in the future?
	HDV: Yes, yes…
Current concerns (interest) Vividness	TTT: The image I remember most was the one in which I was talking to my …er…wife in English (woos, laughs, noises). My to-be wife could also speak English. ... (Irrelevant information removed, i.e. we travelled a lot and we knew a lot of stuff). We were travelling together at that time. I could speak English fluently with my wife. We could speak with other people in English xxx (jokes and laughs). At that time, I could be in my 40s xxx (laughs and chats)
	Interviewer: Which pictures and sentence contexts helped you visualize your future selves the easiest? Why?
(Maybe) Past experiences	TNT: The situation I used the phrase "from time to time". I met a friend at the pub and he talked to me…Er.. in English. I spoke the sentence "From time to time, I still remember her" xxx. This situation is special.
	Interviewer: Why could you remember this sentence so well?
	TNT: Because I had some feeling in that situation. xxx. If I had imagined talking with my colleague, there would have been nothing special about that. When I talked to my friend, I felt sad. That feeling automatically occurred. I

Emotions	could not explain.	
	HDTT: …I could visualize most clearly the situations when I was kind of at the peak of my profession. (Irrelevant information removed). For example, at that time I visualized becoming somebody like an interpreter…but an	
Fanciness of the visualized scenes	interpreter for important people. … I could still remember that.	
	Interviewer: Do you know why?	
	HDTT: I think that the successful self-image motivated me to be more	
Fanciness of the visualized scenes	interested in learning…	
	BNA: I could also remember the situations I visualized myself using the sequences "in conjunction with" and "turn up". Xxx. I could remember both	
Personal expectations and interests	because the situations were my expectations… Many people work together in the situation using "in conjunction with". "Turn up" was used in the picture of a party. I enjoyed partying. … (laughs and chats)	
	Interviewer: What can we do to enhance the visualizing experience?	Improvement – More time
	BNA: The time allowed for visualization was a bit too limited. In some	
The roles of pictures	situations, I didn't have enough time to visualize.... (Repetitions removed)… But the good point is when seeing the pictures I could remember some phrases quickly…Remembering their meanings quickly.	
	Interviewer: Which kinds of pictures did you prefer: the black and white versions or the colourful ones?	
	Someone: I like the black and white ones.	Improvement – Connect images to create short stories
	HDTT: …You can divide the 56 small situations into only a few, for example three scenes. And in each scene, many phrases can be used. In each session, Ss can imagine the images and conversations in these scenes. The scenes can be repeated in the next sessions. … (the interviewer appreciated the idea contribution)	
	Interviewer: What about others? What suggestions do you offer to enhance the visualizing experience?	Improvement – Give Ss more autonomy and power
	BNA: …We can find the pictures by ourselves. Finding pictures stimulate us. We can put ourselves in the situations…. Visualization will be faster.	
	Interviewer: Did you prefer visualizing your future selves with the aid of pictures or without pictures?	
The roles of pictures	Voices from the group: with pictures	
	HDV: I preferred using pictures because I felt more interested in the learning activities than without pictures. xxx. When I had to create images by ourselves, in many cases, the images were not as clear and specific or vivid as with the pictures you provided xxx. (Others agree with Hung).	
	TTT: xxx I liked it when you provided pictures because I could remember the sequences better… in the contexts. …For example, the phrase "in common" in the context of the beach….A group of friends at the beach …. The sequence "in common" used with the picture helped me visualize and remember better. When I recall the picture, I can remember the sequence …. I could feel myself at the beach. If I was at the beach, I felt relaxed.	
	Interviewer: What about others? What do you think of the word card activities?	
The roles of pictures	HDV: I like the pictures in the word cards activity because I could focus on	

	what we were learning. When a friend showed me the card, I could remember the sequence better. ..	
	HDTT: xxx I think it was generally effective (irrelevant information)…But we should learn a few sequences, for example seven sequences, in the first session, and then we add another seven phrases in the second session, and so on instead of repeating the same phrases in every session.	Repetitions of visualizing activities
Effectiveness of visionary technique	*Interviewer: What is your overall evaluation of the experiment? Do you think we should use visualization in learning?* Voice from audiences: Yes…We can learn better. *Interviewer: Do you think visualization plays an important role in learning?* Voices from the audience: Yes, yes, yes…	
Positive attitudes toward the learning experience	TNT: When visualizing my future self-image, it was like a magnet that attracted me to that direction, giving me motivation to move forward to that direction. If I had not visualized, there would have been no goal to direct myself. I think this can also propel me to succeed in learning in the future….It helps me make more efforts in the future so that I can succeed. Interviewer: OK. Thank you everyone!	
	Class ID: 1114 *Interviewer: Could you visualize during the experimental sessions and do you believe in the benefits of visualization?*	
Effectiveness of visualization	TVV: Yes. Because after the sessions, I found it easy to learn and memorize the materials. …	
	Interviewer: Could you visualize your future self-image?	
Ability to visualize Vividness	TVV: Yes. I could visualize two houses. I could visualize the two houses one with Japanese style with rooms facing each other....I could vividly see that most of the internal decorations were made of wood…	
	ACH: I could easily visualize my future house because it was a co-incidence that my family's discussing about the drawings of the to-be-built house…	
Positive attitudes toward the learning experience	And thus I could contribute ideas in discussion with my parents on the construction of the house. We added quite a lot of ideas to the house construction due to my visualization… I think that visualization in this way was pretty interesting…Generally I can see its immediate benefits xxx.	Benefits beyond the learning outcomes
	NLV: Maybe I was different from others. Other friends could visualize the house …. I visualized the destruction of the war in the practicing session…. Ordinary houses being destroyed.	
Interest Vividness	TTD: I could vividly visualize my house in the first session…Even after several weeks, and it was easy for me to remember how it looked like. xxx That was a big villa. Now I could still remember that house and its surroundings…	
	Interviewer: Do you want to own that house? TTD: Yes.	
Positive attitudes toward the learning experience	*Interviewer: Do you think you will quickly forget that house?* TTD: ... No. I think I will remember it for a very long time. ACH:…I am an imaginative person. ..I usually visualize many things every day. I think visualizing in the classroom can reduce the pressure of getting grades…. I like the activity of visualizing my future house in the first session.	Benefits beyond the learning outcomes

	..	
	Interviewer: Which situation do you prefer to visualize: your self-images with family members, with friends, or with colleagues?	
Current concern (priority)	ALH: …I am thinking about my future job… I prefer visualizing profession-related situations because they are in my near future. Non-professional situations such as with friends are what I am already experiencing everyday now…. My biggest goal now is the professional life …What I am going to do and I will have to do at work after graduation… I prefer these future situations rather than with friends and family xxx.	
	TTD: …I also want to visualize profession-related situations because similar to Hoang Anh, I am now already experiencing talking with English with my friends.	
Current concern (priority)	CVX: …I want to imagine talking with my family members…The purpose of learning is to have a stable job. I would like a happy future family. Although work is important, the final goal is to have a happy family xxx. If a man works a lot, and making a lot of money, but he does not have a happy family, he is not happy after all. And he may die soon... I remembered reading a story of a foreigner man, er, a German man… I don't remember very well. He came to Vietnam and knew with a girl working in a traditional dress shop. He said he loved her and they got married. Now they are selling bread and hotdogs in the streets in HCM city… and live happily….A happy family is crucial…	
Current concern (priority)	TLV: …My view is that I prefer visualizing being successful in my professional situations first… because I think success in jobs is the foundation for happiness and family and friendship in the future….	
	ACH: …I think we have different priorities in life. At one time, family is everything. At some other time, profession is important. ..I visualized all of the future situations because they are equally important to me.	
Current concern (no-priority)	*Interviewer: Which kind of images used in the experiment did you prefer? Black and white pictures, Tful versions, Tful pictures or self-generated mental imagery?*	
The roles of pictures	ACH: I prefer colour pictures xxx on my own laptop computers. Indeed right before the exercise activity, I'd already seen their black and white versions from the PowerPoint, so it was interesting to see the Tful versions of those pictures from my computers. The color made the pictures more vivid and lively, making me remember the materials better. As far as I know, T helps stimulate our memory xxx.	
Conditions to visualize well (interest)	*Interviewer: Did you feel yourself being in these visualized situations?* ACH: … Only some, but not all … because I could only visualize my self-images clearly in the situations that I was interested in…. And the time allowed for visualization of each situation was limited. Sometimes, I couldn't visualize the situations that I had to….	Improvement – More time
Past experiences	*Interviewer: When did you find it easy to visualize?*	
	TLV: I found it easy to visualize if I had already thought about that situation in the past xxx. I had wished I could become influential persons as those in the pictures…	
Conditions to	TLV: I thought the quality of the first-time visualization was poor. ..I could	

