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Master's Thesis

Applying Cognitive Linguistics in the EFL Classroom

Master in Cultural and Language Didactics

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Preface

The subject of this thesis grew out of a handful of linguistics lessons during my Master's program, where I developed a fascination of the field. Though the fascination started with the Noam Chomsky's Universal Grammar and Pinker's book *The Language Instinct*, I swiftly discovered the works of Georg Lakoff, especially *Women, Fire, and Dangerous Things,* and the reading list has increased since then. Unsurprisingly, the meager reading I had been doing proved to only scratch the proverbial surface of the immense entity that is cognitive linguistics, and a budding interest turned out to become an extensive project. Since I was a student of English didactics, I envisioned that the wealth of knowledge in this seemingly prosperous field of research had to have some aspects applicable to the teaching scenario. Furthermore, as a trained teacher, I firmly believe that theory and practice should be intimately linked, and feed into each other. Being familiar with a teacher who – like many other primary school teachers – is rich on experience, but lacks formal education, I saw an opportunity to integrated my theoretical fascinations in an authentic context.

This thesis has been a process of discovery and learning, and it would have been absolutely impossible without the aid of several people. First, a thank you to Juliet Munden, who gave me valuable advice as to how I could collect my data when I first approached her with my new-found interests. At the time, this project was hardly more than an idea, and her initial advice gave impetus to the entire research. Also, I want to thank fellow student Torleif Kveset for offering a critical pair of eyes and giving sound feedback throughout the process. Crucially, I want to express my utmost gratitude to the teacher who let me disturb her classroom and the pupils who graciously accepted my presence. Their open minds and positive attitudes made my visits delightful, informative and helpful; without them, this project would not have happened. To my supervisor, Christina Sandhaug, who has gone far beyond expectations and requirements in her guidance, feedback, comments and advice, 'thank you' is hardly sufficient. Her interest and involvement in this project has been invaluable. Lastly, I want to thank Lana Kragulj for her love, patience, helpful feedback and continuous support.

Hamar, June 2017

Petter Hagen Karlsen

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Abbreviations

CLT – Communicative Language Teaching

L1 – First language

L2 – Second language

TPR – Total Physical Response

Abstract

Title: Applying Cognitive Linguistics in the EFL Classroom

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This thesis explores cognitive science and linguistics to connect theory and research on cognition to vocabulary teaching in the EFL classroom. In 2016, the Norwegian Ministry of Education and Research proposed a revision of Kunnskapsløftet, based on a report by Ludvigsen-utvalget, which had a focus on deep-level learning (Kunnskapsdepartementet, 2016). This proposition contributed to the background of this thesis. The thesis question was: "How can research in cognitive linguistics be applied to teaching vocabulary in the EFL classroom?", which also entailed a comparison to authentic teaching practice, and the exploration of possibilities and challenges with implementing a cognitive linguistics framework in the classroom. The research was conducted through extensive reading of theory and previous studies, which became the basis of twelve lesson plans with a cognitive linguistics foundation. To relate the research to an authentic teaching scenario, a 4th grade teacher was observed for three weeks in her regular English teaching practice. During an additional three-week period, the same 4th grade teacher implemented the lesson plans based on cognitive linguistics in her classroom, a process which was also observed. At the end of the second observation period, a reflection note was filled out by the teacher to gain her perspectives on the implementation. The study found that cognitive linguistics promotes deep-level learning by approaching lexical items as concepts and categories, and by having the pupils actively engaging with the language through communication and association exercises. The study also suggested that knowledge of cognitive linguistics entails a systematic view of language, in which English can be taught systematically and incrementally, at various levels of abstraction. The main challenges were the heightened requirements of time and pupil proficiency during the cognitive linguistics-based lessons.

Norsk Sammendrag

Tittel: Anvendelse av kognitive lingvistikk i EFL-klasserommet

Forfatter: Petter Hagen Karlsen

År: 2017

Sider: 101 (uten vedlegg)

Denne oppgaven utforsker kognitive forskning og lingvistikk for å sammenkoble teori og forskning på kognisjon med vokabularundervisning i et EFL-klasserom. Kunnskapsdepartementet foreslo i 2016 en revisjon av Kunnskapsløftet basert på en rapport fra Ludvigsen-utvalget, som hadde fokus på dybdelæring (Kunnskapsdepartementet, 2016). Dette forslaget medvirket til denne oppgavens bakgrunn. Forskningsspørsmålet var: «Hvordan kan forskning innen kognitiv lingvistikk anvendes i vokabularundervisning i et EFL-klasserom?», hvilket også innebar en sammenligning med autentisk undervisningspraksis, samt utforskning av muligheter og utfordringer ved implementeringen av et kognitivt lingvistisk rammeverk i klasserommet. Studien ble gjennomført ved omfattende lesing av teori og tidligere forskning, hvilket ble basisen for tolv undervisningsopplegg. For å relatere forskningen til en autentisk undervisningssituasjon ble en fjerdeklasselærer observert i tre uker gjennom hennes normale praksis. Under ytterligere tre uker ble undervisningsoppleggene implementert; en prosess som også ble observert. Ved slutten av siste observasjonsperiode fylte læreren ut et refleksjonsnotat for å synliggjøre hennes perspektiv på implementeringen. Studien fant ut at kognitiv lingvistikk promoterer dybdelæring ved å håndtere enheter av språk som konsepter og kategorier, og ved å la elevene aktivt jobbe med språket gjennom kommunikasjon og assosiasjonsøvelser. Studien foreslo også at kunnskap om kognitiv lingvistisk medfører et systematisk syn på språk, hvilket fører til at språkundervisning kan foregå systematisk og gradvis, og fra det konkrete til det mer abstrakte. De største utfordringene var det økte kravet til tidsbruk og elevens kunnskapsnivå under de kognitiv lingvistikk-baserte undervisningsoppleggene.

1.   Introduction

1.1 Background

This thesis makes the argument that deep-level learning can be promoted by exploring research on cognition and by applying this research to teaching techniques and strategies. A proposition was made in 2016 by the Norwegian Ministry of Education and Research to revise Kunnskapsløftet, based on a report from Ludvigsen-utvalget (Kunnskapsdepartementet, 2016). One focus area of the report was deep-level learning, which the report suggested could be promoted by having the learner see connections to prior knowledge, comprehend the methods and ways of thinking within the specific subject, and be actively involved in the lesson (Ludvigsen et al., 2015, pp. 10-11).

Cognitive science is the science and philosophy of the mind and brain, and it is a rich field of research drawing on impulses from a variety of disciplines, such as linguistics, psychology, neuroscience, research on artificial intelligence, etc. This diversity has led to: "the emergence of one of the most exciting and fruitful areas of interdisciplinary research in the history of science" (Frankish & Ramsey, 2012, p. 1). In other words, 'cognitive science' focuses all the contributions toward comprehending the workings of the mind. Consequently, the area concerns itself with topics such as problem-solving, language, learning, memory, etc. Given the areas mentioned here, the position of cognitive science in language education seems pertinent: comprehending the functions of the mind makes for a solid foundation upon which to build effective methodology for language teaching and learning.

Though a fascination with cognitive science forms the basis of this thesis, it is only part of the research; its application in practice forms the other part. The importance of the theory and practice relationship is emphasized by Harmer (2015): "[T]he ability to assess what theorists tell us is a vital teacher skill. But we might go further, too, and say that research that is divorced from teacher reality is not very useful" (p. 41). This quote illuminates the idea that theory and practice should be in a symbiotic relationship; drawing and learning from each other. Imagine teachers removed from, or in disregard of, any scientific knowledge. These teachers might assess their own practice based on pupil observation and feedback, and even make improvements on their techniques, however, this classroom becomes a closed system. The teachers may use technique B, because it worked better than technique A, while being completely oblivious to how technique C could be inferred from research beyond the

classroom. Besides, the teachers would remain ignorant as to why technique B is superior to technique A. Conversely, science can tell us interesting things about the mind, language and human learning, but if it is not applied, it remains grand stories of interest to the few.

Grossman, Hammerness, and McDonald (2009) point to the divide between university coursework as theory-oriented, and the school-based placements as practice-oriented (p.275). They further emphasize the inability of teacher education programs to recognize and apply the connected nature of theory and practice, and consequently the possibilities to relate the university-level coursework and the school placements:

> Though scholars and teacher education periodically revise the relationship between theory and practice, teacher education programs struggle to redesign programmatic structures and pedagogy to acknowledge and build on the integrated nature of theory and practice as well as the potentially deep interplay between coursework and field placements. (Grossman et al., 2009, p. 276)

This dichotomized relationship between theory and practice is problematic in that theoretical framework may well be left behind at the university, while the practice-oriented methods become focus for novel teachers, as these are more immediately and explicitly applicable.

In asking 114 students of pedagogy, Hovdenak and Wiese (2017) found that only half of them read the syllabus literature (p. 178), and that many of the participants mainly wanted practical tools to apply in the classroom (p. 179). According to (Hovdenak & Wiese, 2017), their findings suggest a too instrumental approach to teacher education (p. 179). They instead advocate a teacher education in which the teacher possesses scientific knowledge expressed in concrete situations which require reflection and action (Hovdenak & Wiese, 2017, p. 180). It is precisely this integration and theory and practice, and the reflections on scientific application in practice, that are of interest in this thesis. The theoretical paradigm of cognitive research, its integration in practice and what this integration entails are the motivations for the research questions in the following.

1.2 Aims of the Research

The basis of this research is two-fold; firstly, it is based on the field of cognitive linguistics due to its perceived centrality to learning and its anchoring in massive, in-depth research across a plethora of disciplines. Secondly, it was motivated by a curiosity to see whether cognitive linguistics could be brought into a primary school EFL classroom. The latter point grew out of the notion that certain aspects of the teaching observed did not correspond to principles of cognitive science, but rather seemed closer to behavioristic ideas and grammar-translation methodology. So, a curiosity to examine this notion further became a point of departure for this thesis, in combination with an interest in the research on cognition. Therefore, this thesis asks the question:

> **How can research in cognitive linguistics be applied to teaching vocabulary in the EFL classroom?**

In order to explore this thesis question more closely, it has been subdivided into the following three research questions:

a) How can cognitive linguistics be applied to English vocabulary teaching?
b) How does such an application compare to the teaching practice observed in the EFL classroom?
c) Which possibilities and challenges does this implementation pose?

This thesis will explore the feasibility of applying a theoretical framework – cognitive linguistics – to an actual EFL classroom. To answer research question a), the thesis will present and discuss the theoretical field of cognitive linguistics, and construct lesson plans with a basis in this field. Research question b) seeks to compare the authentic practice of an EFL teacher with the suggestions in the lesson plans as they are implemented in the classroom. This comparison is done by observing the teacher in her usual, every-day practice, and then observe her as she implements the lesson plans. Comparisons between the two periods are made in order to accentuate the similarities and differences between the two ways of teaching. Lastly, research question c) is asked in order to examine the possibilities and challenges that come with the implementation of cognitive linguistics, as suggested in the lesson plans. These possibilities and challenges are illuminated from the perspective of the researcher through observations, and from the perspective of the teacher through a reflection note following the implementation of the lesson plans.

1.3 Limitations of the Research

1.3.1 Limitations of the Scientific Field

Ideally, the field of cognitive science would be a holistic package of coherent facts from which one could elicit an unambiguous teaching methodology. However, this is problematic for several reasons. Firstly, the field encompasses a multitude of disciplines whose empirical basis, theories and philosophical strands are so massive that any attempt of a complete account would be an insurmountable task; moving far beyond the scope of this thesis. Secondly, the field is very much a living and growing one. Much is still being explored, and many hypotheses are, as of present, inconclusive or speculative. Thirdly, several ideas, hypotheses and speculations within the field are either divergent or inconclusive. That is, certain findings and philosophical propositions, though perhaps unified in their results, differ in their interpretation of origin with regards to the functions of the mind/brain. Fourthly, all of the disciplines listed above, such as psychology or neuroscience, are demanding and complex fields in their own right. It follows that a complete, in-depth understanding, even if possible, would require a neuroscientist or a psychologist, etc.

In light of these complicating factors, it seems necessary to approach the field of cognitive linguistics from a pragmatic perspective. Regarding the first limitation, a broad, though somewhat general, examination of theoretical perspectives and previous studies in the field has been conducted. An overview of the field was supplied by *The Cambridge Handbook of Cognitive Science* (Frankish & Ramsey, 2012), which seeks to: "describe the state of the art in cognitive science and to survey the major theoretical, philosophical, and foundational issues across the field" (p. 1). This book also sheds light on the second, third and fourth limitation. The richness and growth of the field, as pointed out in the second limitation, pose a challenge when attempting to achieve an overview, yet it is precisely these factors which make the field relevant and interesting. The same can be said of the divergent and inconclusive hypotheses mentioned in the third limitation, which prove the field to be very much alive. These limitations, together with the fourth, must be born in mind when proceeding to the discussion of theory.

1.3.2 Delimitations of the Research

The empirical basis of this thesis is found in the observations and interview of one subject, a teacher of fourth grade primary school English. Therefore, it is not generalizable in the sense that it uncovers typical trends in teacher methodology or can be expected to have equal results in another class with another teacher. Arguably, generalizations of any such research would be problematic, due to the variety of educational backgrounds, classroom milieus, and personal idiosyncrasies possessed by every teacher. This research is qualitative, in that it makes an in-depth examination of one teacher's practice in the English subject, and intervenes in this particular context. This small sample size only offers one piece of authentic practice, and the successes or failures of the implemented lesson plans only reflect this particular scenario.

Furthermore, the theories and previous studies were selected based on topics the researcher deemed relevant, as well as on topics that were frequently featured in the previous research in the field. The list of topics is by no means exhaustive, but attempts instead to make a comprehensive investigation of each selected principle.

The focus of the research was on vocabulary teaching, as an in-depth exploration of the entire content of every lesson (e.g. teaching of grammar or pronunciation) would be an insurmountable task. Vocabulary teaching and learning remain the focal points of the theory, research methods and data collection and presentation. Furthermore, one can divide the aspects of knowing a word into three dimensions: form, meaning and use (I. S. P. Nation, 2001). *Form* is the spoken or written form of the word, and the parts of the word. *Meaning* is the form-meaning pairing, its referents, concepts and associations, while the *use* is collocations grammatical function and appropriate use in communication (I. S. P. Nation, 2001, pp. 27-28). This thesis has a predominant focus on the *meaning* dimension of knowing words. As seen in Section 2.4.1, words are defined as *symbolic assemblies*, which are similar to the form-meaning pairing above. The notion of concepts, associations and referents are also paramount throughout this research. The *form* dimension is given the least attention, which is further discussed in Section 5.3.1. The *use* dimension is addressed indirectly through the communicative nature of certain activities.

2.   Theory and Previous Studies

The current chapter explores cognitive research and theoretical perspective, revealing a complex movement of a vast, interdisciplinary and multifaceted nature. A comprehensive overview into this expansive area of research forms the basis of this thesis, in order to lay down a solid theoretical foundation, and to construct lesson plans which will be integrated into an EFL classroom. This thesis focuses on vocabulary teaching, therefore, the theory and previous research examined are either on general cognitive research, or directed toward vocabulary and semantics. First, the chapter points to the main characteristics of previous research and some of their limitations, with the purpose of relating them to this thesis. Second, a brief account of the evolution of cognitive research and its linguistically-oriented areas is given, in order to provide a wider context and background for the choice of field. Third, the chapter presents and discusses central principles of cognitive science and linguistics which are applied both in the lesson plans and the discussion (Section 5) of the thesis, as well as preliminary didactic implications of these principles. Lastly, these preliminary didactic reflections will be systematically presented, providing a didactic-theoretic platform on which the research is built.