visualize well (relaxed)	only visualize the situations in the learning sessions when my mind was empty…I was relaxed and thinking of nothing else xxx. When I had the only purpose of learning at class….	
Current concern (interest)	Anh Hoang Chu: When I was encountering a problem, and my feelings were up and down. At that time I wish I could be in the visualized situations…And if I did something now, I could be able to become someone or be somewhere in the future. At that time, I could visualize a clear self-image.	
Past experiences	TTD: Uh, If the images were related to an image I have experienced in the past…The image that in the past I wished I would become. It'd be easy for me to visualize the image I've experienced…	
Emotion	HVD: Er… I remember the situation going to a bar with my friends xxx I think when I combined the images with my feelings and senses, I could remember them better. Then I can recall the feelings, I can recall the images, the phrases and sentences.	
The roles of the pictures	*Interviewer: What about others? When did you find it easy to visualize?*(encouraging discussion and idea contribution) QTH: …It was the combination of different versions of the pictures. When you first provided the blurred pictures, my mind had already created some images….Then I met the Tful versions of these pictures in the website, it was easy for me to visualize.	
Conditions to visualize well	NLV: …I find it easy to visualize and act in the visualized situations when I was most relaxed and a bit dreamy, a bit imaginative….	
Conditions to visualize well	ACH: …The images of being a successful professional in the future…. I liked visualizing the images of the things I really wanted for my own future xxx. And I could visualize when I was relaxed …and did not compare myself with others xxx I was confident…I think it is important to have a belief that there's luck around me…	
Fanciness of the visualized scenes	ALH: …Perhaps when I saw a person speaking to the audience in an event…And I also wanted to be as good as that person. And I visualized that in the future I would also stand in front of the audience speaking …The audience also looked at me admiringly like I admired the person in the event.	Current concern (want)
Relaxing music	…	
Conditions to visualize well (language ability)	ACH: Music helps me visualize better. CVX: …I think I can imagine something I like to have or wish to have but I don't have now. For example I liked a house, and it was easier for me to visualize a house … Sometimes I needed to talk to my partner Hieu in Vietnamese …to understand each other a little bit before visualizing and acting the visualized situations. …But I did not have enough vocabulary to express what I wanted to say in English in the visualized situations, so my speaking was not very fluent…	Language conditions for visualizing, speaking, and acting
The roles of pictures	*Interviewer: When did you find it difficult to visualize?* CVX: I find it difficult to visualize if there were only words ….Very difficult… I had to understand the sequence and speak the sentence. I had to remember words and sentences. ...With pictures, I could remember pictures. Then basing on the memory of the pictures to recall the sequences and sentences, and speak the sentence easily… The word cards of the same T	

Role models in classroom	without pictures did not help me visualize. Different Tful pictures allowed me to visualize the different scenes... *Interviewer: Which kind of sentences helped you visualize better? Long or short sentences?* TTD: I think short sentences helped visualize well…. It was hard to understand the meaning of a long sentence… TLV: For me long or short sentences did not matter. If the sentence impressed me immediately, I could visualize easily and remember it well, even if it was long… ACH: ….The sentence contained words that were easy to pronounce…Words that sounded familiar… Even if it was a long sentence but the pronunciation was easy, it would be easy to remember and visualize using. CVX: It is important to immediately understand the sentence or not. If I could barely understand, I could still act and describe it at the learning time. But after that I would forget…. *Interviewer: What did you think of the role models I introduced? Did you like them?* CVX: I saw and heard about them just to know more about them. …But I didn't consider them being my role models …. I did not want to be like them or to follow what they were doing. My achievements would depend on my ways and abilities….Not this man or that man's way. *Interviewer: What about others? Do you have any role models who can speak English well and you want to be like them?* No answers *Interviewer: When I told a story about a new graduate failing the interview to a foreign company because of his poor English. What did you think?* HVD: …I felt sad and sorry for that man. Maybe when he was at college, he didn't learn English. He invested his time in his passion…He invested in his specialized area. I think English is increasingly important now because foreign companies are coming to Vietnam to do business… CVX: It was his mistake to decide to apply to a foreign company when his English was poor. He should have been aware of his English abilities to choose what company to apply to. …If his English was poor, he shouldn't have applied for that foreign company. He should have applied to a local company. …Through the story, I know that I must have English abilities to be able to apply to a foreign company… I know this, so I have to prepare for myself soon… to be better-prepared than him. ACH: At the moment my English abilities are not as good as others, but if I had a working environment where I had to communicate in English a lot, it would help improve my English abilities…. TVV: When I heard the story, I didn't think about much about him. I thought about myself…. I thought that I had to be more hard-working, making more efforts…. If I did not improve my English, I would not be able to work for such a company…..in the future I could fail like him….I felt worried about my own failing scenario instead of thinking about his stuff. ALH:… I thought after that failure. He could be more motivated to improve	Language conditions for visualizing, speaking, and acting Language conditions for visualizing, speaking, and acting Feared possible self Vocabulary knowledge Feared possible self Feared possible self Self-efficacy

	his English…	Feared possible selves
	CVX: I thought being able to speak English is not a very difficult task if we make efforts. ….That man did not have a goal of speaking English well when he was at the university….I would have to learn English communication as soon as possible…. Indeed I had plans for what to do at home, what to do in class, but now I haven't realized the plan.	
	TLV: I feel worried about my own future….	Improvement – Connect images to create short stories (Computer games)
	Interviewer: How could we improve the experience of visualization to learn the materials better?	
	AHL: I think you could combine the images into a series of connected images… and use them like stories in computer games. You could use music to add to the images… This would help better visualization. ….When we combine a series of the images to create a story, we would remember the materials better.	Improvement – Connect images to create short stories (movies)
Improvement – Give Ss more autonomy and power	CVX: You could give us the phrases and the definitions and we could create the sentences and the images by ourselves. ….	
	ALH: ….Use moving images …such as watching travelling scenes in Venice and visualizing ourselves travelling in Venice…	The roles of pictures
	TVV: …You should not have told us how many contexts or sequences we were going to learn….	Positive attitudes toward the learning experience
Repetitions of visualizing activities	TH: …The repetitions of the same items were a bit boring…	
	TVV: I didn't want to visualize when there were so many words….	
	Interviewer: Did you enjoy the visualizing experience?	
	CVX: …More relaxing and comfortable … I didn't feel pressured like other learning activities I used to learn in class.	
	Interviewer: What is your overall evaluation of the experiment?	Positive attitudes toward the learning experience
	TLV: …This is the first time I've ever learned vocabulary with this method….I find this way of learning new and interesting ….because it helps me improve and develop the future self-images xxx. And I learned English too.	
	ACH: …I like learning this way because I could speak the sequences I have learned..	
Effectiveness of visionary technique	HVD: …The pictures helped me remember sequences better…I like the familiar topics because help me visualize easier.	
	ALH: …This technique seems to be a slower way of learning vocabulary than the other vocabulary strategies I'd learned, but I could remember the sequences easier and better….I don't know whether the effectiveness of this technique can be durable…. Pictures facilitated learning better than without pictures xxx. Compared to one online vocabulary learning activity I used to learn, this strategy helped remember better. In the online learning activity, I could only remember the vocabulary at the time of learning and then I forgot most of them.	The roles of pictures
	Interviewer: Thank you!	
	Class ID: 1117	
	Interviewer: (summarized the learning experience) *Did you believe in the benefits of visualization that I presented in the lecture of the first session?*	

	LBH: I didn't want to believe. …I used to read the methods of learning English vocabulary… We can relate the word with an image to learn it. But I don't usually apply this method because I had to think a lot…	No interest in visionary technique
Positive attitudes toward the learning experience	HPTH: I do believe in the benefits of imagination because I used to read about it. I think apart from helping me remember vocabulary, it may affect my own future. I believe so follow the technique.	
	HDP: Indeed it was difficult to visualize and have emotions… I don't know whether we need to practice for a long time to have emotions xxx.	The roles of pictures
	Interviewer: Did you prefer visualizing with or without the aid of pictures? Voices from almost all participants in the group: with pictures, with pictures…	
Conditions to visualize well (pictures & sentences)	HDH: …some pictures were pretty unfamiliar to us…I think they were unsuitable for me …and to my imagination. I could use many of the provided pictures for the visualizing tasks, but I did not use some other pictures. Instead, I visualized other situations that suit me and interest me more. I think you can change some pictures.	
Conditions to visualize well (pictures & sentences)	*Interviewer: Which kinds of pictures helped you visualize your self-images better?*	Conditions to visualize well (practice)
	ADB: I think the familiar pictures that I used to see or experience in real life…. If the pictures depict foreign lives that are not familiar in my country, I found it hard to visualize myself being in…. These pictures were less effective….Visualization was more effective as soon as I had formed a habit of doing so xxx. Once I had the habit, visualizing became easier and more effective.	Improvement – Using familiar materials
	DPT: You could use movies and famous TV shows with popular actors and actresses acting. This could help visualize better because they are familiar. I found it pretty hard to get myself familiar with strange people and images….	Improvement – Using familiar materials
	HPTH: …I agreed with Anh Bui Duc in using familiar images…I think this could help memorize vocabulary better because they were linked to something I had already known...To answer your question… I could	
Fanciness of visualized scenes	remember very well three pictures. A picture of a group of young people standing at a party… The party was luxurious. The place was also luxurious. Another image was a man standing in the office talking to his colleagues. The other image was a group of colleagues standing discussing an issue, in which there was a person who seemed to be the leader…. Using pictures of familiar situations could help me memorize vocabulary better because they were linked to something I had already known…. I could also visualize my future self-images because I wanted to be like the people in the pictures. I wanted to	Conditions to visualize well (familiar and practical)
Current concern (want)	own that company. I wanted to be like the leader who stood out, chairing the meeting. And I also wanted to be in luxurious places such as the party. I could memorize these situations and images because they were what I wanted... These images gave me strong feelings.	Emotions
	NLH: … the daily-life situations, using such sequences as "that sort of thing", "in common". These situations were practical to me. I could use them immediately after the lesson because they can be used in many everyday situations…. As for some unfamiliar situations such as those using the	Effectiveness of visionary technique