2.1 Previous Studies – Characteristics and Limitations

The field of cognitive linguistics offers up an impressive repertoire of research, but it offers few holistic suggestions to classroom application. In fact, most of the studies examined in this thesis sought either to explain language or learning on a theoretical level, test specific principles in controlled experiments, or suggest general and possible teaching techniques based on theory. In spite of fervent effort by the researcher, no concrete studies could be found directed specifically to the appropriate age group. As a result, the researcher had to adapt these studies and theories to fit a 4th grade EFL class. This adaptation was done in several ways. First, the tasks and assignments were engineered by the researcher so that the language fit the perceived proficiency of the 4th grade. Second, theoretical suggestions which contained complex inferences, such as guessing metaphorical source domains, were adapted so that more salient metaphoric examples were explored gradually, instead of inferred (see Sections 4.2.4

and 4.2.5). Lastly, the lesson plans were continuously revised based on their manifestation in the classroom.

Moreover, a majority of the examined studies sought to test long-term retention, especially through controlled experiments. While this thesis does not attempt to measure efficacy directly, the focus on the retention in most of the studied research, has been an influential factor. That is, the claims of efficacy in the theory and previous research are taken as a foundation, while this thesis seeks to explore how teaching techniques can be formed from this foundation and explore how they can be applied in an authentic context.

2.2 The Wider Context of Cognitive Research

Broadly speaking, cognitive science can be regarded as an umbrella term for the interdisciplinary collaboration toward empirical and theoretical understanding of cognition (Abrahamsen & Bechtel, 2012, p. 9). Among the many inquiries regarding the workings of the mind, this thesis chose to focus on those of human language, learning and memory; a perspective further narrowed down to focus on vocabulary teaching and learning. As a subset of cognitive science, the study of language in the cognitive tradition is a branch of research in its own right, namely *cognitive linguistics*. Historically, this branch emerged from a discontentment with the formal approaches to language in the 1970s and gained progressively more proponents throughout the 1980s, until the establishment of the International Cognitive Linguistics Society in 1989/90 (Evans & Green, 2006, p. 3). Importantly, Evans and Green (2006) point out that cognitive linguistics is not a definitive theory, but finds unity in: "a common set of guiding principles, assumptions and perspectives which have led to a diverse range of complementary, overlapping (sometimes competing) theories" (p. 3).

These guiding principles, assumptions and perspectives are intimately tied to cognitive science as a whole, since they refer to general cognitive processes when explaining language. The cognitive approach can be contrasted with two other major theories of language; the structuralist *tabula rasa,* which considered the mind as a blank slate primed for habituation (Bloomfield, 1933); and the Chomskyan notion of a language faculty, a specific module of the brain processing language uniquely and algorithmically (Chomsky, 1986), that is, the view of the mind as a computer containing a particular component processing syntax. This adherence

to general cognitive principles is emphasized by Lakoff (1990), who proposes the *Cognitive Commitment*, which is "a commitment to make one's account of human language accord with what is generally known about the mind and the brain, from other disciplines as well as our own" (p. 40). In other words, the idea that the mind is either a blank slate or a computer with a language-specific component is problematized. Language is not uniquely divorced from general cognitive processes, but rather a product of them. Basically, it is the *Cognitive Commitment* which ties cognitive linguistics to cognitive science and research as a whole, and is thus the rationale for consideration and integration of both in this thesis.

Furthermore, another field of research linked to cognitive linguistics is *cognitive semantics*. According to Evans and Green (2006), cognitive semantics rests on four guiding principles: "(1) conceptual structure is embodied, (2) semantic structure is conceptual structure, (3) meaning representation is encyclopedic, and (4) meaning construction is conceptualization" (p. 157). Each of these principles will be presented and discussed in-depth below, as they form a central part of this thesis. Note, however, that any sharp distinction between cognitive science, cognitive linguistics and cognitive semantics is difficult, due to the unifying principle of the *Cognitive Commitment*. For instance, this thesis utilizes more general theories of memory, as well as more specific theories and studies concerned with language and meaning. In short, the thesis will attempt to draw from principles found relevant across the different fields, in order to approach the research in a coherent manner.

2.3 The Cognitive Basis

Following the aforementioned *Cognitive Commitment*, as promoted by (Lakoff, 1990), an account will be made of a selection of cognitive principles deemed didactically relevant. Some of these processes are not language-specific per se, but will be investigated and discussed in a language context, while others are directly aimed at language learning. According to di Carlo (2017), *cognitive language learning strategies* can be sorted into five categories: *classification, strategies, elaboration strategies, association strategies, preparation strategies, and transfer and practice strategies* (p. 122). He does point out, however, that any given learning strategy may fall within several categories while belonging mainly in one of them (Di Carlo, 2017, p. 122). For the purpose of this thesis, *classification, elaboration and*

association strategies have been kept in focus, and will be discussed in further detail in sections 2.3.1, 2.3.2 and 2.4.2 respectively.

2.3.1 Categorization and Classification

According to Evans and Green (2006), the cognitive process of categorization is "our ability to identify entities as members of groups" (p. 168). This simple definition encapsulates the human ability to order and organize the wealth of information with which we are constantly bombarded. From a cognitive learning strategies-perspective, categorization is a *classification strategy*, which aims to "discriminate, select, organize and classify (or categorize) information so that it is much simpler, quicker and more organized to carry out subsequent structuring and representation" (Di Carlo, 2017, p. 122). In other words, categorization can ease the mental effort of information storage and retrieval by processing novel information in a structured way.

The nature of categorization has been discussed at length in cognitive semantics, with its source in psychology and the work on prototype theory by Rosch (1978): "By prototypes of categories we have generally meant the clearest cases of category membership defined operationally by people's judgements of goodness of membership in the category" (p. 36). Categories, then, are not an objective phenomenon, but highly connected to human perception and convention. This aspect of categorization are emphasized by Lakoff (1987), who strongly criticizes the classical view in which: "the entities in the world form objectively existing categories based on their shared objective properties" (p. 161). Instead, he argues for a theory of categorization which entails human experience and embodiment, and prototypicality effects (Lakoff, 1987, pp. 12-15). In addition to prototypicality, also called typicality effects, another basic aspect of categorization is emphasized, namely that of unclear category membership (Murphy & Hoffman, 2012, p. 152), or *fuzzy categories* (Lakoff, 1987, p. 454). Fuzzy categories is a phenomenon which states that some things are harder to place in a category, as they are perceived as less good examples than the core sense (Murphy & Hoffman, 2012, p. 152). Take the category *berry* as an example: most people would probably consider blueberry as quite a good example of a berry, thus it is a more central – or prototypical – member. A banana, on the other hand, which is also a berry, may not be categorized as such at all; making it a more peripheral category member.

Didactically, one might imagine both implicit and explicit techniques of classification and categorization. Implicitly, new information could be presented in the context of previously encountered categories, so as to attempt integration into the pre-existing knowledge structure. For example, one could choose a topic and strictly adhere to category members which are more prototypical, before moving systematically to the more peripheral members. Explicitly, one could have the pupils make up their own categories to sort novel lexical items, or have them invest cognitive effort in determining which members they perceive as more suited for a given category, thus discussing degree of typicality. Lastly, the pupils could share and compare each other's classifications, so as to expand on each other's categories.

2.3.2 Linguistic Elaboration

The purpose of elaboration strategies is to structure, expand and deepen concepts, incorporate novel knowledge and organize and restructure existing schemas (Di Carlo, 2017, p. 122). More concretely, Boers and Lindstromberg (2008) subdivide elaboration into *semantic* and *structural* elaboration, simultaneously tying it to the *levels-of-processing theory* (p. 12). This theory states that the deeper information is mentally processed, the greater the likelihood of the information being integrated into long-term memory (Boers & Lindstromberg, 2008, p. 12). Semantic elaboration, they suggest, can be done by: "connecting a new item with ones already known, embedding the item in a meaningful scenario, and/or associating the item with a mental image" (Boers & Lindstromberg, 2008, p. 12). In other words, semantic elaboration is the exploration of meaning through contextualization, association or imagining. Moreover, structural elaboration is recognition or noticing of formal features of words (Boers & Lindstromberg, 2008, p. 12), such as similarities in morphology, syntax, spelling or phonology.

Research on memory, however, has uncovered that depth of processing alone does not sufficiently explain memorability. According to Ranganath, Libby, and Wong (2012), the original theory suggested that semantic encoding resulted in deeper level processing, followed by phonological and then orthographic encoding. However, it has been shown that orthographically encoded items are more easily retrieved orthographically, while semantically encoded items are more easily retrieved semantically, etc. and that it is also more easily remembered if retrieved in the same environmental context as it has been encoded (pp. 118-

119). From a didactic point of view, these points entail more than simply to teach on a deeply focused semantic level, but also in a variety of contexts and ways. Moving beyond memory alone, though, there are possibilities for greater comprehension through meaning-exploration which should not be discarded. One might also argue that being able to easily extract a word orthographically is not as helpful as having a firm grasp on its semantics when communication is concerned.

2.4 Language in the Mind

2.4.1 Language and Concepts

As mentioned above (section 2.2), cognitive semantics invokes a relationship between language, meaning and concepts. Evans and Green (2006) points to the inquiry of how language encodes and reflects cognitive structure as a central tenet of cognitive semantics (p. 156). In the same vein, Jackendoff (2012) states that: "in the context of cognitive science, language is best thought of as a cognitive system within an individual's brain that relates certain aspects of thought to acoustic signals" (pp. 171-172). This description of language as binary – divided into 'aspects of thought' and 'acoustic signals' – is echoed by Langacker (2008) who defines human language as being a *symbolic assembly,* consisting of a *phonological pole* – hereunder orthography and gestures – and a *semantic pole* (pp. 15-16). In other words, language is to be understood as sounds or signs connected to each individual's concepts. Furthermore, Evans and Green (2006) point out that: "we have more thoughts, ideas and feelings than we can conventionally encode in language" (p.159). Language, then, is a less complex structure than the conceptual structure to which it is connected; a point which reflects the fourth guiding principle of Cognitive Semantics. According to Evans and Green (2006), a lexical item is not a predetermined bundle of meaning, but rather a *prompt* for *meaning construction* from our rich conceptual structure (p. 214). Arguably, the notion of *prompts* has notable didactic impact, as it reveals words to be more than simply units to convey a stable meaning, but rather an access point for deeper conceptualization. Teaching word meaning as objective referents may be problematic because of the multiplex nature of meaning construction, instead, one might conceive of a more exploratory approach, where meaning – i.e. the semantics of a word – is discovered, discussed and shared.

2.4.2 Encyclopedic Knowledge

The linguistic-units-as-prompts view relates semantic structure to conceptual structure. It also encompasses the third guiding principle of Cognitive Semantics, namely that 'meaning representation is encyclopedic'. Cognitive Semantics, Tyler (2012) explains, "adopts an **encyclopedic view of lexical items**, seeing words as access points to organized complexes of knowledge... not simply truncated dictionary entries" (p. 19). That is, not only are words prompts for richer concepts, but these concepts are part of an intertwined and interconnected store of knowledge in the mind of the individual constructing the meaning. Given that 'semantic structure is conceptual structure' (Evans & Green, 2006, p. 157), and that conceptual structure is encyclopedic, it logically follows that semantic structure is encyclopedic as well. According to Evans and Green (2006), the interconnectedness of knowledge blurs the line between semantics and pragmatics, as both knowledge of word meaning and knowledge of word use are both considered semantic knowledge (pp. 215-216). This encyclopedic view, and its subsequent blurring of semantics and pragmatics, is didactically relevant when contextual teaching is concerned, as teaching a word isolated from its context not only steals away an opportunity to discover its usefulness, but also reduces its semantic encoding to a perceived, objective referent.

To better understand the nature of encyclopedic knowledge, one can consider the notion of *frame*. A *frame*, simply stated, is the large volume of background knowledge necessary to comprehend a given utterance (Lee, 2001, p. 8). More concretely, Fillmore (1976) exemplifies cognitive frame through a *commercial event*; this event is a *scenario* with certain roles, such as buyer, seller, goods and money, as well as the interactions between these roles (p. 25). He suggests that any word connected to the frame has the potential to activate associations to the frame of commercial event as a whole, stating that: "Any one of the many words in our language that relate to this frame is capable of accessing the entire frame" (Fillmore, 1976, p. 25). The description of words as cognitive frames resembles the description of words as prompts for rich concepts. The description also involves cultural and conventional knowledge, that is, an individual is unlikely to readily conjure the frame associated with a commercial event if said individual is not embedded in a cultural environment where such events are conventionalized. Holme (2012) points to the centrality of frames and encyclopedic knowledge regarding categories, stating that: "A given grammatical or lexical category does

not refer straightforwardly to an entity in the world but is part of a network of related meanings and knowledge we build about them" (p. 19).

This last quote sheds light on the implications frames have on teaching; to truly comprehend vocabulary, it should be approached as part of a network of meaning, i.e. frames and encyclopedic meaning, rather than direct dictionary entries. Moreover, Evans and Green (2006) claim that word meanings have a relatively stable core, but that the encyclopedic knowledge is dynamic and can be expanded by continued interaction with a given concept (p. 221). The dynamic view seems to reject absolute relativity, then, in that certain conceptualizations – such as the more conventional frame of economy – are more central and widespread, while still suggesting mutability and more fringe associations based on the individual's experience. For example, 'fur coat' may draw on the concept of a garment that keeps you warm during the winter, but after in-depth research on the fur industry, the encyclopedic knowledge surrounding 'fur coat' has been expanded to entail negative associations to animal cruelty.

Didactically, the encyclopedic view can be seen in context with the elaboration and association strategies. Association strategies are meant to: "establish relations, links and comparisons between the new contents and previous schemes" (Di Carlo, 2017, p. 122). Conceivably, one can structure novel vocabulary within a certain frame, thus emphasizing the relation between the different lexical items. E.g. the meaning of *buy* can be approached in relation to *sell*, etc. Another possibility is working with association exercises – such as mind maps – within a frame, which would serve to explore and expand the frame in line with *elaboration strategies* and simultaneously group and organize the knowledge as a *classification strategy*. This suggestion is linked to the idea that the encyclopedic knowledge is dynamic. Inside the classroom, pupils might harbor a variety of different associations – e.g. some might have subjective experiences tied to a frame, others might lack certain nodes of conventional knowledge on it – which conceivably could be shared to both solidify the more stable core meaning, but also expand the network to which it belongs.

2.4.3 First Language and Imaginability

So far, an examination between language and concepts has been made. However, the relation to second language learning and acquisition has not been directly explicated. In explaining the

languages-to-concept relationships in the second language learner, Kroll and Stewart (1994) suggested the *revised hierarchical model*, which claims there is a strong link between one's first language and one's concepts, while one's second language has a strong lexical link to the first language, but a weak link to one's concepts (p. 158). They further claim that the link between the second language and concepts are strengthened as L2-proficiency increases (Kroll & Stewart, 1994, p. 158). Conceivably, if this model is correct, it might justify to some extent the use of the pupils' first language in EFL teaching at an early age. However, the exact relation between proficiency growth and the gradual strengthening of the conceptual link is unclear.