	sequences "take into account" or "account for"…I was not used to them….I could visualize simple and daily-life situations better ….	
	DNX: Like Nam, I prefer sequences and situations that occur daily now. When was not in class, I sometimes remembered and thought about the sequences I learned in class xxx. When I were learning in class, I was interested in job-related situations such as one situation using the sequence "carry out"….When I encountered similar situations in real life out of the class, I could remember the sequences better xxx. I could also see my future-images, but in near future…If you didn't provide pictures and asked us to generate images by ourselves, I could not visualize...I could only remember the meanings…	Professional situations
Conditions to visualize well (willingness)		The roles of pictures
	HPTH: …When you gave us the learning materials, I visualized to learn them. It was me who decided to visualize or not. If I ordered myself to visualize, I started to visualize. If I didn't order my brain to visualize, I only looked at the sentences and learned the meanings of the sequences. …	The roles of pictures
Past experiences	Without pictures, I could also visualize at the time of learning, but with pictures, I could remember longer and better.	
	HDH: When looking at the sentences without pictures, I could partly visualize. But with pictures, I could fully visualize the image of my future selves….I remembered the past to visualize some situations. For example in the past I used to work with my friends, so I could visualize the sequence "in conjunction with"… I am not sure whether I could become a leader or someone in the future.	
	Interviewer: Do you think this learning technique helps you concentrate better than the online vocabulary learning quiz you used to use? Voices from the participants: Learning with the printed word cards helped concentrate much better than learning with the online quiz….	
	Interviewer: What could be done to improve the experiment? LBH: Time allowed for the visualizing activities was not sufficient for me…. Also, we could connect or group situations in some way. For example, grouping situations related to eating and partying together. When we remember each phrase in a situation, we may remember phrases in these related situations. You can group noun phrases or verb phrases together as well.	Improvement – Time
	DPT:…Grouping the sequences… We may learn fewer sequences, such as from 5-10 sequences each session… The sequences are related to each other.	
	LBH: ….We may find it easier to visualize a group of connected images in which several sequences are used rather than learning many unconnected sequences….	Improvement – Connecting images
	NLH: He (Lam) meant…we should put several sequences in a bigger picture. Each sequence is one part of the picture. When we remember part of the picture, we can remember the sequences xxx and other parts of this big picture. …	
	DPT: Agreed with Dung…We should learn fewer sequences each time… We should be practical….	
	PTL: ….Some pictures were not familiar.	Conditions to

	NLH: I could visualize and learn regardless of with or without pictures. The most important thing and also the thing I liked best in this learning technique was presence of the sentences…..These sentences helped me use the sequences grammatically correctly. I made similar sentences xxx. The sentences could be a bit different….The pictures were next to the sentences, so it was easier to visualize. But in some cases, I had to fix my visualization to the pictures…. It was difficult to create different situations.	visualize well (provided sentences) The roles of pictures
	HPTH: The visualization technique would be easier if you used video. In the videos, people communicate with each other xxx. We would know how the sequences are used…We can learn by heart the conversation with new vocabulary in the video….and we see people expressing their emotions that we can learn from xxx. Watching films is easier to remember….I prefer videos ….	Improvement – Use videos
Current concern (interest)	*Interviewer: Which situation do you prefer to visualize: with family members, with friends, or with colleagues?*	
Current concern (interest)	NLH: I like visualizing the situations with friends and family because I contacted with my friends a lot every day... The phrases and sentences about friends and family were easy to use and remember.	
Current concern (goal) More engagement	TNTT: I like both images of friends and family…Visualizing images of friends and family leads to positive and happy images. I often remember optimistic images better than pessimistic ones.	Non-professional situations
	HPTH: I could remember more images at work. Perhaps from now till I am 30, I will focus on work… I will prioritize studies and work….I will think of work more often. So when I saw these images, it seemed that I paid more attention to them ….I remembered more professional images.	Professional situations
	HDH: I remember images with friends. My friends are studying English with me now…. Not all families use English for communication….	Interest in visualization
	Interviewer: What is your overall evaluation of the experiment?	
	NLH: Visualization activities helped me develop my imaginability…	Instrumentality – Promotion
	VNT: After the course, I felt motivated to learn English. It is necessary for my future career.	Instrumentality – Promotion
Feared possible self	HPTH: I also felt motivated. If I work in a professional working environment, and I am a professional, I will meet international colleagues and friends coming from all over the world. And so I feel motivated to learn how to speak English fluently. But at the same time I feel worried …a bit fearful…because my English is not good now.	
Positive attitudes toward the learning experience	DPT: ….This visionary technique is potential, even effective… The pictures made me feel more interested in learning vocabulary…. I am a lazy student. This method was interesting. And I wanted to study vocabulary more than I did in the past. I have learned quite a lot of sequences…	The roles of the pictures
	Class ID: 1121	
	Interviewer: Did you visualize the images of your future selves in the sessions we learned?	Amount of time one can visualize
	Voices from the group: yes, yes, yes…	
Ability to visualize	DNV: On the first day …Er...I thought this method was new and quite interesting. I was curious about what I was going to learn. …I could visualize	

	what you instructed me to. I could also visualize my future self-images. TLV: Uh…I could only concentrate to visualize for about 15-20 minutes. Then I got distracted…I got bored. I couldn't visualize for a long time… HVH: …I thought visualization was a new topic for the lesson and then we continued to study in a traditional way. But then we practiced visualizing, and I had a lot of ideas for my future selves. And then the activities in the following sessions continued in the similar way…I continued visualizing	Limitations of the visionary techniques applied
Conditions to visualize well (interesting)	other topics….I thought there were too many visualizing activities… But I could visualize best in the situations that excited me. In those situations, I could express myself best.	Repetitions of visualizing activities
	Interviewer: Do you believe in the benefits of visualization? Voices from the group: Yes, yes… LBTK: …The 56 situations were not related to each other. The first session interested me much, but the following sessions did not interest me as much as the first….	
Conditions to visualize well (want)	DBH: If the situations were what I wanted, I could visualize well. But if they were not what I wanted, I could not visualize them well even if I tried to.	
Positive attitudes toward the learning experience	ABTK: I am a kind of person who likes to think about future. The first session impressed me much. I was tired on that day….But I could still visualize my future self-image being in all of the 56 situations. I imagined that I was at 30 years and working with people holding high positions. I felt happy… Visualization motivated me to study.	Past experiences
	Interviewer: Which pictures and sentence contexts that help you visualize your future selves easiest? Why?	Postive attitudes
Current concern (goal)	DBH: … I could visualize the situations that were related to my past and experiences xxx. Those that had nothing to do with my past were rather difficult for me to visualize…	
Practical career goals are different from dreams	NLH2: When I saw the images that were similar to my future dreams such as becoming a successful businessman… I could easily visualize my future selves… because I had feelings with these situations. xxx If it was difficult for me to visualize, I couldn't feel my emotions…. DBH: It was easier to visualize if the images were related to myself…. HNTT: ….The self-image could be in the future. But it did not have to be my dream that I could visualize well, but it was more related to my career orientation. For example, I am studying information technology, so I like visualizing the future situations that are related to a career in technology such as making a presentation at a technology conference. The sentences in the future work-situation interested me. …They made me feel motivated to learn and develop myself...So I think the self-image is more related to my future direction than the history….	
Current concern (goal)	DNV: When seeing the pictures relevant to my future career such as being at meetings, I found it easy to visualize. Looking at these pictures, I immediately visualized being a manager or someone like that. I could easily visualize what and how I was talking… And I could speak the sentences easily xxx. I could visualize quite a lot of situations like these.	The roles of pictures
Current concern (interest)	DBH: When looking at the pictures, I used multiple senses, so I concentrated	

	on learning. Using multiple senses helped memorize better…	
Current concern (goal)	VNK: I agreed with Nam…The situations that were like my future goals excited me xxx. I dreamed of being successful in my future job. I would like to become a manager of a certain company or a successful businessman.	Future concern (relating to self)
Current concern	xxx.In the future, I was able to speak English fluently.	
	ABTK: I remember several pictures, for example, a picture at a party. I visualized being at a party. …If my friends and I would be happy like that, it would be interesting…When I saw a picture of a man thinking about a lover…. I felt sad when thinking that maybe in the future my lover would also say that xxx. Apart from job-related situations, I could also visualize situations being with my friends and family members…	Improvement – Connect images to create short stories
	LBTK: I could visualize a lot of situations related to any topics. For example at what age I would take my parents to go on holidays abroad…At a party when I would ask my friends about their jobs xxx. If we connect the	
Current concern	sentences together and create a story, it would be more interesting and effective. The story could be about anything rather than limiting to the topics of family, friends, or work…	Improvement – Sentences
	TLV: It was difficult to visualize 56 situations. We could connect 7-8 situations that are related to each other…. And create a story basing on them….This would interest me more xxx. In our lessons, we had only 30'-1 minute to both visualize and speak each sentence, it was a bit too fast. .. Another thing is that some sentences were not really exciting. You should include funny sentences.	
	HVH: …I skipped some situations that did not interest me. For the situations that impressed me, I visualized my self-images not only in the future but also in the past. Xxx. Each episode I visualized was very vivid. I was fascinated at	
Current concern (personal relevant)	that time. And I asked myself what I was doing in the present. …And whether it was related to my past or my future. What I really wanted. I was impressed….I think we don't need to use up to 56 situations. We only need those that can really influence us….	Improvement - Give Ss more autonomy and power
	DBH: There should be fewer sentence contexts. Too many sentences could be confusing.	
	GTM: It did not matter how many sequences or sentences to learn. But with the pictures and sentences provided by others, it would not be much different from learning by heart. So if I make sentences and search pictures by myself, it will be much easier to remember. We can make a series of events to create a story xxx. It would be easy to remember….In some cases, the pictures had nothing to do with me, and I did not like them.	Improvement - Give Ss more autonomy and power
	LBTK: I agreed with Giang…We can make our own sentences and search our own pictures. This may interest us more than those prepared for us….	
	ABTK: My view is that 56 situations were fine. But they were not related to each other. They were about different topics. We could have one session exclusively used for visualizing about future jobs. Another session was for family….	
	HVH: I agreed with Kim Anh. Each topic for each session will be better…This helps us focus and brings about new experience.	

	DBH: I am afraid we cannot remember the sequences if we learned the way Hoang suggested….	
	LBTK: ...I want to clarify Duc's opinion. I think we could use all 56 sequences in a topic… And use them again in another topic. …The more we meet the phrases, the better we learn them. …If we use each sequence only once in each topic, that is not enough.	Improvement-Use games
	TLV: I think for each topic we should use only 20-30 sequences …In the next learning session, we repeat part of these 30 sequences and sentences, and add some more to learn a new topic…. This way could interest us more because in each session we remember the old and learn the new things.	
	Interviewer: How to improve learning and visualization?	
	VNK: We need to add more excitement to the learning experience such as small rewards, mini games…	Conditions to visualize well
	NLH: Er…We may add games and warming up activities to stimulate the atmosphere and the experience could be more exciting….	
	LBTK: I agreed that we should add games to maintain interest….	Problem with distant goals
	Interviewer: How could we create future images easier?	
	NLH: Ss need to have some specific goals in advance. To be honest, I am not clear what I could become in the next 5 or 7 years. …So I didn't know how to visualize my future self-images…So it is important for us to have an idea of our future goals.	Reduced interest
	NTTM: I think most can determine their specific future goals. But once you have already determined the goal but do not know how to realize it, you will gradually get bored. Learning is meaningless…Sometimes it wastes a lot of time…I only learned the lessons in class. …I could only maintain interest to learn in the class in the first few days. But this interest reduced over time xxx. I learned from your lesson at the beginning of the week and did not practice them frequently. I had to wait until the next week to meet them again. So I think my interest in learning decreased….	Lack of opportunities to use
Effectiveness of visionary techniques		
	DBH: I did not have chances to use these phrases in real life situation or even in the exams xxx. (Voices from others: but in the recent test I could use some sequences we learned)…. In the recent writing progress test, I wrote the sequences automatically. I didn't have to try hard to think about them but used them quite naturally…. I didn't have intention to use them before I could use them xxx. Maybe because we learned them again and again, and I could automatically use some of these phrases when I had a chance.	Lack of opportunities to use
Effectiveness of visionary techniques		
	TLV: I indeed didn't visualize all the situations in the class, but I could still use five to six phrases in my writing test as well. And it was automatic.	
	Interviewer: Do you have a plan to learn English and feel motivated to learn English?	
	LBTK: Perhaps this method interested me at the beginning because it was strange…. But after that I had to spend more time visualizing the situations….. I can use other learning methods to learn vocabulary such as doing exercises so that I don't have to visualize….	
	Interviewer: After the experiment, do you think it's necessary to have a future self-image?	

	Voices from the group: Yes, yes, yes…	
Positive attitudes toward the learning experience	TLV: …I think I have to pay more attention to my future goals after this program.	
	GTM: …I need to have a clear future self-image to direct my actions toward that image…	
	Interviewer: Do you want to keep the future self-image that you have created and do something so that it will not disappear?	
	HVH: I think the potential benefits of visualization are not limited to learning English …. It helped me when I was faced with problems…. When I thought about my future dream, I was very excited. But when I had difficulties, I started to lose my excitement. The repetitions of different images kept me thinking of my future self-images frequently xxx. I didn't lose the excitement about the self-image that I had created….So its benefits are not limited to mastering 56 sequences. It helped me more than that xxx. I don't think I am learning English as a subject at school, but as a tool to use it in the future, gradually turning it into my own language rather than considering it as an academic skill….	English as one's own language, not a skill
Limitations of the visionary techniques applied	*Interviewer: Do you think this experiment succeeds in raising awareness of the importance of developing your future self-image?*	
	TLV: I think the aim of this experiment is very important and necessary for everyone. But I haven't really applied it to myself xxx. But I agree that the purpose is very good….	
	NLH: This method had some degree of initial success. But you have to improve it xxx. I agree with Hoang that this method is potential...not only in learning English but also in many areas of life…It is very potential and worthy of researching and developing further so that it will be more effective and practical…	Intended efforts
Positive attitudes toward the learning experience	*Interviewer: (explaining the purpose of the question and encouraging idea contribution)*	
	ABTK: The visualizing activities helped me create goals to direct myself to…. I visualized myself talking to people of high positions or travelling abroad. I wanted to speak English better. I have to make efforts to learn better to achieve the goal xxx. And I set goals for myself	Intended efforts
	Interviewer: Have anybody made plans for learning English to achieve your future goals?	
	HVH: Actually…mostly short-term plans. For example, next year I will join the "Eloquence Contest" (this is perhaps a local English-speaking contest popular to Ss) with the English abilities being higher than last year. Next year, I will be able to watch movies without reading subtitles in Vietnamese and I will be able to understand everything in computer games that use English.…I think learning English is not so difficult, and I am improving it every day…	Positive attitudes toward the learning experience
	Interviewer: What is your overall evaluation of the experiment?	
	CVCL: Not mentioning learning English...But previously I read research	

about visualization and I watch a couple of videos….If people do research they will understand the power of visualization, and I find it interesting indeed…. Since studying at the university, I have been practicing the habit of visualizing every day to see what happens xxx. Actually it is really good, because it allows me to have certain directions in my life…As for learning English, I found this technique very exciting because I used to learn vocabulary by writing them on paper which was boring. Learning with pictures like this is interesting.… This method is not only applicable to learning English but it can be helpful in directing my future. I created images or a movie in which I was the main character. I also tried to create happy images…. They were powerful. This helped me be more positive…. I saw myself in the future. I had clear directions, and it was motivating. At that time, I could overcome the most difficult moments….	Creativity in application of the technique Combine visionary technique with motivational technique (games)
LBTK: I think it is more difficult to apply visualization like this in classroom than for self-learning at home….If used in classroom, this technique should be combined with other activities such as interaction and games… NLH: I agree with Linh's opinion… You should combine this method with other methods that use more actions and games…They will complement the weaknesses of the visualization technique….	
CVCL: … I think Ss have to remind themselves to visualize their future selves at home… If you come to my room, you will see my dream board…If I want something, I stick on the board…If you want to visualize something, you have to look at it every day…. For example they can select pictures in this experiment to stick on their board at home so that they could look at them every day. Basing on these pictures, they can remember the sequences as well…The point is they need to have something to remind them of their future self-images every day. …	Reduced interest - Any technique should be applied once or twice
TLV: I think whatever method used to motivate learning, it could only be exciting for one or two weeks xxx. Only one or two people could maintain their excitement and enthusiasm over time… GTM: …Different people in this class have different dreams…..We could put those who share the same dream in the same class …It will be more exciting…We talk about things that interest us….	Conditions to visualize well (partners)
HVH: After the experiment, I felt that the knowledge of all the sequences as well as my ability to visualize had improved. And this showed that the program was successful to me. One thing I would like to add is that, it pretty much depended on the partner I worked with during the experiment that decided what I was thinking…And the quality of my learning and visualization. If he listened to me and I felt that I could trust him, I would be comfortable to visualize, sharing the visions of my future selves and expressing my emotions to him…. ABTK: (agreed with Hoang)…..If I talked about my future self-images with someone who didn't want to share or listen, then I stopped talking….. (The interviewer thanking the participants)	Conditions to visualize well (partners)

Emerging themes and quotes

1. Ability to visualize

Being able to visualize vividly

- I could also see the surroundings in the office. For example, I was in the office. I was standing with a colleague.
  I imagined what you instructed me to. PARTICIPANT V19
- The image I remember most was the one in which I was talking to my wife in English. My to-be wife could also speak English. ...We were travelling together at that time. I could speak English fluently with my wife. We could speak with other people in English xxx. At that time, I could be in my 40s. PARTICIPANT V31
- I could vividly visualize my house in the first session…Even after several weeks, and it was easy for me to remember how it looked like. xxx. That was a big villa. Now I could still remember that house and its surroundings… PARTICIPANT V36.