The revised hierarchical model was challenged by de Groot and Keijzer (2000), who conducted an experiment on the learning and forgetting of words based on their concreteness and cognate status. To clarify, *cognates* are words with similar orthography/phonology and meaning as their first language equivalents (Tokowicz, 2015, p. 73), while the *concreteness* of a word is tied to its referent's perceptibility (Tokowicz, 2015, p. 81). In the experiment, de Groot and Keijzer (2000) devised pseudo-words with different degrees of cognate and concreteness status, which were presented with translations on a screen to learners. Two translation post-tests, one immediately after the treatment and one with a week's delay, was administered to check long-term retention. The experiment concluded that both cognates and concrete words were easier to learn and harder to forget than abstract words and non-cognates (De Groot & Keijzer, 2000, pp. 1-49). Based on these findings, de Groot and Keijzer (2000) concluded that certain types of words that are not L1-words – especially those that are fall under the category of concreteness – are, at least in part, linked to their concepts, even at low proficiency (p. 40). In other words, the perceptibility of the concept prompted by a lexical item influences whether it is mediated by the learner's first language, or directly associated with the concept.

Interestingly, the perceptibility associated with the concreteness effect can be connected to the theory of basic-level categories (Lakoff, 1987; Rosch, 1978). In a web lecture at the Central European University (2013), Lakoff explains that certain categories have special properties, these being the basic-level categories. These categories call on mental imagery in a very concrete, gestalt sense (Central European University, 2013, 00:06:15-00:08:02). As an example, by hearing the word *horse* you swiftly and effortlessly get the mental image of a horse, however, if provided the word *animal*, you cannot get a neutral, direct mental image of the category *animal*. In other words, *horse* is more easily perceived in relation to its referent

– an actual horse – than the more abstract superordinate term *animal.* Seen in the context of the findings of de Groot and Keijzer (2000), the basic-level categories should be easier to learn and harder to forget than superordinate or subordinate categories, due to their imaginability.

The concreteness and cognate effects entail certain didactic implications. Crucially, they closely correspond to the *dual-coding theory*, which states that some information is stored both verbally and as mental images, due to their perceptibility (Boers & Lindstromberg, 2008, pp. 11-12). On dual-coding theory, Cook (2006) explains that working memory consists of the visuo-spatial sketchpad, which creates a visual mental model from visual information; and the phonological loop, which makes a verbal model from verbal input (p. 1079). On the one hand, concrete words and cognates can be argued to deserve precedence in the EFL classroom, since their encoding advantages may facilitate a faster progression to a threshold for communication. On the other hand, acknowledging the relatively short amount of time the learner spends in the EFL classroom, one could also propose leaving the cognates and concrete items to acquisition through exposure and rather focus on the more abstract or alien words and phrases. While cognates are not given special attention in this project, the concreteness effect is central to embodiment, illustration techniques and consequently metaphoric extension (which *are* given special attention), and is therefore taken into account. Crucially, the dual-coding theory, basic-level categories and concreteness effect all concern *mental imagery*, though one could argue that what is easier to perceive in actual images, is also easier to imagine as a mental image. Cook (2006), however, warns that if the connection between visual and verbal information is hard to perceive by the learner, the wanted effect of dual-coding falters, with the consequence of increased cognitive load due to the *split-attention effect* (p. 1079-1080).

2.4.4 Communication: Language as Usage-based

Another central idea in cognitive linguistics is that language emerges from use, a principle explained through the *Usage-based model*. At its core, the usage-based model claims that stored language is emergent generalizations in the individual's mind, as a consequence of exposure to language in use (Sanford, 2014, pp. 103-109). This model can be seen in contrast to the notion of a language acquisition device, as proposed by Chomsky (1986), in that it hypothesizes that language emerges gradually, contingent on frequency of exposure to language interactions, as opposed to being governed by a specific device and innate rules. As

stated by Croft and Cruse (2004): "categories and structures in semantics, syntax, morphology and phonology are built up from our cognition of specific utterances on specific occasions of use" (p. 4). Furthermore, evidence for language as emergent is presented and discussed by Goldberg (2006) and Tomasello (2000), who studied emergent language in young children. In other words, language grows from use, and the desire to communicate, and is therefore to be understood as an incremental process based on these principles.

From a didactic point of view, the usage-based model can be seen in context with *Communicative Language Teaching* (CLT). CLT's basic premise is that language exposure, and the desire and need to express something, are the driving factors in language learning and acquisition, and that focus on language comes from communicative events (Harmer, 2015, p. 47). According to Waters (2012), the professional discourse has been centered around a 'communicating to learn' approach since the 1980s, which has grown out of a post-method era, yet emerged as a method in itself (p. 443). Additionally, the English subject curriculum puts a solid emphasis on communicative ability (Munden, 2014, p. 46). Additionally, in their book on language for teacher education, Flognfeldt and Lund (2016) point to teaching communicative language competence as an overarching ambition for teachers (p. 29). Obviously, the application of communication in teaching is in accord with cognitive linguistic principles. De Rycker and De Knop (2009) state that the move toward communicative teaching has had a great, positive effect on language pedagogy, though it lacks a satisfactory theoretical framework (p. 34). This theoretical framework is given in the usage-based model; if language is emergent through use, then one could logically infer that use of language – communication – offers greater opportunity of exposure and frequency, thus fostering language learning and acquisition. Moreover, when discussing CLT from a linguistic perspective, Whong (2013) argues for greater involvement with language as an important feature for its advancement, stating that: "higher levels of engagement with language lead to more active processing, which is what is needed for language development" (p. 123). Conceivably, a communicative approach supplies 'higher levels of engagement' than would a solely instructional approach, consequently tying communication to the *levels-of-processing theory*, and the frequency aspect of the Usage-based model. However, cognitive linguistics is not claimed here to simply be a theoretical framework to justify a purely exposure and language-focus-through-communication approach. Rather, it is argued that CLT should be among the techniques and procedures of the teacher, but that it is not necessarily a complete and infallible model. As stated by Boers and Lindstromberg (2008), leaners often overestimate their ability to guess

from context (p. 5). And, as posed by P. Nation (2007), a balance should be made between form focused instruction and productive activities in the classroom.

2.5 Embodiment and Language

2.5.1 The Role of the Body in Cognition

Having looked at the connection between concepts and language, the next step is to examine how conceptual structure emerges. The answer has already been suggested by the first guiding principle of Cognitive Semantics, as proposed by Evans and Green (2006), namely that conceptual structure is embodied (p. 157). According to Pfeifer, Bongard, and Grand (2007), embodiment is the idea that intelligence is contingent upon a body; that cognition is facilitated through the body's interaction with the environment (pp. 18-19). The road to language, then, is from embodied experience to conceptual structure, then to language structure. As summed up by Lakoff (1987): "There is no direct connection between human language and the world as it exists outside of human experience. Human language is based on human concepts, which are in turn motivated by human experience" (p. 206). As a consequence, language is not simply a direct labeling of things out there in the world, but rather prompts for concepts which have emerged through human interaction with and understanding of the external world.

On the nature of embodiment, Tyler and Evans (2003) state that: "Our world, as mediated by our perceptual apparatus (our physiology and neural architecture, in short, our bodies) gives rise to conceptual structure, that is, to thoughts and concepts" (pp. 23-24). This point places special emphasis on the biological nature of the human body, working as a filter through which we structure our understanding of the world. Moreover, Achard and Niemeier (2004) point out that, in cognitive linguistics: "meaning is equated with conceptualization, or, to be more specific, in the human interpretation of the world" (p. 2). The term *interpretation* implies an individual and cultural component to embodied conceptualization as well as a biological. Our concepts have not arisen solely from our perception of sensory input, but also as embedded in a social environment.

2.5.2 Embodiment and Teaching

Though much of the writings on embodiment has been focused on explaining the human conceptual system, some implications and methods for teaching have been found as well. In the EFL context, Holme (2012) proposes that to make new items more memorable, one can use the movements, gestures, and physical imagery which were the ground for initial conceptualization (p. 9), he also cites Asher's (1969) test of Total Physical Response, in which pupils responded to commands by performing actions, which lead to higher scores in a comprehension post-test of the commands (referenced in Holme, 2012, p. 12). Moreover, Holme (2012) advocates the use of enactment and movement, but also suggests a coupling between these principles and virtual, illustrative methods (p. 10). The underlying idea seems to be to learn from early human conceptualization and language learning, and 're-trace the steps', so to speak, of L1-acquisition. That is, instead of turning to, say, the L1-translation of a given lexical unit, one should offer the L2-prompt and tie it directly to the perceived source of the concept. This view seemingly promotes a more demonstrative teaching approach, as opposed to an approach relying on verbal description.

This methodology can be connected to the aforementioned *dual-coding theory*, in which teaching through physical representation, such as mime, might help create a mental image of the lexical unit's meaning, in addition to its verbal coding. Notably, the ideas proposed by Holme (2012) are reminiscent of certain aspects of the Direct Method. As part of this method, a learner connected the words and phrases with the objects and actions they denote. This method is claimed to be successful when teaching communication on a basic level (Drew & Sørheim, 2016, p. 24).

On the face of it, insofar as teaching concrete, easily illustrated or enacted linguistic items go, the Direct Method seems a good comparison to the perspectives of Holme (2012), but the comparison is not wholly unproblematic. Though it may ease the encoding process in showing a direct link between a given object and a word, it does not elaborate on the richness of the concept denoted by the given word. Apparently, the Direct Method presupposes an objectivist view of categories, as warned by Lakoff (1987), in which language ties directly to objective things in the real-world (pp. 158-159), thus bypassing the complex associations inherent a concept. This point has central didactic implications, as the Direct Method may aid immediate comprehension on a superficial level, but is less helpful when the concept's complex and intertwined nature is concerned.

Furthermore, Tyler, Mueller, and Ho (2011) looked at human construal of spatial scenes in connection with the L2 learning of the semantics of English prepositions *to, for* and *at*, arguing that: "one of the most fundamental human experiences is viewing spatial scenes; i.e. objects in relation to each other" (p. 183). In this experiment, 14 advanced EFL learners were informed of the related meanings a preposition could have, which stemmed from a central meaning of spatial relation between a focus and ground element, which was shown in visual diagrams and cartoons, before the students worked in pairs filling out meaning maps which visually represented the different meanings of the prepositions (Tyler et al., 2011, p. 199). The results showed an increase in comprehension, but Tyler et al. (2011) warns that the engaging visuals of the experiment could be the reason for these findings, as much as the demonstration of semantic relations between the extended and core meanings (pp. 201-202). The experiment outlines a possibility for language teaching, then, and perhaps especially how prepositions are prone to semantic explorations, as opposed to rote memorization of their grammatical function. This thesis is most concerned with the semantic exploration of prepositions, though not with their extensions. However, this study indicates the next step in teaching prepositions after their prototypical meaning has been demonstrated.

Lastly, another interesting experiment was conducted by Forceville (2005), who looked at the representation of anger in an Astrix cartoon. He argues that anger is experienced as physiological effects such as heat, increase in internal pressure, agitation and interference with perception (p.71), which form the basis for their subsequent visual representation in comics. This account exemplifies the close relationship between our perceptions and feelings of an experience, such as anger, in our bodies translate into exaggerated visual representation of those phenomena. Arguably, this article can be taken as further evidence toward the embodiment principle, and how we structure our conceptions on that very basis.

2.6 Metaphors in Language and Language Teaching

2.6.1 The divergent Views on Metaphor

A much-discussed subject in cognitive linguistics is metaphor, and the idea that metaphors extend beyond a purely linguistic phenomenon. As stated by Lakoff and Johnson (1980) in their book *Metaphors We Live By,* which gave impetus to the field of metaphor exploration in

a cognitive perspective: "Metaphor is for most people a device of the poetic imagination and the rhetorical flourish – a matter of extraordinary rather than ordinary language" (p. 3). The traditional and conventional view of metaphorical expressions is one of language ornamentation. However, in the same vein as the premise that linguistic structure reflects an underlying conceptual structure, so does linguistic metaphors trace back to *conceptual metaphors* and the conceptual structure of the mind. In fact, Lakoff and Johnson (1980) theorize that we think in metaphors: "Our ordinary conceptual system, in terms of which we both think and act, is fundamentally metaphoric in nature" (p. 3). Interestingly, this proposition brings metaphors to the forefront of linguistic inquiry, as a integral aspect of the mind, rather than an embellishment of language.

The basic assumption of cognitive linguistics that language reflects patterns of thought (Evans & Green, 2006, p. 5), which correlates with the thorough investigation of metaphor occurrences in ordinary language by linguists such as Lakoff and Johnson (1980), gives relevance to the attention on metaphor in linguistic research. Nacey (2013) neatly and precisely summarizes this point, writing that: "The words we use are derivatives of the metaphors structuring our thoughts" (p. 12). The evidence, then, seems plentiful in the language-thought relation, but the investigation of conceptual metaphor has not been exclusively language-based. For example, Evans and Green (2006) draw on the example: INSTITUTIONS ARE HIERARCHICAL STRUCTURES [1], which places the CEO at the top of the organization and subsequent employees at lower points (p. 303). That is, conceptual metaphors not only represent the way we talk about things in the world, but ultimately how we perceive them and structure them. This extra-linguistic exploration helps satisfy the *Cognitive Commitment*, as it suggests metaphors to be part of one's wider cognition and our conceptual structuring of the world, not just a manifestation in language.

Given that conceptual structure is systematic and partially metaphorical, and that linguistic structure is the manifestation of conceptual structure, it follows that linguistic structure is systematic and partially metaphorical. Herein lies the possibilities for language teaching methodology. The overarching argument is that language can be treated as coherent and systematic, as opposed to isolated and arbitrary, in the classroom. Conceivably, conceptual

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[1] The capital letters are conventionally used to denote conceptual metaphors and will appear as such throughout this thesis.

and linguistic relatedness allow for both semantic (conceptual) and linguistic (form) relatedness. In the following, an account of metaphor theories is given, before exploring its applications in, and consequences for, the L2-context.

2.6.2 Conceptual Metaphor Theory and Beyond

Arising from the acknowledgement that metaphors exist beyond the realm of literary decoration, is *Conceptual Metaphor Theory*. Geeraerts (2010) presents three pillars upon which said theory rests: firstly, that metaphors are cognitive phenomena, not simply lexical ones; secondly, that metaphors are to be understood as mappings between two domains; and, thirdly, that: "linguistic semantics are experientially grounded" (p. 204). The first point has already been discussed above. Nevertheless, to address it in more detail one can look at the ARGUMENT IS WAR metaphor explored by Lakoff and Johnson (1980). They argue that, not only do we verbally express argumentation as an act of war, but we *perceive it* as such: "The concept is metaphorically structured, the activity is metaphorically structured, and, consequently, the language is metaphorically structured" (Lakoff & Johnson, 1980, p. 5). The underlying concept is metaphorically understood as war-like, which surfaces in the actions of the activity and manifests in its verbal expression.

The second pillar alludes to the process of metaphoric extension. Initially, the basic idea was to explain how more abstract concepts were structured by more concrete, physically salient concepts; a notion referred to as *unidirectionality* in that it suggests a clear concrete-to-abstract pathway (Evans & Green, 2006, p. 298). This position has been scrutinized and ultimately expanded upon by, among others, Fauconnier and Turner (2003), who propose the *blending theory*. Blending Theory hypothesizes *conceptual blending* through *integration networks* consisting of four connected spaces: two input spaces, the blended space and the generic space (Fauconnier & Turner, 2003, pp. 58-61). A selection of shared features from the input spaces are meshed in the blending space, while the generic space supplies a shared *schematic frame* between the two input spaces which constitutes the structuring of the blend (pp. 57-61). Returning to the example of ARGUMENT IS WAR, *argument* and *war* each constitutes an input space, while the generic space would be the *agents* in the blending as combatants and the *goal* of the activity as a victory, etc. (see Fauconnier & Turner, 2003 for a more comprehensive discussion on Blending Theory).

Moreover, Grady (2005) questions the source-target mapping through analogy, which is assumed in both conceptual metaphor theory and blending theory. Instead, he suggests what he calls *primary metaphors* to arise through repeated experiential correlations between two instances, which entrench a connection between the two (Grady, 2005, p. 1600). For example, the MORE IS UP metaphor, where our experiences of increase in substance – like water in a lake – correlate with seeing an increase in height-levels, thus associating the two events. According to Grady (2005), these primary metaphors are foundational to the metaphoric system, while analogy-mappings – or shared features mappings – are a vital component in more "dynamic, opportunistic and generative processes…" (p. 1612). Thus analogy-based mappings are not discredited, but rather deemed unsatisfactory in accounting for the more basic conceptual metaphors. Tyler and Evans (2003) assert two categories; experiential correlation – as hypothesized by Grady (2005) – and *perceptual resemblance* (pp. 32-36), which is more akin to analogical mapping or association through perceived feature resemblance.

The field of metaphor theory is a complex and multifaceted one, which is to varying degrees speculative and growing. However, Geeraerts (2010) argues that, even considering the introduction of a blending space, the theories seek in essence to comprehend one concept through another (p. 213). This basic premise is paramount to the current research, and will be presented further and more concretely in the TIME IS MONEY metaphor. Though the discussion concerning conceptualization and metaphor is still on-going, the heart of the matter is the systematicity found in language through metaphoric projection, and how this will relate to the language classroom.

2.6.3 The TIME IS MONEY Conceptual Metaphor

A much-discussed phenomenon in metaphor theory is the TIME IS MONEY metaphor. This type of metaphor, in which concept A is structured through concept B, is termed a *structural metaphor* (Lakoff & Johnson, 1980, pp. 7-8). Concretely, the metaphor is said to stem from our culture's view of time as a valuable commodity and a limited resource, conceptualized through cultural phenomena such as hourly pay, renting, loan interests, serving prison time, etc. (Lakoff & Johnson, 1980, pp. 7-8). Whether through shared features or correlating experiences, the mapping is well-documented and linguistically salient. Nacey (2013) explains that: "a metaphor such as this one [TIME IS MONEY] is rich in entailments due to various

perceived structural similarities, whereby certain features of a 'source' domain (i.e. money) are mapped onto a 'target' domain (i.e. time)" (p. 13). What she alludes to here is directionality, in which we structure – and thereby comprehend – time through the more concrete and physically salient concept of money, which is more perceptually and physically accessible to us in the real world. This view seems more in line with perceptual resemblance than experiential correlation, though one might speculate that both approaches are applicable in some manner – after all, restrictions on time is experienced at an early age from bedtime, etc. Additionally, she touches on another key point here, namely that such mappings are not absolute, but rather draw from a selection of shared features from each input space.

In the research conducted for this thesis, the TIME IS MONEY conceptual metaphor was integrated into the lesson plans. The reasoning behind this choice was two-fold; firstly, the domains of this metaphor have a high degree of overlap of expressions; and, secondly, the themes of both time and money were on the teacher's agenda previous to the planning of the research. Thus, the following linguistic expressions were integrated: *save money/time, waste money/time, money/time to spare, spend time/money, have time/money* and *steal time/money.*

Moreover, an additional mapping was integrated which draws from a different source domain, namely THE PASSING OF TIME IS MOTION (Lakoff, 1990, p. 55). This particular metaphoric mapping is based on the conceptualization of time as a moving object, and how the perceived velocity of this object is relative to our mental state. Arguably, the conception of time moving faster in enjoyable situations than in dreaded situations is easily associated with personal experience. Two concrete linguistic representations were applied: *time flies* and *time stands still*. Together, the TIME IS MONEY and THE PASSING OF TIME IS MOTION lexical representations exemplify that mapping, even structural metaphors, are partial and can draw from several domains or spaces. The integration of this additional domain shows that metaphoric mappings are neither absolute nor unvarying in their source.

2.6.4 Motivation, Metaphors and Language Teaching

The extensive account of metaphors supplied by cognitive linguists, which has been sampled so far, gives insight into the workings and structuring of the mind in relation to concepts and language, but it remains to be asked how this insight can be applied in teaching and learning of language. A basic assumption of cognitive linguistics is that language is *motivated*. Not to

be confused with the pedagogical definition of motivation, concerned with the desire or perceived need to learn (Harmer, 2015, p. 90), motivation in the cognitive linguistics sense is concerned with the systematic relationship between knowledge. Lakoff (1987) places motivation as a central phenomenon in cognition, stating that it is easier to learn, remember and use motivated knowledge, than arbitrary knowledge (p. 346). In other words, motivated knowledge is easier to attain and produce due to its systematic connection to previous knowledge, in contrast to learning something through pure memorization in isolation.

Lakoff (1987) claims that the prior knowledge, by which the new knowledge is systematically related, is either the center of a radial category, or a metaphoric or metonymy source domain (pp. 346-347). For example, consider the preposition *on;* its most concrete sense of spatial relation (e.g. the book is physically *on* the table) is the central member of the category, with less central senses such as *on time* in a connected pattern radiating from the core sense. Thus, the more abstract sense has grown out of – is motivated by – the more concrete, central member. In other words, their meanings are related. In much of the research on both language itself and language teaching, motivation appears to be the focal point or the underlying assumption. Furthermore, metonymy, according to Lakoff (1987), is: "to take one well-understood or easy-to-perceive aspect of something and use it to stand either for the thing as a whole or for some other aspect or part of it" (p. 77). An example of metonymy is the way one speaks of the royal authority as *the crown*; structuring the people, there power and their wealth under one aspect of their garment.

As an advocate of teaching L2 through motivation, Cognitive Linguist Frank Boers (2004) suggests *enhanced metaphor awareness* as a methodological groundwork. He further outlines three approaches to achieving this awareness:

> The imagery behind idioms can be made explicit by referring to the literal (or original) meaning; learners can be encouraged to invest cognitive effort in trying to figure out the meaning of idioms independently; and idioms can be grouped under common metaphoric themes. (Boers, 2004, p. 211)

The first two suggestions are concerned with source domain tracking, while the third relies on categorization. As a variation on the first suggestion, one may also teach the source domain first, before systematically teaching the extensions. According to Boers (2004), having the learners explore or refer back to the more concrete source of the metaphor can help breathe life into 'dead metaphors', an approach he justifies through the dual-coding theory and the

concreteness effect (p. 212). Judging from these statements, the reference-to-imagery point is conceivably literal; the concrete domain could be referred to by actual images, not just a verbal nod to the source domain. In addition to the concreteness effect and dual-coding theory, lines may be drawn to basic-level categories which, as mentioned, seem to be more concrete and easier to imagine. Ultimately, Boers' ideas advocate increased awareness in learners' view of language as systematic through metaphor; a phenomenon resulting from motivation.

Boers (2004) outlines six practical concerns regarding the teaching of metaphoric extensions. First, he discusses the investment of time and effort into teaching extensions and motivations, concluding that: "a one-off eye-opener. . . is not sufficient to yield a long-term advantage in retention, [but that] recurring awareness-raising activities do have a long-term beneficial effect on memory storage" (Boers, 2004, p. 216). In other words, the awareness-raising activities, at least with the aim of improved retention, require a great deal of dedication and knowledge from the teacher. This point entails the integration of the techniques in a more pervasive manner, challenging the notion that these sorts of activities can be considered complimentary to other teaching approaches, if only with regards to retention.

The second concern relates to whether working with metaphoric awareness should have a receptive focus, concerned with comprehension, storage and reproduction of conventionalized expressions, or a generative focus, in which the learners create novel figurative extensions (Boers, 2004, p. 217). The former is emphasized in the current research, especially with regards to comprehension and reproduction – focusing on storage would require delayed post-tests after controlled instruction to measure efficacy. Perceivably, the question boils down to whether one intends to help learners reach native speaker conventions, or if creative, non-conventional language use is wanted. According to Boers (2004), different languages can instantiate a conceptual metaphor in a variety of ways, lending support to the argument that focus should be kept on the encountered (more conventional) metaphors (p. 217).

The third and fourth point, *cognitive style* and *proficiency level*, both concern the learner. Boers (2004) points out that those who process information as images – *imagers* – and those who are analytical – *analyzers* – tend to be more proficient in relating figurative language to its source domain, than their counterparts of *verbalizers* and *holistic style* respectively (p. 223). Moreover, he argues that teaching which is metaphorically oriented suits all proficiency levels, since metaphor is a basic cognitive process, though he warns that younger, lower proficiency learners would need greater teacher guidance, as they lack the vocabulary to perform the

analysis (Boers, 2004, p. 221). In other words, applying metaphoric awareness activities to fourth grade pupils might be time consuming, as it would require the teacher to engineer the linguistic input in such a manner that it is not only comprehensible to the pupils, but so that they can see the metaphoric link as well. The suggestion to directly refer to the literal imagery might be more fruitful to the youngest learners; however, one might also attempt to have them puzzle out the metaphoric links. Importantly, the exploration of imagery behind figurative language may conceivably be a direction of differentiation for the *analyzers* and *imagers*, as opposed to purely verbal instruction or explanation. Teaching metaphoric awareness puts pressure on the teacher as well, both in terms of time, knowledge and differentiation, however, it can also be beneficial in that opaquer expressions with unclear source domains could offer greater challenges to higher proficiency learners.

Lastly, the fifth and sixth concerns relate to choosing what particular language items one should teach, namely degree of transparency and vagueness (Boers, 2004, pp. 224-227). These points are seemingly somewhat interconnected, and can be summed up as making sure the motivation is clear by using one metaphoric theme, and by applying clear-cut cases where the source domain is salient and easily tracked (Boers, 2004, pp. 224-227). These practical considerations are also within the realm of differentiation, in giving the teacher the responsibility to recognize suitable metaphors to teach. Moreover, it supplies a tool with which to handle incidentally appearing or deliberately selected idioms, which permeate the English language.

2.7 Didactical Implications

The theoretical perspectives and studies reviewed in this chapter emphasize the multifaced nature of cognitive science, linguistics and semantics. However, in summary, some preliminary didactical implications and methods can be extracted, to see how cognitive linguistics can be applied to the EFL classroom. Firstly, general cognitive abilities such as categorization and classification, association and elaboration offer directly applicable methodology such as sorting activities, associative maps, creating links between novel and previous knowledge, and exploring meaning and meaning connections. In addition, the view of language as prompts for concepts, and a part of an underlying network of interconnected knowledge, opens up for deep exploration of semantics. Secondly, concreteness effects and

embodiment supply grounds for exploring meaning of words from its direct and concrete source; an approach supported by the dual-coding of information in memory and the basic-level properties of some of these words. Thirdly, the principle of motivation through metaphoric mappings can be a gateway of learning extended meaning of concrete linguistic representations, by seeing their systematic relation. These ideas, though still abstract and general, will carry over into more direct manifestations in the lesson plans.

3.   Methods and Materials

3.1 Selection of Research Methods

The current chapter presents the research methods selected to help answer how cognitive linguistics can be applied to the EFL classroom, and subsequently elaborate on the reasons for the methodological choices. The study as a whole is qualitative, as it offers an in-depth look at one particular teacher's practices and experiences with a focus on teaching methodology, and the integration of a theoretical paradigm in a single context. As a qualitative inquiry, it is 'richly descriptive', and "attempts to understand and make sense of phenomena from the participant's perspective" (Merriam, 2002, pp. 5-6). In order to provide this rich description, a variety of research methods were applied to answer each of the research questions (Section 1.2).

In order to discover how cognitive linguistics could be applied to English vocabulary teaching, an extensive examination and discussion of theory and previous research was conducted. The discussion of theory constituted one research method, as it resulted in preliminary didactical reflections (see Chapter 2), and formed the basis of the lesson plans implemented in the classroom (see Section 3.3). Additionally, the discussion of theory and previous research supplied the framework against which the observations were discussed, to illuminate possibilities and challenges perceived during both observation periods.

Furthermore, to find coinciding and differing aspects between a cognitive linguistics-based practice and an authentic teaching practice, as well as to pinpoint possibilities and challenges of implementing such a practice in an authentic scenario, the thesis relied on lesson plans, observations and a reflection note. First, the participating teacher was observed for three weeks, while she taught in her regular manner. Second, the lesson plans were constructed by the researcher, then implemented by the participating teacher in another three-week period. In the following, the first three-week period will be referred to as *the initial period*, while the latter will be named *the implementation period.* The two periods were juxtaposed and scrutinized through the lens of theory to answer the research questions. Third, the reflection note was sent by e-mail after the completion of the implementation period, in order to represent the teacher's perspective on the similarities and differences between the two periods, as well as perceived possibilities and challenges of the implementation of the lesson plans. A more detailed account of each method will be provided in Sections 3.3, 3.4 and 3.5 below.

3.2 Participants

3.2.1 The Participants Involved

The experiment was carried out in a fourth grade at a primary school, consisting of a teacher, an assistant and twelve pupils, ages nine to ten. The primary focus was kept on the teacher, who was the class's homeroom teacher, in addition to being their sole English teacher. She had been with the class for several years, and had therefore built up a familiarity with the pupil group. The teaching assistant was present for the predominant portion of the lessons, mainly focused on one select pupil. All teaching, classroom management, feedback and guidance was performed by the teacher, with the exception of some guidance by the assistant to her assign pupil. The teacher had no formal education in English subject, and taught fourth grade in a variety of subjects, including Norwegian.

3.2.2 Familiarity, Openness and Participation

The pupils and teacher had some familiarity with the researcher previous to the experimental context. Prior to the project, the role of the research was explicitly stated to the pupils, so that they were aware of the researcher's intentions to observe their teacher and the general conduct during their English lessons. The pupils were also informed that the researcher was not there to teach or help out, but only to watch. According to Bjørndal (2011), degree of openness and degree of participation can be placed along two axes in order to accentuate the nature of researchers presence while observing (p. 46). The observation research conducted for this thesis attempted to keep a high degree of openness, but a low degree of participation. The low degree of participation was achieved by having the teacher implement the lesson plans, instead of the researcher teaching the implementation period. One the one hand, this decision conceivably entailed a transference effect when instructing the teacher on the lesson plans, wherein aspects of the proposed techniques were changed in her interpretation of the instructions. On the other hand, it removed an element of unfamiliarity – i.e. a new teacher – and made the results more comparable due to a higher degree of similarity between both observation periods.

Regarding the teacher, there was a shift in degree of openness between the initial period and the implementation period. As the observations of the initial period sought to describe

authentic, every-day English vocabulary teaching, the teacher was only informed that she would be the main focus of the observer, that the observer would not participate in teaching, and that the project wanted to describe her regular approach. In contrast, the implementation period had a much higher degree of openness, as the teacher was instructed explicitly on how to incorporate the lesson plans, as well as receiving the lesson plans in writing (see Appendix 7.1). This shift in participation was deemed necessary for the intentions of the observations. Additionally, a shift in degree of participation also took place in the implementation period, as the teacher sporadically asked the researcher for clarification or verification of certain techniques. Also, since the implementation period contained more group and pair work, the teacher could not guide every group or pair at once. Therefore, some pupils turned to the researcher for help on occasion, but were referred back to their teacher.

3.2.3 Anonymity and Ethical Considerations

All participants were informed several weeks prior to the research, and agreed to participate. The principle of the school was also informed. The pupils parents were informed during parent-teacher meeting by the homeroom teacher, as well as through an e-mail composed by the researcher disclosing the research aims and the degree of anonymity. Bjørndal (2011) states that the ethical considerations made when observing depends on the intent of the observation, which may entail registry of information of different degrees of sensitivity (p. 141-143). The registered information was the vocabulary teaching practice of the teacher and notes on the pupils' interactions with said practice; deemed by the researcher to have a low degree of sensitivity, since it is highly improbable that any individual would be identified through on this information.