Being able to visualize as instructed

- I thought this method was new and quite interesting. I was curious about what I was going to learn. …I could visualize what you instructed me to. I could also visualize my future self-images. PARTICIPANT V8

Optimal time for visualization

- I could only concentrate to visualize for about 15-20 minutes. Then I got distracted…I got bored. I couldn't visualize for a long time. PARTICIPANT V32

2. Factors facilitating visualization

Pictures

- Without pictures, I could also visualize at the time of learning, but with pictures, I could remember longer and better. PARTICIPANT V14
- But the good point is when seeing the pictures I could remember some phrases quickly…Remembering their meanings quickly. PARTICIPANT V5
- I preferred using pictures because I felt more interested in the learning activities than without pictures. xxx. When I had to create images by ourselves, in many cases, the images were not as clear and specific or vivid as with the pictures you provided xxx. (Others agree with Hung).
  I like the pictures in the word cards activity because I could focus on what we were learning. When a friend showed me the card, I could remember the sequence better. .. PARTICIPANT V19
- When looking at the pictures, I used multiple senses, so I concentrated on learning. Using multiple senses helped memorize better…
  This visionary technique is potential, even effective… The pictures made me feel more interested in learning vocabulary…. I am a lazy student. This method was interesting. And I wanted to study vocabulary more than I did in the past. I have learned quite a lot of sequences… PARTICIPANT V9

- xxx I liked it when you provided pictures because I could remember the sequences better… in the contexts. …For example, the phrase "in common" in the context of the beach….A group of friends at the beach …. The sequence "in common" used with the picture helped me visualize and remember better. When I recall the picture, I can remember the sequence …. I could feel myself at the beach. If I was at the beach, I felt relaxed. PARTICIPANT V31
- When seeing the pictures relevant to my future career such as being at meetings, I found it easy to visualize. Looking at these pictures, I immediately visualized being a manager or someone like that. I could easily visualize what and how I was talking… And I could speak the sentences easily xxx. I could visualize quite a lot of situations like these. PARTICIPANT V8
- I prefer colourful pictures xxx on my own laptop computers. Indeed right before the exercise activity, I'd already seen their black and white versions from the PowerPoint, so it was interesting to see the colourful versions of those pictures from my computers. The colour made the pictures more vivid and lively, making me remember the materials better. As far as I know, colour helps stimulate our memory xxx. PARTICIPANT V2
- …It was the combination of different versions of the pictures. When you first provided the blurred pictures, my mind had already created some images….Then I met the colourful versions of these pictures in the website, it was easy for me to visualize. PARTICIPANT V29
- I find it difficult to visualize if there were only words ….very difficult… I had to understand the sequence and speak the sentence. I had to remember words and sentences. ...With pictures, I could remember pictures. Then basing on the memory of the pictures to recall the sequences and sentences, and speak the sentence easily… The word cards of the same T without pictures did not help me visualize. Different colourful pictures allowed me to visualize the different scenes... PARTICIPANT V7
- some pictures were pretty unfamiliar to us…I think they were unsuitable for me …and to my imagination. I could use many of the provided pictures for the visualizing tasks, but I did not use some other pictures. Instead, I visualized other situations that suit me and interest me more. I think you can change some pictures. PARTICIPANT V17
  Interviewer: Did you prefer visualizing your future selves with the aid of pictures or without pictures?
  Voices from the group: with pictures

Prompted language contexts

- I could visualize and learn regardless of with or without pictures. The most important thing and also the thing I liked best in this learning technique was presence of the sentences…..These sentences helped me use the sequences grammatically correctly. I made similar sentences xxx. The sentences could be a bit different….The pictures were next to the sentences, so it was easier to visualize. But in some cases, I had to fix my visualization to the pictures…. It was difficult to create different situations.

the daily-life situations, using such sequences as “that sort of thing”, “in common”. These situations were practical to me. I could use them immediately after the lesson because they can be used in many everyday situations…. As for some unfamiliar situations such as those using the sequences “take into account” or “account for”…I was not used to them….I could visualize simple and daily-life situations better …. PARTICIPANT V23

- I think short sentences helped visualize well…. It was hard to understand the meaning of a long sentence… PARTICIPANT V36
- ….The sentence contained words that were easy to pronounce…Words that sounded familiar… Even if it was a long sentence but the pronunciation was easy, it would be easy to remember and visualize using. PARTICIPANT V2
- It is important to immediately understand the sentence or not. If I could barely understand, I could still act and describe it at the learning time. But after that I would forget… PARTICIPANT V7
- There should be fewer sentence contexts. Too many sentences could be confusing. PARTICIPANT V9

Congruence of the pictures and/or prompted language contexts with the students’ current concerning and past experiences

Current concerns: Goals, expectations, interests

- I imagined most vividly the image of myself talking with my foreign friends. These images are the most memorable. PARTICIPANT V5
- If the situations were what I wanted, I could visualize well. But if they were not what I wanted, I could not visualize them well even if I tried to. PARTICIPANT V9
- …I thought visualization was a new topic for the lesson and then we continued to study in a traditional way. But then we practiced visualizing, and I had a lot of ideas for my future selves. And then the activities in the following sessions continued in the similar way…I continued visualizing other topics….I thought there were too many visualizing activities… But I could visualize best in the situations that excited me. In those situations, I could express myself best.

  I skipped some situations that did not interest me. For the situations that impressed me, I visualized my self-images not only in the future but also in the past. Xxx. Each episode I visualized was very vivid. I was fascinated at that time. And I asked myself what I was doing in the present. …And whether it was related to my past or my future. What I really wanted. I was impressed….I think we don’t need to use up to 56 situations. We only need those that can really influence us…. PARTICIPANT V18
- I think the familiar pictures that I used to see or experience in real life…. If the pictures depict foreign lives that are not familiar in my country, I found it hard to visualize myself being in…. These pictures were less effective….Visualization was more effective as soon

as I had formed a habit of doing so xxx. Once I had the habit, visualizing became easier and more effective. Participant V3

- For me I think the image of myself talking with my colleagues in the office are the most memorable because they are related to my own future, uh… It is certain that in my job, I will communicate with colleagues in my country and in other countries. I will have to use English a lot. I think if in the future I can use English like I imagined I could, it would be very useful in my job… PARTICIPANT V19
- Perhaps when I saw a person speaking to the audience in an event…And I also wanted to be as good as that person. And I visualized that in the future I would also stand in front of the audience speaking
  My biggest goal now is my professional life … What will I have to do at work after graduation… I prefer these future situations to those with friends and family xxx.
  The audience also looked at me admiringly like I admired the person in the event. PARTICIPANT V4
- The image I remember most was the one in which I was talking to my …er…wife in English (woos, laughs, noises). My to-be wife could also speak English. We were travelling together at that time. I could speak English fluently with my wife. We could speak with other people in English xxx (jokes and laughs). At that time, I could be in my 40s xxx (laughs and chats)
  xxx I liked it when you provided pictures because I could remember the sequences better… in the contexts. …For example, the phrase "in common" in the context at the beach….A group of friends at the beach …. The sequence "in common" used with the picture helped me visualize and remember better. When I recall the picture, I can remember the sequence …. I could feel myself at the beach. If I was at the beach, I felt relaxed. PARTICIPANT V31
- I remember images with friends. My friends are studying English with me now…. Not all families use English for communication…. PARTICIPANT V17
- I also want to visualize profession-related situations because similar to Hoang Anh, I am now already experiencing talking with English with my friends. PARTICIPANT V36
- I think I can imagine something I like to have or wish to have but I don't have now. For example, I liked a house, and it was easier for me to visualize a house …
  I want to imagine talking with my family members…The purpose of learning is to have a stable job. I would like a happy future family. Although work is important, the final goal is to have a happy family xxx. If a man works a lot, and making a lot of money, but he does not have a happy family, he is not happy after all. And he may die soon... I remembered reading a story of a foreigner man, er, a German man… I don't remember very well. He came to Vietnam and knew with a girl working in a traditional dress shop. He said he loved her and they got married. Now they are selling bread and hotdogs in the streets in HCM city… and live happily.…A happy family is crucial… PARTICIPANT V7

- My view is that I prefer visualizing being successful in my professional situations first… because I think success in jobs is the foundation for happiness and family and friendship in the future….
  It was difficult to visualize 56 situations. We could connect 7-8 situations that are related to each other…. And create a story basing on them….This would interest me more xxx. In our lessons, we had only 30'-1 minute to both visualize and speak each sentence, it was a bit too fast. .. Another thing is that some sentences were not really exciting. You should include funny sentences. PARTICIPANT V32
- I think we have different priorities in life. At one time, family is everything. At some other time, profession is important. ..I visualized all of the future situations because they are equally important to me
  Only some, but not all … because I could only visualize my self-images clearly in the situations that I was interested in…. And the time allowed for visualization of each situation was limited. Sometimes, I couldn't visualize the situations that I had to….
  When I was encountering a problem and my feelings were up and down. At that time I wish I could be in the visualized situations…And if I did something now, I could be able to become someone or be somewhere in the future. At that time, I could visualize a clear self-image.
  The images of being a successful professional in the future…. I liked visualizing the images of the things I really wanted for my own future xxx. And I could visualize when I was relaxed …and did not compare myself with others xxx I was confident…I think it is important to have a belief that there's luck around me… PARTICIPANT V2
- I agreed with ADB in using familiar images…I think this could help memorize vocabulary better because they were linked to something I had already known...To answer your question… I could remember very well three pictures. A picture of a group of young people standing at a party… The party was luxurious. The place was also luxurious. Another image was a man standing in the office talking to his colleagues. The other image was a group of colleagues standing discussing an issue, in which there was a person who seemed to be the leader…. Using pictures of familiar situations could help me memorize vocabulary better because they were linked to something I had already known…. I could also visualize my future self-images because I wanted to be like the people in the pictures. I wanted to own that company. I wanted to be like the leader who stood out, chairing the meeting. And I also wanted to be in luxurious places such as the party. I could memorize these situations and images because they were what I wanted... These images gave me strong feelings. … I could remember more images at work. Perhaps from now till I am 30, I will focus on work… I will prioritize studies and work….I will think of work more often. So when I saw these images, it seemed that I paid more attention to them ….I remembered more professional images. PARTICIPANT V14