Importantly, great care was taken not to disclose any names – be it of teachers, pupils, parents or places – which might be traced back to the participants. Codes were applied to sensor names uttered during the observations and the thesis writing process. The pupils were named P both in the thesis and in the protocol of the observations, sometimes P1, P2, etc. in instances where several pupils interacted at once, however, whoever was assign P1 in one situation, was not necessarily P1 in previous or following situations – i.e. the number was randomized. The teacher is referred to as 'the teacher' in this thesis, or 'T' in some places where she is quoted. Lastly, in her reflection note, any disclosure of place or person has been anonymized. Since

no coding of individuals or sensitive data of persons or place was registered, the project did not need to be reported to, and approved by, the NSD.

3.3 Lesson Plans

3.3.1 The Foundation

The lesson plans were the concrete manifestations of the theoretical examination and didactical implications explored in chapter 2, and as such, central to the project as a whole. Their foundation was three-fold, taking into account the theoretical and philosophical concepts of cognitive science, the curriculum aims for 4th grade English concerning vocabulary (Utdanningsdirekotratet, 2013), and the subject intended for the period where the implementation period intervened. The creation of the plans became process oriented, as aspects of both time and proficiency had to be adapted throughout the implementation period. The temporal aspect, specifically, were subject to much change, either because certain activities demanded more time to either explain or execute than stipulated by the researcher, or because of unforeseen circumstances relating to classroom management, recess issues or the distribution of general information not pertaining to English.

Adhering to the 4th grade curriculum was a crucial constituent to the lesson plans, and aims were presented in every plan as seen in *the English subject curriculum* (Utdanningsdirekotratet, 2013). In their teacher's education book of Year 1-4 English, Munden and Myhre (2015) point out that "the national curriculum is very important, because it is our job description and provides our working instructions" (p. 12). Simply stated, the curriculum must be the foundation of any lesson. The following competence aims after Year 4 were used in this thesis:

- Understand the meaning of words and expressions based on the context they are used in.
- Use some common short words and simple spelling and sentence patterns.
- Understand and use English words, expressions and sentence patterns related to one's needs and feelings, daily life, leisure time and own interests.
- Use simple listening and speaking strategies.
- Find similarities between words and expressions in English and his/her own native language.

- Understand and use English words and expressions related to prices, quantities, shape and size when communicating about one's daily life, leisure time and own interests.
(Utdanningsdirekotratet, 2013, pp. 6-7)

The concrete integration of the different aims can be seen in the lesson plans (Appendix 7.1). Numbers were added to the aims for ease of future reference.

In order to avoid thwarting the yearly plan of the participating teacher and her class, the lesson plans sought to follow the topic envisioned by the teacher prior to the project. She followed the chapter progression of *Stairs 4: My Textbook* (Håkenstad, Morten, & Vestgård, 2014a), and during the implementation period, chapter 5: 'Making Plans' (Håkenstad et al., 2014a, pp. 84-105) was the intended chapter. This chapter was not used explicitly, but most of the vocabulary presented in it was integrated in the lesson plans, and the topics of *shops and services* and *time and money* were outlined due to their presence in said chapter. In doing so, the teacher could proceed with her regular schedule post-research, without substantial gaps in the intended vocabulary covered. Moreover, this condition supplied an opportunity to show that the proposed teaching methodology could be fitted to a random topic, not just a conveniently selected topic based on pre-perceived applicability.

Preliminary lesson plans were sketched out pre-implementation and sent to the teacher (see Appendix 7.1). The first plan was implemented as seen in the Appendix, while the successive plans were modified and adapted in response to the observations. Each lesson plan was given to the teacher in a template constructed by the researcher, as seen in Figure 1. Almost all teaching resources and materials were created and provided by the researcher, with a few exceptions retrieved from the subject books (Håkenstad et al., 2014a; Håkenstad, Morten, & Vestgård, 2014b).

The lesson plans applied the terms approach, method, procedure and technique as a framework according to the following definitions presented by Harmer (2015). While *approach* concerns theory on language and language learning, and is the justification for the classroom conduct, a *method* is the actual manifestation of the approach in the classroom, containing decisions, techniques and procedures concerning how to bring the approach into being (p.54). *Techniques* are the concrete activities that are conducted in the classroom (p. 55); if one was to atomize the method, techniques would be its smallest component. Moreover, a *procedure* is a sequence of techniques arranged together (Harmer, 2015, p. 55), thus forming a coherent and connected unit of activities. This taxonomy is used throughout the thesis.

Date:	Lesson: #	4th Grade	English	Lesson Duration:		Lesson Subject:		
LK06:					Aims presented to the pupils:			
Time	Goal	Activity					Org.	Mat.

Figure 1. Minimized version of the lesson plan template (filled out in Appendix 7.1).

During the implementation period, the lesson plans were subject to continuous editing, adaptions, and reductions. In the following, the techniques and procedures that were actually carried out in the classroom are described and categorized under their general topics of *prepositions, shops and services*, and *time and money*. The lesson plans prior to editing can be viewed in Appendix 7.1. Though the lesson plans were continually adapted, assessment and differentiation were not in focus in this study, but will be returned to in the discussion.

3.3.2 Lessons on Prepositions

The first two lessons centered on prepositions, and covered the vocabulary: *on top of, to the left of, to the right of, under, between, in front of* and *behind.* The first lesson covered the *prepositions commands* procedure and the *model building* technique. Both the procedure and the technique worked with the English subject curriculum aim: "understand the meaning of words and expressions based on the context they are used in" (Utdanningsdirekotratet, 2013, p. 7). The second lesson applied the *Simon says, prepositions graphics* and *preposition cloze test* techniques, and targeting the curriculum aims: "understand the meaning of words and expressions based on the context they are used in" and "use some common short words and simple spelling and sentence patterns" (Utdanningsdirekotratet, 2013, p. 7).

The *preposition commands* procedure consisted of two similar techniques. The first technique had the teacher commanding either the whole class or individual pupils to stand in relation to certain object in the room, by using prepositions – e.g. 'Pupil, stand to the left of your desk'. The second technique had the pupils give each other commands in the same fashion. The procedure as a whole sought to teach the prepositions by tying the phonological pole – the

command – to the semantic pole. The semantic pole was represented by the concrete sense of each prepositions, i.e. their spatial relation, through the means of TPR. The *Simon says* technique, integrated in the second lesson, revisited the first technique of *preposition commands,* except in the context of a Simon says game.

Following the *preposition commands* procedure, the *model building* technique consisted of a worksheet describing a simple Lego-model. The model had no intended shape, but used the prepositions to describe the positioning of the different color blocks in relation to each other. The pupils were organized in groups to build the models as described. The intent of the technique was to show the orthographic pole, and practice the prepositions' semantics using problem-solving through physical imagery and their concrete sense of spatial relations.

The *prepositions graphics* technique involved a series of graphics depicting a red ball in relation to a box. The technique was organized in pairs, where one member of the pair showed one of the graphics to the other, while the other had to describe it using the sentence pattern: 'the ball is on top of the box', etc. The technique intended to use simple graphics to practice the use of prepositions as spatial relations; building on dual-coding theory, while attempting to avoid the split-attention effect by making the graphics simple.

The last technique centered on prepositions was the *preposition cloze test*. This technique was individual, and consisted of a worksheet with a detailed picture of a bedroom with various animals in it, and a text describing the spatial relations of the animals and objects in the picture, but with missing propositions. The sentences were such that several prepositions could be applied in a single gap. The technique sought to test whether the pupils applied the novel prepositions, or drew on prior knowledge to apply prepositions with similar semantic poles.

3.3.3 Lessons on Shops and Services

The topic of shops and services was predominantly in focus during the third and fourth lesson, but appeared throughout the entire implementation period. During these two lessons, the target vocabulary was *supermarket, toyshop, cinema, bookshop, bakery, hairdresser's* and *café*. The third lesson featured the *shops and services mind map* technique, and the *wares and goods sorting* technique, while the fourth lesson featured the *shops to visit* procedure and the *walkabout* technique. These two lessons sought to accomplish the aims: "understand and use

words, expressions and sentence patterns related to one's needs and feelings, daily life and leisure time and own interests" and "use simple listening and speaking strategies" (Utdanningsdirekotratet, 2013, p. 7).

The *shops and services mind map* technique was a teacher-lead association activity. The teacher elicited words associated with different shops and services from the pupils, and put them in a sun model on the blackboard with *shops and services* in the center. This technique aimed to draw on prior knowledge in order to explore the categories of shops and services, and find additional novel words in these members, consequently sharing these novel terms with the other pupils. The technique also utilized the pupils' personal experience to fill in the sun model, as they had to come up with shops or services they knew or had visited.

The *wares and goods sorting* activity was a categorization exercise where photographs of different kinds of wares and goods, such as pastries or vegetables, were categorized under a variety of shops. Several of the wares and goods pictures could be categorized under more than one shop, in order to prompt a discussion on category membership, and the names of the shops were given in writing on strips of paper. The technique relied on fuzzy boundaries of categories, and sought to expand the semantics of the orthographic poles by associating them with category members.

The *shops to visit* procedure consisted of two assignments, both featured on a worksheet and individual. The first assignment was to make a list of which shops or services one would like to visit, and range them from one to seven; one being the shop or service one would most like to visit, while seven being the shop or service one would least want to visit. The second assignment had the pupils write a sentence to each of the ranked items, using the patterns 'I would love to go to…', 'I would like to go to…' or 'I don't want to go to…'. These assignments drew on subject experiences and personal opinion as grounds for categorization. The intent was to apply deeper levels of processing by having the participants reflect on their own opinions of the different items. Following the *shops to visit* technique, the *walkabout* had the participants move around the classroom, asking each other 'Could I hear your sentence, please?' and receiving one sentence in return. This technique sought to practice the phonological pole of the shops or services, and at the same time share categories with other participants.

3.3.4 Lessons on Time and Money

The eight remaining lessons were all centered on the topic of money and time. The fifth lesson attempted the *text comparison* procedure, the sixth lesson featured the *money mind map* and the *L1 to L2 money expressions* technique. The seventh and eight lessons consisted of the *money in town* procedure. The ninth lesson featured the *time is money elicitation* technique, while both the ninth and tenth lessons revisited the *text comparison* procedure. The eleventh and twelfth lessons entailed the *time in town* procedure and the *perception on time* procedure.

The *text comparison* procedure had three techniques, all of them organized in groups. The first technique had the participants in pairs, either working with a text about time or a text about money. The technique required the participants to locate and underline sentences concerning either time or money, depending on the type of text they had received. The second technique had the pairs merge into groups, and compare their underlined expressions to find which were similar and which were different. The third technique had the same groups discuss whether there were similar expressions for time and money in the participants' L1. This third technique constituted the *L1 and L2 money expressions* technique of the sixth lesson, excluding time expressions. The intent of the entire procedure was to notice the metaphoric link between time and money expressions, and further link these coinciding aspects to similarities in their L1, thus activating prior knowledge. The procedure covered the aims: "find similarities between English and his/her own native language" and "read, understand and write English words and expressions related to one's needs and feelings, daily life, leisure time and own interests" (Utdanningsdirekotratet, 2013, pp. 6-7). Since this procedure lead to some confusion, the focus was shifted from *time and money* to solely money, in order to focus on the source domain prior to exploring the metaphoric link. To achieve this, the *money mind map* technique was applied. This technique was a teacher-lead association exercise akin to the *shops and services mind map*. Following the *money mind map* technique, the *L1 and L2 money expressions* technique was used to accentuate the focus on money expressions.

The *money in town* and *time in town* procedures both entailed three separate techniques, all in groups. The first technique had the participants use paper cut-outs representing either pound-notes for the money version, or tiny clocks symbolizing a set amount of time for the time version, and placing these notes at different shops or services on a town map in accordance with sentences describing a person's use of money or time while visiting a town. The participants then answered questions relating to the use of money or time – e.g. 'How much

money does John have left?' The second technique had the participants make their own questions using the researcher's questions as models. The third technique re-organized the participants in new groups, and had these new groups work on the participant-made questions. The procedures had two intentions: first, each sought to use problem-solving to understand and produce the linguistic expressions prompting the conceptual domains of time or money; second, procedures were similarly constructed to provide a physically salient mapping between the two domains. The English subject curriculum aims covered were: "read, understand and write English words and expressions related to one's needs and feelings, daily life, leisure time and own interests" and "understand and use English words and expressions related to prices, quantities, shape and size when communicating about one's daily life, leisure time and own interests" (Utdanningsdirekotratet, 2013, p. 7). Between the money-centered procedure and the time-centered procedure, the *time is money elicitation* technique was applied. This technique was a teacher-lead activity where the teacher wrote 'time is money' on the blackboard and asked the class what they thought that meant. This simple technique sought to make explicit the motivational link between the money and time mapping.

The *perceptions on time* procedure had two components: one organized as group work, the other as teacher-centered. The first component was a worksheet with the incomplete sentences: *Time flies when…, Time stands still when…, If I had time to spare, I would…* and *It feels like a waste of time when…* The worksheet required the pupils to discuss and write down as many suggestions as possible for ways to complete these incomplete sentences. The second component had the teacher ask the class to share their associations. The procedure sought to draw on the pupils' associations of embodied experience of time, categorize these experience, and share them. The reasoning behind the sharing of these experiences was to prompt a discussion of agreement or disagreement with the other pupils' statements, in order to engage with the information more deeply. The procedure covered the aims: "read, understand and write English words and expressions related to one's needs and feelings, daily life, leisure time and own interests" (Utdanningsdirekotratet, 2013, p. 7).

3.4 Classroom Observations

Both periods were observed by the researcher from the back of the classroom, with a few exceptions during group- or pair-based activities where the researcher had to move closer to

observe teacher-pupil dialogue. The choice of position at the back of the classroom was to get a clear view of the teacher and be less distracting to the pupils, who were facing the front of the classroom. As mentioned in Section 3.2.2, the degree of participation sporadically increased as the pupils turned to the researcher for aid when the teacher was preoccupied with another group. Nevertheless, despite these sporadic occurrences, the focus was kept on the observation task. All observations were registered on a computer by using Microsoft Word, and anonymity was already considered at this point by avoiding disclosure of names or descriptive features which might point to specific participants.

The main focus of the observations of both periods were on the teacher's conduct concerning vocabulary teaching. That is, any instructions, presentations, activities, assignments or tasks which promoted vocabulary learning, practice or production were considered interesting and registered. Furthermore, pupil-teacher interactions and pupil conduct which were deemed interesting due to their connection to the vocabulary teaching process were registered as well. According to Bjørndal (2011), the *focus* of the observation determines the degree of structure one should apply when registering the observations (p. 50). He further emphasizes that unstructured observations can be an almost insurmountable task, but that the use of open categories or topics can alleviate the strain of registry (Bjørndal, 2011, pp. 53-54, own translation).

The abovementioned points of focus entail observations with a wide perspective, seeking to describe teaching practice at it unfolded. Therefore, no strict observation guide was constructed, rather, pre-determined open categories were used. These categories were *time on task*, *description of activity*, and *pupil responses*. The registration was done as a running protocol, wherein most of the teacher actions and class interactions were described concretely, and oral communication was noted down as direct quotes. On the one hand, a running protocol requires much of the researcher's attention, which has the potential of stealing focus from the subtler interactions of the classroom. On the other hand, in giving a sufficiently detailed and accurate account of the observations, a thorough registry method was paramount. A viable alternative could have been to use video or audio recording equipment, but since many of the participants were children, such methods can be ethically questionable.

There was a shift in focus between the initial period and the implementation period. While the former sought to describe in detail the techniques and procedures of the teacher, the latter already had these techniques and procedures in the lesson plans. The observation of the

implementation period was more concerned with how the lesson plans translated from ideas to practice. The focus on how the different techniques and procedures unfolded was kept, but since the implementation period contained a larger number of pupil-centered activities, some of the resulting observations had an increased pupil-focus.

3.5 Reflection Note

The reflection note took the shape of a standardized interview with open questions and answers, which entails a high degree of structure (Bjørndal, 2011, pp. 96-97). The reflection note was administered on e-mail two weeks after the implementation period. The aim was to gain insight into the possibilities and challenges of the implementation of cognitive linguistics in the EFL classroom, from the perspective of the participating teacher. According to Bjørndal (2011), the interview can be applied as a supplementary research method, as it offers insight into another person's perspective (p. 95). Though a reflection note is not the same as a face-to-face interview, it aimed to be a supplementary research method in the same vein as an interview, with the intention of representing the participant's point of view.

On the one hand, the structured format of the reflection note removes the possibility to ask follow-up questions or request clarifications. On the other hand, the questions were made deliberately open-ended to ensure that the participant answered as independently as possible with regards to length and content. E-mail was used to give the participant as much time as she required to reflect on and fill out the note, and also to distance the researcher from the reflection and answering process. After working closely for several weeks, the participant may have been reluctant to criticize the lessons constructed by the researcher in a face-to-face interview. In order to reduce any reluctance or bias, it seemed pertinent to give the participant time and space in her reflection process.

The following questions were sent via e-mail:

1) Which methods and/or principles do you consider to be central or good in English teaching?
2) Which thoughts and considerations make the foundation for your choice of methods when teaching English?

3) From which inspirational sources do you draw your methods?

4) Which methods did you experience as new when using the novel lesson plans, and which were already familiar?

5) Which advantages did you experience in applying the new lesson plans?

6) Which challenges or disadvantages did you experience in applying the new lesson plans?

7) Do you have any other comments or reflections concerning the periods and its execution?

3.6 Data Analysis

The analyses of the raw data gathered through the research methods outlined above follow a pattern of qualitative analysis known as *segmenting* and *coding data,* and *reassembly* (Boeije, 2010, pp. 76-82). Segmenting can be thought of as the re-organization of the raw data into categories deemed relevant and purposeful by the researcher (Boeije, 2010, p. 77). These new categories are given a "summarizing label", based on perceived thematic commonality, which is referred to as coding (Boeije, 2010, p. 79). The observations from the initial period were re-organized into categories based on the type of techniques that were applied in the specific scenarios. The implementation period was organized by topic as they unfolded chronologically, in order to track the temporal aspect of the implementations and the revisions of the lesson plans during the implementation. The reflection note was presented as translated extracts of the main points of the reflection note in the order the questions were answered.

The reassembly of the segmented data took place in the discussion (see Chapter 5). Reassembly is the recombination of the 'building blocks' that is the segmented raw data, and requires a consideration of the relationship between these blocks (Boeije, 2010, p. 79). The discussion reassembled the data in categories of presentation of vocabulary, the use of communication, the selection of vocabulary, and the implementation as a whole. In each of the three first categories, the implemented lesson plans were discussed in light of theory, and compared to the techniques of the initial period, which was also discussed in light of theory. The challenges perceived by the teacher in the reflection note were discussed to gain a holistic overview of the implementation, together with possibilities and challenges observed during implementation.

4. Results

This chapter presents the results of the study and is subdivided into three main Sections; initial period observations, implementation period observations and the reflection note. The presentation of the results follows the same taxonomy of approach, method, procedure and technique (Harmer, 2015, p. 55) as presented in Section 3.3.1.

Given this thesis' focus on vocabulary teaching, observed techniques and procedures perceived to foster, or attempting to foster, vocabulary learning became the natural focal-point in the results. Considering that the techniques and procedures themselves are of greater interest than the order in which they appeared, the results have been categorized based on certain commonalities defined by the researcher, rather than how they were observed chronologically. These categories are elaborated on below. In addition, though the teacher's conduct was the main point of interest in this research, observations of the pupils' interactions were also included when deemed pertinent to the challenges or possibilities of the practical application of the novel techniques and procedures.

The first section describes the initial observation period, in which the teacher's techniques and procedures in the classroom were registered in order to give a detailed depiction of her teaching practice. Since the aims of the research is to juxtapose the teacher's regular practice with the researcher's lesson plans in action, a concise account of her teaching choices was necessary to construct a clear frame of reference for the ensuing discussion. This section is divided into six subsections: first, a brief overview of the period as a whole is supplied to show organizational aspects and typical features. Second, detailed accounts of observed techniques and procedures are grouped into five categories based on their similarities, these are: translation and repetition techniques, categorizing, illustrative techniques, songs and poems, and form-focused techniques.

The second section contains the observations of the implementation of the researcher's method anchored in cognitive science and linguistics. This method encompassed a series of techniques and procedures – outlined in Section 3.3 – which were brought into the classroom by the same teacher as was observed in the initial period. These observations attempt to recount the practical application of the theoretical perspectives, in order to both discuss how the real-life manifestation of the cognitively based methodology compares to the teacher's regular practice, and to see possibilities and challenges posed by the new method when the novel techniques

and procedures were set in a genuine teaching and learning environment. The data from this period was categorized based on their topics, since the variety of techniques carried out had these topics as common features. The categories are prepositions, shops and services, and time and money. The topics follow the lessons chronologically, in order to accentuate the temporal aspect and the adaptations and revisions of the lesson plans. The theoretical background of this period's techniques and procedures is outlined in Section 3.3, and in the pending discussion, these techniques and procedures will be discussed in light of their theoretical anchoring, and compared to the different techniques from the initial period (see Section 4.1).

Lastly, the data retrieved from the reflection note is presented in categories in order of how the questions were answered. This data explores both the given reflections behind the teacher's choices, in order to get an idea of which approaches lie behind the techniques and procedures observed, and her reported experience of the novel techniques and procedures, to gain insight into the possibilities and challenges the new method brings in practice, as understood by an experienced teacher.

4.1 Initial Period Observations

4.1.1 Overview

During the first period, data was gathered from a total of twelve lessons, spanning three weeks. The lessons followed the topic of Halloween, due to the proximity to Halloween and the upcoming chapter 2: 'It's getting darker' of *Stairs 4: My Textbook* (Håkenstad et al., 2014a). Each week had a schedule containing the learning aims of the week, homework, a vocabulary list and practice sentences. The lessons themselves were predominantly teacher-centered, with the exception of some individual, pair or group work, or station-based work (see Table 1). Though the techniques utilized in the pupil-centered activities required more time each, the sheer number of teacher-centered techniques took up more time in total. Every lesson featured non-subject specific information at the beginning for a duration of five to ten minutes. The transition from non-subject specific conversation into English was clearly marked by either of the phrase: 'Now we start English' or 'Now it's time for English'.

Table 1. Class organization during the different techniques.

Class Organization	Number of Observed Techniques
Teacher-centered, whole-class	34
Individual, pair and group work	8
Work stations	3
Total	**45**

4.1.2 Translation and Repetition Techniques

This subsection presents a category of results which shared translation and repetition as their most basic techniques.

A procedure applied to novel vocabulary items was vocabulary lists, presented at the start of the week, followed up by glossary tests at the end of the week. These lists were taken from chapter 2 'It's getting darker' of *Stairs 4: My Textbook (Håkenstad et al., 2014a)*. The items on the lists were either from the second page of the chapter and explicitly Halloween-themed, or extracted from some of the translation pairs under the variety of texts in the chapter, the extracted words being unrelated or partially related to Halloween. The word lists consisted of translation pairs of English to Norwegian and the practice sentences were simple sentences written in English. The translation pairs were divided into two lists of varied sizes for differentiation purposes (Table 2). The teacher expressed that she expected the pupils to learn the translation pairs by heart at home.

The glossary tests consisted of the teacher reading aloud one member of each translation pair in turn, repeating each uttered member three times. The chosen member could either be the L1 or L2 form. The pupils wrote the supplied item in a glossary book, then translated it into the other language without aid or co-operation permitted. Upon completion, the glossary books were handed in, corrected and scored based on two criteria; correct translation and correct spelling. The teacher wrote comments accompanying the score, such as 'Great job!', 'Better than last week!' or 'practice more.' As seen in the reflection note, the vocabulary lists and glossary tests were a reoccurring aspect of the teacher's weekly practice (see Section 4.3.1).

Table 2. Vocabulary Lists of the Weekly Schedules.

Differentiation	Week One	Week Two	Week Three
All Pupils	Hide – gjemme seg	Claws – klør	Grow - vokse
	Pumpkin – gresskar	Wear – ha på seg	Up in the air – oppe i luften
	Yell – hyle	Except – bortsett fra	Gets bigger – blir større
	Owl – ugle	Bald – skallet	Flies across – flyr over
	Witch – heks	Wigs – parykk	Need – trenger
	Ghost – spøkelse	Ordinary – vanlige	Know – å vite
	Scream – skrike/hyle	Spit – spytt	Tie – å binde
Expansion	Light – lys	Before – før	Plane – fly
	Chant – sang	Nouns – substantiv	Give me a hand – hjelpe meg

To present the items of the vocabulary lists, the teacher applied a technique of translation elicitation, which was done in a teacher-centered, whole-class setting. This technique was the pupils' first encounter with the vocabulary lists. Using the smartboard, the teacher wrote down the English member of the translation pairs, and inquired what the lexical item meant. The pupils were selected on raising their hands, and they provided direct translations into Norwegian. The provided translation was written down on the smartboard next to its English equivalent, as shown in Table 2. The pupils wrote down the translation pairs in their notebooks. The pupil-provided translations were accepted, except for one instance; the idiom 'give me a hand', as seen in Week Three in Table 2. The teacher's translation request prompted the following interaction:

P: Gi meg en hånd?
T: Tja, det kan jo bety 'gi meg en hånd', men ikke at man faktisk gir noen ei hånd. Det betyr å hjelpe til. Det er et vanlig uttrykk på engelsk.

While working on months, the teacher applied a repetition-oriented procedure consisting of two techniques, both teacher-centered. First, the teacher elicited the English name of a specific month by asking a close-ended question; second, the teacher modelled the elicited name twice and had the entire class repeat in unison. Elicitations were conducted for all twelve months. The following example shows an excerpt of this activity:

T:	La oss repetere månedene og se hva vi husker. Which one is first?
P1:	January.
T:	We'll do it together. *January*.
Class:	January. [unison]
T:	January.
Class:	January. [unison]
T:	And Second?
P2:	February.
T:	February.
Class:	February. [unison]

Immediately following the abovementioned elicitation procedure, a similar procedure followed in which the names of the months were elicited in relation to the current date:

T:	Let me ask another question. La meg spørre et annet spørsmål. Hvilken måned er det nå? [Points to the pupil raising his hand]
P1:	October.
T:	Yes, and which one is the next? Hva betyr next? [Points to the pupil raising her hand]
P2:	Neste.
T:	Yes, and which month is next?
P2:	November?
T:	Yes, that's right! And which month was the last one?
P3:	September?
T:	Yes, that's right!

In addition to repetition, the examples given above show the teacher's frequent code-switching. The code-switching technique was observed throughout the initial period, especially during teacher-centered instruction or when the teacher explained assignments. The code-switching varied between purely Norwegian utterances, immediate sentence translations, or a particular word in an English sentence. As seen in the reflection note, the teacher expressed to provide translations when she deemed it necessary (see Section 4.3.1).

Another technique was observed related to the months, in which she asked each pupil in turn the questions: 'When is your birthday?'. When the first pupil answered with the month in English, he was told to use the full sentence: 'My birthday is in [month]'. Subsequently, three of the pupils used the whole sentence to answer the question, while others simply answered with the name of their birthday month in Norwegian. In the instances where Norwegian months were uttered, the teacher modelled the month in English and had the class repeat twice.

Several of the longer texts (one to three pages) of chapter 2: 'It's getting darker' (Håkenstad et al., 2014a, pp. 24-43) were handled through translation and repetition techniques. Pupils were selected to read a paragraph out loud in a whole-class setting, before either being asked to translate, or have another pupil translate the paragraph. The entire text was read in this manner. The teacher guided the process by selecting pupils, and in cases where a pupil got stuck, modelled the pronunciation of the word or supplied the translation. In addition, these texts were homework, and the teacher informed the pupils that they had to read and translate the text to a parent at home. At the end of the week, the same texts were read and translated in the same paragraph-by-paragraph process as initially observed. The texts featured the words from the vocabulary lists of the week (see Table 2), but no explicit attention was given to these specific items. Each text also had footnotes with four to ten English- Norwegian translation pairs of words appearing in the text.

4.1.3 Categorizing

The teacher repeated the months by providing the categories *winter, spring, summer* and *autumn* in turn, and asking which months belonged to each season. This technique was teacher-centered and done in a whole class setting, requesting answers from every pupil. The technique was completed without any need of translation or guidance. The activity was partially revisited during a work station, where one assignment was to fill in the months of spring in *Stairs 4: My Workbook* (Håkenstad et al., 2014b, p. 25). In addition to the months of spring, the assignment had categories of *scary nouns, hairy nouns that fight, nouns with four legs, nouns that lay eggs* and *names* which required three members each (Håkenstad et al., 2014b, p. 25). The assignment referenced pages in the textbook where suggestions of category members could be found.

Another activity featuring categorization concerned the word and concept of 'noun'. This activity first connected the word with the notion of word classes which the pupils had encountered in the Norwegian subject. The teacher went on to elicit category members, as seen in the following excerpt:

> T: Husker dere at alle ord hører hjemme I en språkklasse? Vi har hatt det på norsk.
>   Husk at dere er delt inn i klasser etter når du er født. Ord er også delt inn. Er det noen
>   som vet hva et substantiv er?
> P1:   Navn på ting man kan se; steder og sånn.

T:	Egentlig navn på alt mulig. Har dere noen eksempler på engelsk?
P2:	Dog!
P3:	Cat!
P4:	Hand!
P5:	Skap?
T:	Cupboard.

Lastly, the teacher applied a 'true-or-false' activity which required categorization. Firstly, the Norwegian equivalents of 'true' and 'false' were elicited from a couple of pupils. Secondly, the pupils were divided into groups of four and handed paper strips with sentences on them, which the pupils had to sort under either 'true' or 'false'. The following sentences were featured: 'A skeleton has no more than ten bones', 'A skeleton is inside the body', 'A broomstick can fly', and 'A broomstick can sweep the floor'. The following interactions show one groups categorizations while being monitored and aided by the teacher:

P1:	'A skeleton has no more than ten bones.' [Reading the first paper strip]
P2:	Et skjelett har bare ti bein … det skal på 'false'.
P1:	'A skeleton is inside the body'
T:	Hva betyr body? [no response] Hvis dere smører dere med bodylotion er det 'kroppskrem'.
P3:	Et skjelett bruker solkrem?
T:	Nei, ikke akkurat. Hva betyr 'inside'?
P1:	Inni?
T:	Ja, så hva betyr 'inside the body'?
P1:	Inni kroppen! Så skjelettet er inni kroppen! Det er 'true'.

4.1.4 Illustration Techniques

In practicing items from the vocabulary list (see Table 2), the teacher applied a teacher-centered illustration technique. The technique had the teacher holding up cards depicting illustrations from *Stairs 4: My Textbook* (Håkenstad et al., 2014a, p. 25). The illustrations were of a skeleton, a witch, a broomstick, a bat, a vampire, a ghost, sweets, a graveyard, and a pumpkin. While holding up a card, the teacher provided the word associated with the illustration, and the pupils repeated in unison. When all the cards had been shown, she held them up once more without providing the word, and instead had the pupils provide the words in unison. Following the flashcard technique described above, each pupil received one of the illustrations. They were instructed to walk around in the classroom and approach other pupils. Upon approaching someone, pupil A was instructed to ask: 'What do you see?', which

prompted pupil B to answer: 'I see a [word represented by the illustration]'. The teacher monitored this walkabout by listening to different pupils as they encountered each other, but no interference was observed.