- Like Nam, I prefer sequences and situations that occur daily now. When was not in class, I sometimes remembered and thought about the sequences I learned in class xxx. When I were learning in class, I was interested in job-related situations such as one situation using the sequence "carry out"….When I encountered similar situations in real life out of the class, I could remember the sequences better xxx. I could also see my future-images, but in near future…If you didn't provide pictures and asked us to generate images by ourselves, I could not visualize...I could only remember the meanings… PARTICIPANT V11
- I like visualizing the situations with friends and family because I contacted with my friends a lot every day... The phrases and sentences about friends and family were easy to use and remember. PARTICIPANT V23
- I like both images of friends and family…Visualizing images of friends and family leads to positive and happy images. I often remember optimistic images better than pessimistic ones. PARTICIPANT V38
- When I saw the images that were similar to my future dreams such as becoming a successful businessman… I could easily visualize my future selves… because I had feelings with these situations. xxx If it was difficult for me to visualize, I couldn't feel my emotions…. PARTICIPANT V24
- It was easier to visualize if the images were related to myself….
  When looking at the pictures, I used multiple senses, so I concentrated on learning. Using multiple senses helped memorize better… PARTICIPANT V9
  The self-image could be in the future. But it did not have to be my dream that I could visualize well, but it was more related to my career orientation. For example, I am studying information technology, so I like visualizing the future situations that are related to a career in technology such as making a presentation at a technology conference. The sentences in the future work-situation interested me. …They made me feel motivated to learn and develop myself...So I think the self-image is more related to my future direction than the history…. PARTICIPANT V13
- When seeing the pictures relevant to my future career such as being at meetings, I found it easy to visualize. Looking at these pictures, I immediately visualized being a manager or someone like that. I could easily visualize what and how I was talking… And I could speak the sentences easily xxx. I could visualize quite a lot of situations like these. PARTICIPANT V8
- I agreed with Nam…The situations that were like my future goals excited me xxx. I dreamed of being successful in my future job. I would like to become a manager of a certain company or a successful businessman. xxx. In the future, I was able to speak English fluently. PARTICIPANT V39
- I remember several pictures, for example, a picture at a party. I visualized being at a party. …If my friends and I would be happy like that, it would be interesting…When I saw a picture of a man thinking about a lover…. I felt sad when thinking that maybe in

the future my lover would also say that xxx. Apart from job-related situations, I could also visualize situations being with my friends and family members… PARTICIPANT V1

- I could visualize a lot of situations related to any topics. For example at what age I would take my parents to go on holidays abroad…At a party when I would ask my friends about their jobs xxx.
  If we connect the sentences together and create a story, it would be more interesting and effective. The story could be about anything rather than limiting to the topics of family, friends, or work…
  I agreed with Giang…We can make our own sentences and search our own pictures. This may interest us more than those prepared for us…. PARTICIPANT V22
- I think that the successful self-image motivated me to be more interested in learning… …I could visualize most clearly the situations when I was kind of at the peak of my profession. (Irrelevant information removed). For example, at that time I visualized becoming somebody like an interpreter…but an interpreter for important people. … I could still remember that. PARTICIPANT V20
- I think most can determine their specific future goals. But once you have already determined the goal but do not know how to realize it, you will gradually get bored. Learning is meaningless…Sometimes it wastes a lot of time…I only learned the lessons in class. …I could only maintain interest to learn in the class in the first few days. But this interest reduced over time xxx. I learned from your lesson at the beginning of the week and did not practice them frequently. I had to wait until the next week to meet them again. So I think my interest in learning decreased…. PARTICIPANT V26
- It did not matter how many sequences or sentences to learn. But with the pictures and sentences provided by others, it would not be much different from learning by heart. So if I make sentences and search pictures by myself, it will be much easier to remember. We can make a series of events to create a story xxx. It would be easy to remember….In some cases, the pictures had nothing to do with me, and I did not like them.
  PARTICIPANT V12

<u>Past experiences</u>

- The situation I used the phrase "from time to time". I met a friend at the pub and he talked to me…Er.. in English. I spoke the sentence "From time to time, I still remember her" xxx. This situation is special….Because I had some feeling in that situation. Xxx. If I had imagined talking with my colleague, there would have been nothing special about that. When I talked to my friend, I felt sad. That feeling automatically occurred. I could not explain.
  PARTICIPANT V38
- I agreed with Anh Bui Duc in using familiar images…I think this could help memorize vocabulary better because they were linked to something I had already known...To answer your question… I could remember very well three pictures. A picture of a group

of young people standing at a party… The party was luxurious. The place was also luxurious. Another image was a man standing in the office talking to his colleagues. The other image was a group of colleagues standing discussing an issue, in which there was a person who seemed to be the leader…. I could visualize those images because I wanted to be like the people in the pictures. I wanted to own that company. I wanted to be like the leader who stood out, chairing the meeting. And I also wanted to be in a luxurious place such as the party. PARTICIPANT V14

- some pictures were pretty unfamiliar to us…I think they were unsuitable for me …and to my imagination. I could use many of the provided pictures for the visualizing tasks, but I did not use some other pictures. Instead, I visualized other situations that suit me and interest me more. I think you can change some pictures.
- When looking at the sentences without pictures, I could partly visualize. But with pictures, I could fully visualize the image of my future selves….I remembered the past to visualize some situations. For example in the past I used to work with my friends, so I could visualize the sequence "in conjunction with"… I am not sure whether I could become a leader or someone in the future. PARTICIPANT V17
- I could visualize the situations that were related to my past and experiences xxx. Those that had nothing to do with my past were rather difficult for me to visualize… PARTICIPANT V9
- Uh, If the images were related to an image I have experienced in the past…The image that in the past I wished I would become. It'd be easy for me to visualize the image I've experienced… PARTICIPANT V36
- I found it easy to visualize if I had already thought about that situation in the past xxx. I had wished I could become influential persons as those in the pictures… PARTICIPANT V32

Peers

- Sometimes I needed to talk to my partner Hieu in Vietnamese …to understand each other a little bit before visualizing and acting the visualized situations. … PARTICIPANT V7
- One thing I would like to add is that, it pretty much depended on the partner I worked with during the experiment that decided what I was thinking…And the quality of my learning and visualization. If he listened to me and I felt that I could trust him, I would be comfortable to visualize, sharing the visions of my future selves and expressing my emotions to him…. PARTICIPANT V18
- (agreed with Hoang)…..If I talked about my future self-images with someone who didn't want to share or listen, then I stopped talking….. PARTICIPANT V1

Students feeling relaxed

- …I find it easy to visualize and act in the visualized situations when I was most relaxed and a bit dreamy, a bit imaginative…. PARTICIPANT V25
- The images of being a successful professional in the future…. I liked visualizing the images of the things I really wanted for my own future xxx. And I could visualize when I

was relaxed …and did not compare myself with others xxx I was confident…I think it is important to have a belief that there's luck around me… PARTICIPANT V2

- I thought the quality of the first-time visualization was poor. ..I could only visualize the situations in the learning sessions when my mind was empty…I was relaxed and thinking of nothing else xxx. When I had the only purpose of learning at class…. PARTICIPANT V32

Importance of frequent reminders

- Yes. But it is not clear now because this was the first time I'd imagined my future selves… PARTICIPANT V19
- Yeah…I could imagine the surroundings, the furniture, xxx, my future selves speaking English. I could see the T of the surroundings as well. But the image got blur gradually because I didn't imagine quite often. … PARTICIPANT V31

Relaxing music

- Music helps me visualize better. PARTICIPANT V2

Students' willingness to visualize

- …When you gave us the learning materials, I visualized to learn them. It was me who decided to visualize or not. If I ordered myself to visualize, I started to visualize. If I didn't order my brain to visualize, I only looked at the sentences and learned the meanings of the sequences. … PARTICIPANT V14

Vocabulary knowledge

- But I did not have enough vocabulary to express what I wanted to say in English in the visualized situations, so my speaking was not very fluent… PARTICIPANT V7

3. Effects of the visionary techniques

Positive attitudes toward the learning experience and benefits beyond the learning outcomes

- I found this technique very exciting because I used to learn vocabulary by writing them on paper which was boring. Learning with pictures like this is interesting.… This method is not only applicable to learning English but it can be helpful in directing my future. I created images or a movie in which I was the main character. I also tried to create happy images…. They were powerful. This helped me be more positive…. I saw myself in the future. I had clear directions, and it was motivating. At that time, I could overcome the most difficult moments ….
  I thought being able to speak English is not a very difficult task if we make efforts. PARTICIPANT V6

  <u>Considering English to be one's own language, not an academic skill</u>
  I think the potential benefits of visualization are not limited to learning English …. It helped me when I was faced with problems…. When I thought about my future dream, I was very excited. But when I had difficulties, I started to lose my excitement. I don't

think I am learning English as a subject at school, but as a tool to use it in the future, gradually turning it into my own language rather than considering it as an academic skill….

After the experiment, I felt that the knowledge of all the sequences and my ability to visualize had improved. This program was successful to me. One thing I would like to add is that, it pretty much depended on the partner I worked with during the experiment that decided what I was thinking…And the quality of my learning and visualization. PARTICIPANT V18

- I think when visualizing my future self-image, it was like a magnet that attracted me to that direction, giving me motivation to move forward to that direction. If I had not visualized, there would have been no goal to direct myself. I think this can also propel me to succeed in learning in the future….It helps me make more efforts in the future so that I can succeed. PARTICIPANT V38
- I could easily visualize my future house because it was a co-incidence that my family's discussing about the drawings of the to-be-built house… And thus I could contribute ideas in discussion with my parents on the construction of the house. We added quite a lot of ideas to the house construction due to my visualization… I think that visualization in this way was pretty interesting…Generally I can see its immediate benefits xxx.

  I am an imaginative person. ..I usually visualize many things every day. I think visualizing in the classroom can reduce the pressure of getting grades…. I like the activity of visualizing my future house in the first session. ..

  When I was encountering a problem, and my feelings were up and down. At that time I wish I could be in the visualized situations…And if I did something now, I could be able to become someone or be somewhere in the future. At that time, I could visualize a clear self-image. PARTICIPANT V2
- I could vividly visualize my house in the first session…Even after several weeks, and it was easy for me to remember how it looked like. xxx That was a big villa. Now I could still remember that house and its surroundings…

  (Interviewer: Do you think you will quickly forget that house?)

  No. I think I will remember it for a very long time. PARTICIPANT V36
- I do believe in the benefits of imagination because I used to read about it. I think apart from helping me remember vocabulary, it may affect my own future. I believe so follow the technique.

  The visualization technique would be easier if you used video. In the videos, people communicate with each other xxx. We would know how the sequences are used…We can learn by heart the conversation with new vocabulary in the video….and we see people expressing their emotions that we can learn from xxx. Watching films is easier to remember… PARTICIPANT V14
- This visionary technique is potential, even effective… The pictures made me feel more interested in learning vocabulary…. I am a lazy student. This method was interesting.

And I wanted to study vocabulary more than I did in the past. I have learned quite a lot of sequences… PARTICIPANT V9

- I am a kind of person who likes to think about future. The first session impressed me much. I was tired on that day….But I could still visualize my future self-image being in all of the 56 situations. I imagined that I was at 30 years and working with people holding high positions. I felt happy… Visualization motivated me to study.
- The visualizing activities helped me create goals to direct myself to…. I visualized myself talking to people of high positions or travelling abroad. I wanted to speak English better. I have to make efforts to learn better to achieve the goal xxx. And I set goals for myself. PARTICIPANT V1

Future desired communication does not need to occur in English-speaking countries

- For me I think the image of myself talking with my colleagues in the office are the most memorable because they are related to my own future, uh… It is certain that in my job, I will communicate with colleagues in my country and in other countries. PARTICIPANT V19

Emotion

- I agreed with Anh Bui Duc in using familiar images…I think this could help memorize vocabulary better because they were linked to something I had already known...To answer your question… I could remember very well three pictures. A picture of a group of young people standing at a party… The party was luxurious. The place was also luxurious. Another image was a man standing in the office talking to his colleagues. The other image was a group of colleagues standing discussing an issue, in which there was a person who seemed to be the leader…. Using pictures of familiar situations could help me memorize vocabulary better because they were linked to something I had already known…. I could also visualize my future self-images because I wanted to be like the people in the pictures. I wanted to own that company. I wanted to be like the leader who stood out, chairing the meeting. And I also wanted to be in luxurious places such as the party. I could memorize these situations and images because they were what I wanted... These images gave me strong feelings.
- When I saw the images that were similar to my future dreams such as becoming a successful businessman… I could easily visualize my future selves… because I had feelings with these situations. xxx If it was difficult for me to visualize, I couldn't feel my emotions…. PARTICIPANT V24
- Indeed it was difficult to visualize and have emotions… I don't know whether we need to practice for a long time to have emotions xxx. PARTICIPANT V15
  Interviewer: Why could you remember this sentence so well?
- Because I had some feeling in that situation. xxx. If I had imagined talking with my colleague, there would have been nothing special about that. When I talked to my friend, I felt sad. That feeling automatically occurred. I could not explain. PARTICIPANT V38

Feared possible selves having effects on learning motivation

- I felt sad and sorry for that man. Maybe when he was at college, he didn't learn English. He invested his time in his passion…He invested in his specialized area. I think English is increasingly important now because foreign companies are coming to Vietnam to do business… PARTICIPANT V16
- It was his mistake to decide to apply to a foreign company when his English was poor. He should have been aware of his English abilities to choose what company to apply to. …If his English was poor, he shouldn't have applied for that foreign company. He should have applied to a local company. …Through the story, I know that I must have English abilities to be able to apply to a foreign company… I know this, so I have to prepare for myself soon… to be better-prepared than him.
  I thought being able to speak English is not a very difficult task if we make efforts. ….That man did not have a goal of speaking English well when he was at the university….I would have to learn English communication as soon as possible…. Indeed I had plans for what to do at home, what to do in class, but now I haven't realized the plan. PARTICIPANT V7
- When I heard the story, I didn't think about much about him. I thought about myself…. I thought that I had to be more hard-working, making more efforts…. If I did not improve my English, I would not be able to work for such a company…..in the future I could fail like him….I felt worried about my own failing scenario instead of thinking about his stuff. PARTICIPANT V35
- I thought after that failure. He could be more motivated to improve his English… PARTICIPANT V4
- I feel worried about my own future…. PARTICIPANT V32
- I also felt motivated. If I work in a professional working environment, and I am a professional, I will meet international colleagues and friends coming from all over the world. And so I feel motivated to learn how to speak English fluently. But at the same time I feel worried …a bit fearful…because my English is not good now. PARTICIPANT V14

Intended efforts

- Actually…mostly short-term plans. For example, next year I will join the "Eloquence Contest" (this is perhaps a local English-speaking contest popular to Ss) with the English abilities being higher than last year. Next year, I will be able to watch movies without reading subtitles in Vietnamese and I will be able to understand everything in computer games that use English.…I think learning English is not so difficult, and I am improving it every day… PARTICIPANT V18
- The visualizing activities helped me create goals to direct myself to…. I visualized myself talking to people of high positions or travelling abroad. I wanted to speak English better. I have to make efforts to learn better to achieve the goal xxx. And I set goals for myself ….PARTICIPANT V1

- I think when visualizing my future self-image, it was like a magnet that attracted me to that direction, giving me motivation to move forward to that direction. If I had not visualized, there would have been no goal to direct myself. I think this can also propel me to succeed in learning in the future….It helps me make more efforts in the future so that I can succeed. PARTICIPANT V38

Engagement

- When looking at the pictures, I used multiple senses, so I concentrated on learning. Using multiple senses helped memorize better… PARTICIPANT V9
- I could remember more images at work. Perhaps from now till I am 30, I will focus on work… I will prioritize studies and work….I will think of work more often. So when I saw these images, it seemed that I paid more attention to them ….I remembered more professional images. PARTICIPANT V14
  Interviewer*:* Do you think this learning technique helps you concentrate better than the online vocabulary learning quiz you used to use?
- Voices from the participants: Learning with the printed word cards helped concentrate much better than learning with the online quiz….

Improvement in generic visionary skills

- After the experiment, I felt that the knowledge of all the sequences and my ability to visualize had improved. This program was successful to me. One thing I would like to add is that, it pretty much depended on the partner I worked with during the experiment that decided what I was thinking…And the quality of my learning and visualization. If he listened to me and I felt that I could trust him, I would be comfortable to visualize, sharing the visions of my future selves and expressing my emotions to him….
  I think the potential benefits of visualization are not limited to learning English …. It helped me in my biggest problem…. When I thought about my future dream, I was very excited at that time. But when I had difficulties, I started to lose my excitement. PARTICIPANT V18
- I could remember more images at work. Perhaps from now till I am 30, I will focus on work… I will prioritize studies and work….I will think of work more often. So when I saw these images, it seemed that I paid more attention to them ….I remembered more professional images. PARTICIPANT V14
- I could vividly visualize my house in the first session…Even after several weeks, and it was easy for me to remember how it looked like. xxx That was a big villa. Now I could still remember that house and its surroundings…
  (Interviewer: Do you think you will quickly forget that house?)
  No. I think I will remember it for a very long time. PARTICIPANT V36

Learning outcomes

- I did not have chances to use these phrases in real life situation or even in the exams xxx. (Voices from others: but in the recent test I could use some sequences we learned)….In the recent writing progress test, I wrote the sequences automatically. I didn't have to try hard to think about them but used them quite naturally…. I didn't have intention to use them before I could use them xxx. Maybe because we learned them again and again, and I could automatically use some of these phrases when I had a chance….. PARTICIPANT V9
- I indeed didn't visualize all the situations in the class, but I could still use five to six phrases in my writing test as well. And it was automatic.
  I indeed didn't visualize all the situations in the class, but I could still use five to six phrases in my writing test as well. And it was automatic. PARTICIPANT V32
- Like Nam, I prefer sequences and situations that occur daily now. When was not in class, I sometimes remembered and thought about the sequences I learned in class xxx. PARTICIPANT V11
- Interviewer: What is your overall evaluation of the experiment? Do you think we should use visualization in learning?
  Voice from audiences: Yes…We can learn better.
- Yes. Because after the sessions, I found it easy to learn and memorize the materials. PARTICIPANT V35
- This technique seems to be a slower way of learning vocabulary than the other vocabulary strategies I'd learned, but I could remember the sequences easier and better….I don't know whether the effectiveness of this technique can be durable…. PARTICIPANT V4
- I did not have chances to use these phrases in real life situation or even in the exams xxx. (Voices from others: but in the recent test I could use some sequences we learned)….In the recent writing progress test, I wrote the sequences automatically. I didn't have to try hard to think about them but used them quite naturally…. I didn't have intention to use them before I could use them xxx. Maybe because we learned them again and again, and I could automatically use some of these phrases when I had a chance….. PARTICIPANT V9
- …the daily-life situations, using such sequences as "that sort of thing", "in common". These situations were practical to me. I could use them immediately after the lesson because they can be used in many everyday situations…. As for some unfamiliar situations such as those using the sequences "take into account" or "account for"…I was not used to them….I could visualize simple and daily-life situations better …. PARTICIPANT V23

<u>Roles models in the visionary technique</u>

- I saw and heard about them just to know more about them. …But I didn't consider them being my role models …. I did not want to be like them or to follow what they were

doing. My achievements would depend on my ways and abilities….Not this man or that man's way. PARTICIPANT V7

Interviewer*:* What about others? Do you have any role models who can speak English well and you want to be like them?