A pair-based illustration technique had pupil A flashing a card to pupil B depicting an illustration of one of the months, the depictions were taken from *Stairs 4: My Textbook* (Håkenstad et al., 2014a, p. 25). The activity took the form of a game in which one member of the pair flashed a card, while the other had to give the associated name of the month. If the incorrect name was given, the card was placed at the bottom of the pile and another presented, if the correct name was supplied, the card was put aside as a point and the stack of cards were exchanged to the other member. The teacher circulated between the pairs and monitored their activity, but no interference was observed.

A final illustrative activity, as observed during work stations, had the pupils matching simple sentences to the illustrations they described. The illustrations and sentences were copied from *Stairs 4: My Textbook* (Håkenstad et al., 2014a, pp. 28-29). For example, a sentence said, 'A ghost is in the graveyard', and the pupils had to find the illustration depicting a ghost in a graveyard. On request, the teacher approached the pupils of that particular station, and encouraged them to try translating the sentence prior to matching them with their respective illustrations. While two of the groups discussed translations out loud, the final group matched the descriptions and illustrations without any such discussion being noticed.

4.1.5 Songs and Poems

Five of the lessons also featured poetry and song. The song was about the months, and was initially taught by listening to a CD and having the pupils sing along. At a following lesson, the song was first sung together with the CD-recording, then without. The song was revisited twice the second week in two different lessons; the first lesson being sung along with the recording, then without it; the second lesson being sung without the recording at all.

The poem was about a family of five, each line pertaining to a family member, and the last line summing up the poem with a count from one to five. It was taught by the teacher modelling each sentence up till the end rhyme, and had the pupils repeating it in unison. Translations were made through close-ended elicitation aimed at the whole class, in which Norwegian

equivalents for each sentence was requested from the pupils. In addition to the language modelling, hand movements were added to the text; one finger held up for each mentioned family member. The movements were modeled as well, at the same time as the sentences were read. Twice the following week and once the third week, the poem was reiterated similarly to its instruction; the teacher modelled line by line with accompanied hand movements, the pupils repeated each line in unison, then the pupils recited the poem in unison without the teacher participating. Additionally, as one of the stations during a work station session, a poem had been cut into singular lines; the assignment being to arrange them in the correct order.

4.1.6 Form-focused Techniques

The abovementioned techniques had a retention and comprehension focus, certain activities had a focus on word form. During work stations, two distinct exercises focused specifically on form, all of which were conducted by the pupils individually. First, an exercise from *Stairs 4: My Workbook* (Håkenstad et al., 2014b, p. 24) portrayed the months in chronological order, but with two to five letters missing from each of them. The gaps where the letters were missing were underlined, so as to illustrate the number of missing letters. In her instruction of the exercise, the teacher informed the class that the correct spelling could be found on page 25 in their textbooks, but that they should attempt spelling out the words before consulting the book. No further guidance was observed on this particular exercise.

Lastly, one of the exercises of the online resource accompanying the textbook had the pupils listen to the recordings of words from the current chapter, and attempt to spell these words based on their sound. Stippled lines were shown on screen representing each letter, and the pupils had the option to replay the sound recording of the word as frequently as desired. This phonology-to-orthography technique saw no monitoring by the teacher, nor did the researcher observe any request for aid.

4.2 Implementation Period Observations

4.2.1 Overview of the Implementation Period

The implementation period consisted of three weeks, with a week-long winter vacation between the first and second week, ultimately accumulating in twelve lessons. The lesson plans in the Methods and Material chapter (see Section 3.3) outline the methods as they were provided to the teacher, and are revised to reflect what actually took place: certain activities had to be excluded due to time constraints, while others needed more time to be completed. The observations in this period sought to register how the different techniques and procedures unfolded in the classroom, that is, which visible processes and challenges the researcher observed when the lesson plans were brought to life, as well as how the teacher chose to carry them out. The observations of the implementation period were intended to give insight into which possibilities and challenges could arise from integrating cognitive linguistics in the EFL classroom. Furthermore, the observations of this period made possible the juxtaposition with the initial period, which made the discussion of coinciding and differing aspects of the two periods of teaching.

Two common denominators among the two periods were observed; firstly, the aims were written down on the blackboard as they appeared on the lesson plans and translated at the start of every lesson. This translation entailed the teacher requesting translations from individual pupils. On the occasions when a pupil offered only parts of the translation, the teacher asked the rest of the class what the missing translations were. The teacher also asked for verification of whether everyone had understood. Secondly, most of the techniques and procedures were explained thoroughly to the whole class before their initiation, even though the lesson plans only requiring short introductory comments in English. In procedures that contained a series of differing activities, she took time between each particular activity to present the subsequent techniques, elicit its translation and ask for verification of comprehension.

Organizationally, the planned techniques which were to be implemented diverged on the whole from the initial period techniques in that they were predominantly pupil-centered. As shown in Table 3, the organizational pattern of the pupils – i.e. individual work, pair work, group work, etc. – leaned toward the use of pupil-centered techniques. Table 4 shows the lexical items that appeared in the lesson plans (note that these were not presented as vocabulary lists or present on the weekly schedule).

Table 3. The Organizational Pattern of the Implementation Period.

Technique Organization	Number of Techniques
Teacher-centered	5
Pupil-centered	17
Total	**21**

Table 4. Target Words Presented in the Lesson Plans.

Prepositions	Shops and Services	Money	Time
On top of	Supermarket	Spend money	Spend time
To the left of	Toyshop	Waste money	Waste time
To the right of	Cinema	Have money	Have time
Under	Bookshop	Steal money	Steal time
Between	Bakery	Save money	Save time
In front of	Hairdresser's	Money to spare	Time to spare
behind	Café	Earn money	Time flies
			Time stands still

4.2.2 The Lessons on Prepositions

In the first lesson, the teacher informed the class that the coming weeks would be based on lesson plans made by the researcher. The first technique was initiated by the following teacher introduction to the class:

> T: What are prepositions?
> P1:   Noe man bruker for å fortelle hvor folk er, og hvor ting er, og sånt.
> T.   Today, we will be using movements and Lego-tasks to better understand what prepositions are. What are movements?
> P2:   Bevegelse.
> T: Good!

The *preposition commands* procedure was initiated and unfolded according to plan, with the exceptions of the time frame being exceeded and the elicitation of a definition of prepositions. First, the teacher gave five commands to the entire class. Second, she gave individual

commands to every single pupil, accumulating in twelve commands in total. There were no indication of number of commands that should be given in the lesson plans (see Figure 7.1 in Appendix 7.1), it only set a timeframe.

On some commands, the teacher switched to Norwegian to ensure comprehension, as seen in this example

> T: Stand between two friends. [Pupil hesitates] Hva var det jeg spurte etter? Hva var spørsmålet, P1?
> P1:   Stå mellom to venner?
> T: Yes, right!

Prior to the second part of the procedure, which had the pupils give commands, the teacher wrote the prepositions on the blackboard, and gave the following introduction:

> T: Okay everybody, I'll give you another exercise. You have to give another classmate a command using these prepositions. Skjønte du hva du skulle gjøre? [looks at a pupil].
> P1:   Vi skal gi hverandre kommandoer.

The second part of the procedure went according to plan. The pupils actively looked at the prepositions on the blackboard when forming their command, but without much hesitation. The teacher remained passive throughout this part of the procedure.

The *model building* technique received little time, as the *preposition commands* procedure took most of the first lesson. The teacher circulated between the groups, and had to tell one group to work together, as one of the pupils completed the task without consulting the group. No requests for aid were observed and the teacher was predominantly monitoring the pupils without intervention. As seen in the preliminary lesson plan in Figure 7.1 in Appendix 7.1, two more techniques were initially planned, but were excluded due to time constraints.

Initiating the second lesson, the *Simon says* technique was realized as intended, with the exception of the timeframe being expanded by five minutes. Three of the pupils watched their classmates and copied their movements to a large degree, while the others seemed autonomous. At one point, confusion broke out due to a particular command, as seen in this example:

> T: Simon says: 'go to the right of the door.' [The pupils distribute evenly on both sides]. Okay, nå er det et definisjonsspørsmål. Hvis jeg ber dere gå ut døra – dere er på vei ut – hva er høyre? If you are going out of the classroom, and you are told to go out of the classroom, this is your right [points to the right of the door from her perspective].

The *prepositional graphics* technique – second lesson – went according to plan. After the introduction, the pupils worked autonomously and without using translation, as far as could be observed. Some pairs completed the technique quicker than the estimated time frame, so the teacher had them play memory, in which they flipped the graphics and tried to find matching ones. Several pupils expressed that the technique was too easy.

Completing the final lesson, the *preposition cloze test* had the following introduction:

> T: Now I'll hand out a piece of paper. On this paper you will work with more prepositions. On this picture, you can see a bedroom. What's a bedroom?
> P1: Soverom.
> T: Yes, that's right. And you have to see where the different things are and fill in the prepositions. Don't ask for help right away, try yourself first. Ikke spør om hjelp med en gang.

The teacher aided pupils on request, this aid consisted of the teacher helping to translate certain sentences, and asking which preposition the pupil thought fit the best, but never supplying the answer directly. The following example shows one such episode:

> T: Hva er 'bak'? Hvis vi sier at noe er bak noe?
> P1: Next to?
> P2: By?
> P1: Behind!
> T: Ja! Og hva betyr 'a cat is playing'?
> P1: En katt leker?

The results of the *preposition cloze* test can be seen in Table 5 below. There were variations in the responses, in that certain prepositions tended to be substituted by other prepositions. This tendency was observed for all of the pupils to some degree. Concretely, *To the left of* and *to the right of* were substituted with *besides* or *next to*, or simply by *right* or *left*. *On top of* was substituted either by *on* or *in*, the former being most frequent.

Table 5. Results of the Preposition Cloze Test.

Prepositions	Total possible applications	Novel preposition applied	Substitutions applied	Spelling errors
On top of	**36**	2	34	2
To the left of	**12**	1	2	2
To the right of	**12**	2	10	2
Under	**12**	12	-	-
Between	**12**	12	-	5
In front of	**12**	12	-	2
Behind	**12**	12	**-**	5

4.2.3 The Lessons on Shops and Services

In the third lesson, the first technique was the *shops and services mind map* (see Section 3.3.3), following the aims. The teacher went outside the lesson plan by requesting translations of *shops* and *services* of the pupils prior to the category member elicitation. Additionally, the estimated time frame was exceeded. *Shops and services* was written on the blackboard and associated members of these categories were elicited from the pupils using two distinct techniques. First, the teacher inquired if the pupils knew any shops or services in English, or had visited any shops or services recently. She chose to handle *shops* first, before repeating the elicitation procedure with *services*. Second, since the answers received were predominantly proper nouns of shops found locally or nearby, she inquired as to what types of wares could be purchased at the suggested shop. The subsequent answer was used to determine the more general term of the shop in question, as shown in the following example:

P1:   XXL
T: And what can you buy there? Hva kan du kjøpe der?
P1:   Sports stuff?
T: Yes, a sports shop [writes it on the mind map]. Kan dere gjenta det? Sports shop.
Class: Sports shop.
T: Sports shop.
Class: Sports shop.

The *shops and services mind map* technique resulted in a comprehensive mind map in the shape of a sun model. Figure 1 shows a picture of this mind map immediately after its completion.
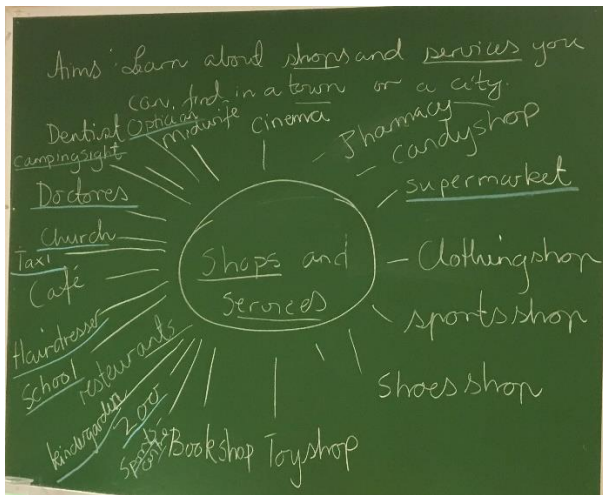
Figure 2. *Shops and services mind map from a teacher elicitation.*

Proceeding with the third lesson, the *wares and goods sorting* activity was introduced in Norwegian. It received little time as the previous technique exceeded its time limit. The teacher explained that there was more than one right answer, and that the pupils should strive to communicate in English. The sorting was done swiftly, but the envisioned discussion of category membership did not happen. The teacher circulated between the groups, but no guidance was needed. As shown in Figures 7.3 and 7.4 in Appendix 7.1, several planned techniques were excluded due to time constrains. The *shops to visit* procedure was originally skipped as a classroom technique to become homework, but was moved to the fourth lesson.

The fourth lesson got a late start, as a pupil argument during recess had to be solved by the teacher. In addition, the breach of timeframe resulted in departure from the lesson plans to accommodate the *shops to visit* procedure. This procedure was done individually by pupils and took most of the lesson. The teacher circulated between pupils, mostly aiding in translating the assignment description and explaining how to perform it. As observed, the answers of the pupils were predominantly from the previous *shops and services mind map* technique or proper nouns of specific shops. Note that the mind map was no longer on the blackboard.

The fourth lesson was concluded with the *walkabout* technique, as outlined in Section 3.3.3, and the whole-class sharing of the 'I would love to go to…', 'I would like to go to…' and 'I don't want to go to…' sentences of the original lesson plans. The sharing activity was excluded from the edited plans, as seen in Section 3.3.3, but was re-introduced as a finalizing activity of the lesson. Every pupil shared one sentence with the class on request of the teacher. The

walkabout proceeded as planned, with the teacher occasionally aiding pupils with pronunciation on request.

4.2.4 The Lessons on Time and Money

The implementation of the *text comparison* procedure in the fifth lesson had several issues. Prior to the procedure, the teacher explained the assignment in detail, yet several pupils asked once more after the worksheet was handed out. During the first technique, in which the groups searched for either time or money expressions depending on the text, several pupils asked whether they were supposed to translate the text first, to which the teacher told them to try guessing the meaning of difficult words from the context of the sentence. One of the pupils with lower English proficiency struggled with the text and opted out of the exercise, while a pupil with higher English proficiency completed the task without much aid. Another issue with the first technique was that some of the pupils were unsure as to which elements of the text were to be underlined. The teacher instructed them to underline the sentences that made mention of time or money, depending on the texts.

The second technique of the *text comparison* procedure, in which new groups were formed and the underlined expressions were to be examined, was left very little time. One group managed to start, but expressed confusion as to how to perform the assignment. The teacher explained that they had to look for similar sentences, but the pupils pointed out that the sentences were not exactly similar. One assignment was excluded due to time constraints.

The sixth lesson was adapted toward a focus to money, because of the issues observed during the *text comparison* procedure. The first technique was the *money mind map* technique, which was initiated by the following interaction:

> T: What can you use money on?
> P1: Breakfast?
> T: Yes, you can buy food – breakfast and dinner. And where can you buy food?
> P2: At the supermarket.
> P3: You can go to the hairdresser?
> T: Yes, and what can you do there?
> P3: Cut your hair?
> T: Yes, you can spend money to cut your hair!
> P4: You can buy the restaurant!