No answers

Limitations of the visionary techniques applied

No interest or reduced interest in visualization

- I didn't want to believe. …I used to read the methods of learning English vocabulary… We can relate the word with an image to learn it. But I don't usually apply this method because I had to think a lot… PARTICIPANT V21
- I think the aim of this experiment is very important and necessary for everyone. But I haven't really applied it to myself xxx. But I agree that the purpose is very good….
  I think whatever method used to motivate learning, it could only be exciting for one or two weeks xxx. Only one or two people could maintain their excitement and enthusiasm over time… PARTICIPANT V32
- I think most can determine their specific future goals. But once you have already determined the goal but do not know how to realize it, you will gradually get bored. Learning is meaningless…Sometimes it wastes a lot of time…I only learned the lessons in class. …I could only maintain interest to learn in the class in the first few days. But this interest reduced over time xxx. I learned from your lesson at the beginning of the week and did not practice them frequently. I had to wait until the next week to meet them again. So I think my interest in learning decreased….
  I think most can determine their specific future goals. But once you have already determined the goal but do not know how to realize it, you will gradually get bored. Learning is meaningless…Sometimes it wastes a lot of time…I only learned the lessons in class. …I could only maintain interest to learn in the class in the first few days. But this interest reduced over time xxx. I learned from your lesson at the beginning of the week and did not practice them frequently. PARTICIPANT V26

Lack of opportunities to use

- I did not have chances to use these phrases in real life situation or even in the exams xxx PARTICIPANT V9

Repetitions of visualizing activities may be boring

- The repetitions of the same items were a bit boring… PARTICIPANT V30
  The 56 situations were not related to each other. The first session interested me much, but the following sessions did not interest me as much as the first…. PARTICIPANT V22
- xxx I think it was generally effective (irrelevant information)…But we should learn a few sequences, for example seven sequences, in the first session, and then we add another

seven phrases in the second session, and so on instead of repeating the same phrases in every session. PARTICIPANT V20

- I thought visualization was a new topic for the lesson and then we continued to study in a traditional way. But then we practiced visualizing, and I had a lot of ideas for my future selves. And then the activities in the following sessions continued in the similar way…I continued visualizing other topics….I thought there were too many visualizing activities… But I could visualize best in the situations that excited me. In those situations, I could express myself best. PARTICIPANT V18

4. Suggestions for improvement

Students selecting pictures or prompted contexts by themselves

- We can find the pictures by ourselves. Finding pictures stimulate us. We can put ourselves in the situations…. Visualization will be faster. PARTICIPANT V5
- You could give us the phrases and the definitions and we could create the sentences and the images by ourselves. PARTICIPANT V7
- You should not have told us how many contexts or sequences we were going to learn. PARTICIPANT V35
- It did not matter how many sequences or sentences to learn. But with the pictures and sentences provided by others, it would not be much different from learning by heart. So if I make sentences and search pictures by myself, it will be much easier to remember. We can make a series of events to create a story xxx. It would be easy to remember….In some cases, the pictures had nothing to do with me, and I did not like them. PARTICIPANT V12
- I agreed with Giang…We can make our own sentences and search our own pictures. This may interest us more than those prepared for us. PARTICIPANT V22
- My view is that 56 situations were fine. But they were not related to each other. They were about different topics. We could have one session exclusively used for visualizing about future jobs. Another session was for family…. PARTICIPANT V1
- I agreed with Kim Anh. Each topic for each session will be better…This helps us focus and brings about new experience. PARTICIPANT V18
- I am afraid we cannot remember the sequences if we learned the way Hoang suggested…. PARTICIPANT V9

Combining target items and prompted language contexts in the same topic, scene or story

- You can divide the 56 small situations into only a few, for example three scenes. And in each scene, many phrases can be used. In each session, Ss can imagine the images and conversations in these scenes. The scenes can be repeated in the next sessions. … (the interviewer appreciated the idea contribution) PARTICIPANT V20
  (Interviewer: What about others? What suggestions do you offer to enhance the visualizing experience?)

- Time allowed for the visualizing activities was not sufficient for me…. Also, we could connect or group situations in some way. For example, grouping situations related to eating and partying together. When we remember each phrase in a situation, we may remember phrases in these related situations. You can group noun phrases or verb phrases together as well.
  We may find it easier to visualize a group of connected images in which several sequences are used rather than learning many unconnected sequences…. PARTICIPANT V21
- Grouping the sequences… We may learn fewer sequences, such as from 5-10 sequences each session… The sequences are related to each other. PARTICIPANT V10
- I could visualize a lot of situations related to any topics. For example at what age I would take my parents to go on holidays abroad…At a party when I would ask my friends about their jobs xxx. If we connect the sentences together and create a story, it would be more interesting and effective. The story could be about anything rather than limiting to the topics of family, friends, or work.
  I want to clarify Duc's opinion. I think we could use all 56 sequences in a topic… And use them again in another topic. …The more we meet the phrases, the better we learn them. …If we use each sequence only once in each topic, that is not enough. PARTICIPANT V22
- It was difficult to visualize 56 situations. We could connect 7-8 situations that are related to each other…. And create a story basing on them….This would interest me more xxx. In our lessons, we had only 30'-1 minute to both visualize and speak each sentence, it was a bit too fast. .. Another thing is that some sentences were not really exciting. You should include funny sentences.
  I think for each topic we should use only 20-30 sequences …In the next learning session, we repeat part of these 30 sequences and sentences, and add some more to learn a new topic…. This way could interest us more because in each session we remember the old and learn the new things. PARTICIPANT V32
- I think you could combine the images into a series of connected images… and use them like stories in computer games. You could use music to add to the images… This would help better visualization. ….When we combine a series of the images to create a story, we would remember the materials better. PARTICIPANT V4

Using moving images such as videos or movies to support visualization

- We can find the pictures by ourselves. Finding pictures stimulate us. We can put ourselves in the situations…. Visualization will be faster. PARTICIPANT V5
- Use moving images …such as watching travelling scenes in Venice and visualizing ourselves travelling in Venice… PARTICIPANT V4
- You could use movies and famous TV shows with popular actors and actresses acting. This could help visualize better because they are familiar. I found it pretty hard to get myself familiar with strange people and images…. PARTICIPANT V10

- The visualization technique would be easier if you used video. In the videos, people communicate with each other xxx. We would know how the sequences are used…We can learn by heart the conversation with new vocabulary in the video….and we see people expressing their emotions that we can learn from xxx. Watching films is easier to remember….I prefer videos. PARTICIPANT V14

Using games and competitions

- We need to add more excitement to the learning experience such as small rewards, mini games… PARTICIPANT V39
- We may add games and warming up activities to stimulate the atmosphere and the experience could be more exciting….
  I agree with Linh's opinion… You should combine this method with other methods that use more actions and games…They will complement the weaknesses of the visualization technique…. PARTICIPANT V23
- I agreed that we should add games to maintain interest…. PARTICIPANT V22

Allowing more time for each visualization episode

- The time allowed for visualization was a bit too limited. In some situations, I didn't have enough time to visualize. But the good point is when seeing the pictures I could remember some phrases very fast…Remembering their meanings quickly. PARTICIPANT V5

Interview data for the visionary condition

Participant ID	Name	Class ID
Participant V1	ABTK	1121
Participant V2	ACH	1114
Participant V3	ADB	1117
Participant V4	ALH	1114
Participant V5	BNA	1113
Participant V6	CVCL	1121
Participant V7	CVX	1114
Participant V8	DNV	1121
Participant V9	DBH	1121
Participant V10	DPT	1117
Participant V11	DNX	1117
Participant V12	GTM	1121
Participant V13	HNTT	1121
Participant V14	HPTH	1117
Participant V15	HDP	1117

Participant V16	HVD	1114
Participant V17	HDH	1117
Participant V18	HVH	1121
Participant V19	HDV	1113
Participant V20	HDTT	1113
Participant V21	LBH	1117
Participant V22	LBTK	1121
Participant V23	NLH1	1121
Participant V24	NLH2	1117
Participant V25	NLV	1114
Participant V26	NTTM	1121
Participant V27	OPT	1121
Participant V28	PTL	1117
Participant V29	QTH	1114
Participant V30	THQ	1114
Participant V31	TTT	1113
Participant V32	TLV	1121
Participant V33	TTN	1114
Participant V34	TMTT	1117
Participant V35	TVV	1114
Participant V36	TTD	1114
Participant V37	TLV	1114
Participant V38	TNT	1113
Participant V39	VNK	1121
Participant V40	VNT	1117

Note. The names and class IDs of the participants were coded to maintain the anonymity