> T: Yes, you can either buy food or own the restaurant to earn money. What does 'earn' mean?
>
> P1:   Tjene?
>
> T: Yes, you can earn money if you own the restaurant.

As seen in this excerpt of teacher-class interaction, the teacher first elicited pupil knowledge of money use, then used that information to lead into terms of money, in this example 'earn'. The technique took approximately two-thirds of the lesson, and resulted in the sun model seen in Figure 2.
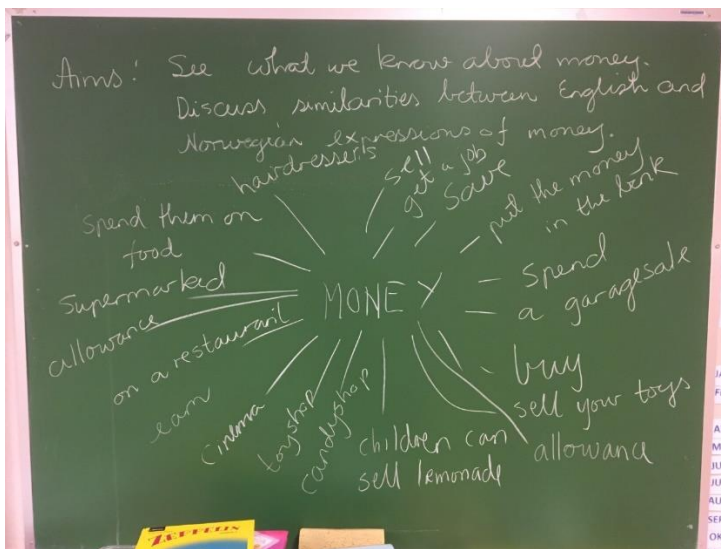
Figure 3. *Money mind map from a teacher elicitation.*

The remainder of the sixth lesson was spent on the *L1 to L2 money expressions* technique. The technique kept its time frame, but became a reading and translation exercise, as opposed to a discussion on general expressions of money being similar in Norwegian and English. The teacher alternated between the groups and encouraged the reading-and-translation focus. The intent of a similarity-of-features discussion was not sufficiently accentuated by the researcher.

The *money in town* procedure (see Section 3.3.4) ended up spanning two lessons (lesson seven and eight). One group did not understand the exercise, so the teacher took one of the provided questions and demonstrated how they were supposed to perform it, which seemed to end the confusion. The observed discussions concerning the questions were mainly in Norwegian, though the worksheet was in English. The teacher repeatedly urged the pupils to speak as much English as possible, but the discussion remained predominantly in Norwegian. Repeatedly, several pupils confused *money to spare*, with *penger å spare*, but the error was resolved by

the teacher simply indicating an error. Furthermore, all groups placed the money correctly on all questions according to the texts, but struggled in forming the sentences of the answers when spelling and syntax were concerned. The teacher alternated between groups and aided in constructing sentences for the pupils' answers and translating the questions.

The component of the *money in town* procedure, which had the groups construct their own questions, was left varying amounts of time, depending on the group's efficacy in completing the first component. The time left for this last component varied between five and fifteen minutes, resulting in the second component being incomplete and continued in lesson eight. During the question-making component, the groups wrote several pages of questions in English, even though the oral discussions were exclusively in Norwegian. The teacher circulated between the groups and aided in constructing their sentences, as well as making sure every pupil wrote down the new questions and participated in the exercise.

Additionally, the pupils frequently requested English words for a variety of valuable items that could be purchased. The teacher's attention was mainly on a pupil who struggled to form sentences in English, but was eager to make questions. The teacher had this pupil express his intended meaning in Norwegian, before she elicited partial translations or supplied the words he did not know. The pupil proceeded to make the following question: 'He has 4,000,300 pounds, he buys a car for 4,000,000 pounds, how much does he have to spare?'

Next, being directed into new groups, every pupil got to ask the new group one of his/her questions. The teacher alternated between groups and mainly monitored the activity. She had to tell one group to give answers in English, as they read the constructed question in English, but discussed and answered them in Norwegian.

4.2.5 Revisiting Time and Money

The ninth lesson began with the *time is money* elicitation technique, which went according to plan. The following quotes show its implementation:

> T: I'll write *time is money*. [writes it on the blackboard]
> P1:   Tid er penger.
> T: That's an expression, what does it mean?
> P2:   Kanskje hvis du gjør noe, si du jobber for et selskap og du har en times pause, men så bruker du én og en halv, så er tid penger, liksom.

> T: Så det du sier da, er at: time and money are valuable things. De er begge verdt noe. Skjønner dere hva jeg sier? Tid er verdt noe. Hvis dere ikke hadde hatt tid med familien hadde jo det vært trist. Så tid er verdt noe, akkurat som penger.
> P3: Tid er jo faktisk livet!
> T: Very good! Det er veldig fint sagt!

Following the *time is money elicitation* technique, the *text comparison* procedure was revisited in the remainder of the ninth and the tenth lessons. During the reading, retelling and discussion of similarities between the two texts in the following exercise, a frequent comment made by most of the pupils was that the sentences in which the time or money expressions were embedded were not complete equivalents. Apparently, it was a challenge underlining similar expressions, when their sentence contexts differed. As far as could be observed, the teacher solved this issue by telling the pupils to look for similar words, not the entire sentence. A larger degree of participation was concerned, then during the first attempt of the *text comparison* procedure. Most of the similar expressions were pointed out by all groups. Unforeseen circumstances not pertaining to English took up most of the tenth lesson, resulting in the exclusion of the L1 comparison component of the *text comparison* procedure.

The *time in town* procedure went according to plan, with the exception of exceeding its timeframe. The groups worked more autonomously than with the similar *money in town* procedure. Three out of four groups relied heavily on the time-notes, using them actively to visualize the time stamps mentioned in the accompanying questions. The fourth group skipped the use of notes all together, being able to give the answers directly. Gradually, however, all the groups made less and less use of the time-notes, one pupil expressing that it was getting easier, so they were not needed at all. All four groups discussed in Norwegian, but read in English and used the expressions in English when answering the questions. One pupil expressed that, a while back – referring to the time and money texts – he had not understood the expressions, but now he understood everything. Another pointed out that the Underground depicted on the town map was not found in towns, but cities. The teacher circulated between groups and aided with translations, but most of the time she remained passive.

Like the comparable money exercise, the time exercise also led to the pupils producing their own questions. One group had a member trying to make a question which would span an entire day, but the rest of the group members thought this suggestion to be too excessive. Instead, they compromised on half a day. An observed technique employed by the pupils was that one pupil narrated a visit to town in Norwegian, before the group as a whole discussed how to

translate it and get it into written form. Each group made two questions, and these were answered in new group assemblies. The questions were presented in English, the difficult ones discussed in Norwegian by the rest of the pupils, then answered using the English expressions. The teacher attention was predominantly on the pupils struggling with speaking or writing English, which resulted in the more autonomous pupils were largely left to their own devices.

The *perception on time* procedure constituted the remainder of the twelfth lesson. The procedure went according to plan, with the exception of the first technique, which had the pupil work in groups, was awarded less time, and the teacher-centered elicitation concluding the procedure was expanded. During the group component of the procedure, the teacher alternated between groups and aided by either reiterating the assignment, or providing English translations for Norwegian sentences uttered by the pupils in relation to the task.

The second technique of the *perception on time* procedure – teacher-led elicitation – went according to plan. The teacher made sure to include all the pupils in her elicitation, and inquired after each suggestion whether the class agreed with the statements of the presenting pupil. The pupils voiced agreement or disagreement out loud on request, but no further discussion was had. The following excerpts show the category *I think time stands still when…*

T:	Ok, give me some examples, please.
P1:	When it's boring.
P2:	When I read.
P3:	Are in the toilet.
P4:	Homework [agreement is heard from the rest of the class]
P5:	When I are in the bedroom.
P6:	Jeg kan leke alene, men jeg synes ikke det er kjedelig.
T:	In English?
P6:	I can play alone, but I don't think it's boring.

Moving to the category *if I had time to spare, I would…*, these interactions were observed:

P1:	Go to my grandmother.
P2:	I would like to go to my best friend.
P4:	Hvis jeg hadde hatt veldig mye, så hadde jeg dratt på kino!
T:	You would go to the movies. To the cinema.
P5:	I would play games – hockey and football.

On *time flies when…*, the following interaction was registered:

> P1: Når jeg sover.
> T: In English?
> P1: When I sleep.
> P2: When I have fun.
> P3: Playing with friends. Play outside. Play football. Watching TV. Eat food and drink things.

Next, the category *It feels like a waste of time when…* was covered:

> P1: Når jeg står i kø.
> T: When you are queueing. Queueing.
> P2: When I'm with my sister! [he snickers]
> P3: When I'm with my brothers!
> P4: I do homework! Noen som er enige? [The class expresses loud agreement]

Lastly, the teacher asked how the pupils could save time, which led to these pupil-teacher interactions:

> P1: Hvis du gjør leksene ferdig kan du leke med venner og sånt.
> T: If you do your homework you can play with your friends.
> P2: Jeg klarer ikke si det på engelsk, men hvis man rydder og gjør sånne ting først, så har man mye tid til overs.
> T: If you clean up first, you have a lot of time to spare. And if you pay attention, we will be done with this lesson before 13:15.

This procedure concluded the implementation period.

4.3 Reflection Note

The following section presents the reflection note, which was sent to the teacher by e-mail after the conclusion of the implementation period. The note sought to gain the participating teacher's perspective on the possibilities and challenges she experienced during the integration of the lesson plans, as well as reflections on her general conduct, and coinciding and differing aspects of her own practice and the implemented practice. In addition to seeking insight from

the teacher as a participant, it also provided insight from the teacher as an experienced educator.

The questions, and subsequently the teacher's answers, were in Norwegian and can be seen in Appendix 7.2. The presentation below summarizes main points and contains translated extracts from the complete original note, but great care was taken not to distort the original message. There was no communication between the researcher and the teacher between the sending of the reflection note and its return. The accompanying e-mail urged earnest answers and specified that the teacher could write at any length she desired. The section is structured in the order the teacher answered the questions.

4.3.1 Central Methods and Principles

When asked which methods or principles the teacher considered as central and good, and which thoughts and considerations underlay her methodological choices, she initially mentioned the pupils' L1, age, subject competence and level of maturity as something one should be aware of when teaching English. She further described her class as born in 2007, and as being relatively homogenous and coordinated. She also mentioned the textbooks *Stairs 4*, (Håkenstad et al., 2014a) and *Quest 4* (Hansen, Lien, & Pritchard, 2015), alongside their online resources, as well as material found at the school, to aid her in researching the curriculum aims.

Furthermore, she pointed to her main approach to teaching as giving a varied and positively charged education, with the intention of having the pupils be motivated and have a positive relationship to English. She expressed the importance of creating a safe atmosphere with a low bar of participation for both speaking and writing English. To achieve this participation, she mentioned using English as the main language in her classroom, with translations supplied when necessary. She further stressed the motivational aspect, writing that punishment is alien to her classroom, and that rather guidance, encouragement and praise are key components in making the pupils experience mastery.

Next, she turned to the structuring of her classes, stating that the weeks are similarly constructed. Mondays are spent going through the aims, new material and the homework. Wednesdays and Thursdays often entail working at different stations, utilizing *Stairs 4: My*

Workbook (Håkenstad et al., 2014b), worksheets, games, roleplays, English books, and computer-related tasks. Fridays are spent going through the homework and doing a glossary test. She described her general approach to vocabulary as having the pupils meet both topic and words in a variety of ways; the process entailing that the novel words and phrases are first encountered in a text and the vocabulary lists, before reappearing in different tasks and through rehearsing them at home. Her goal is to build the pupils vocabularies and gradually expand their understanding of the language through methods of reiteration and repetition.

4.3.2 Sources of Methodological Inspiration

On this topic, the teacher drew on the more general perspective of human values and general pedagogical theories. Regardless of subject, she stated that good learning is dependent on pupils' perception of wellbeing, their friendships, the teacher's ability to adapt the teaching to the pupils' level, and pupils' perception of being acknowledged and appreciated. She proceeded by emphasizing that the teacher-pupil relation is a prerequisite for the pupil's learning, maturation and motivation. Regarding her theoretical foundation, she mentioned Vygotsky's theories on pupil-teacher relation, Bruner's Spiral model, and Piaget's theory of assimilation. She stated that one must see the learning process as building brick upon brick, but that she increasingly wants to approach Bruner's idea of 'learning by discovery'. Lastly, she added that the available materials at school also influence her choices to some extent.

4.3.3 Perceived Strengths, Challenges and Weaknesses

On the question of which strengths the teacher experienced with the practice introduced in the implementation period, she pointed at the activity-based nature of the teaching, and how these varied activities helped initiate the pupils' creative side. She also thought the activities were organized in such a manner that they gradually built up from parts to a whole. Toward the end of the period, she experienced that the pupils to a larger degree formed both oral and written sentences in English. She also perceived the pupils as motivated and engaged when met with the types of tasks presented in the implementation period. With regards to vocabulary, she wrote that these methods helped the pupils pick up novel words, expressions and idioms, and made a leap into both written and oral English language production.

As a challenge, the teacher mentioned to the temporal aspect of planning and executing the lesson plans, and that – due to unforeseen circumstances or the conversion from plan to practice – some of the activities broke their timeframe. She pointed out that the activities worked because the researcher did the planning, and was able to adapt the activities from day to day, but that planning, execution and adaption to this degree would be too time consuming for a full-time teacher. Another challenge was concerned with classroom management, in that the teacher occasionally experienced difficulty in keeping track of all the groups or pairs during pupil-centered activity. She further asserted that the relative moderate size of her class – twelve pupils in total – made such styles of teaching and organizing more forgiving, than they would be in a larger class. She expressed that she sometimes wished she could have been several places at once. Lastly, she remarked that the implemented lessons required higher English proficiency of the pupils, and believed that the lessons worked because the higher proficiency pupils did well in including the lower proficiency pupils, further stating that such implementations are contingent upon a good class milieu. She especially exemplifies this point by mentioning a pupil who struggled greatly with English and generally required a very safe teaching atmosphere. This pupil occasionally resigned and felt unsure and unsafe in the class when required to speak or write English in groups or pairs. Concluding the reflection note, the teacher expressed that, on the whole, these types of lessons demand a lot of the teacher, and that the success of any such approach depends greatly on the person teaching them.

4.3.4 A Note on Familiarity

To gain some insight into how the newly proposed methods differed or coincided with the pre-existing teaching of the participating teacher, a question was posed asking what she experienced as new in the implementation period, and what was familiar. What was most familiar to her was the presentation of aims, which she herself did routinely. Mind maps were also something she was familiar with, and had used in other subjects, but never in English.

Regarding differences, she commented on the lack of vocabulary lists, glossary tests and rote memorization of word lists during the implementation period. Furthermore, she saw the methods applied during said period as more task- and activity-based, entailing much more group-organization, with much less dependency on resources such as textbooks, workbooks and related resource material. She also wrote that the implemented lessons contained more

problem-solving, which required more use of English language skills and creativity. Moreover, the sound in the classroom during this period she describes as 'more', but in a positive sense. She also saw a greater degree of text production, which she claimed revealed an English repertoire in her pupils of which she was previously unaware.

In summary, the current chapter has sorted the observations of the initial period in groups based on similarities in techniques. The implementation period was registered and presented as it unfolded chronologically, to accentuate the temporal aspect and the adaptations. Lastly, the translated extract of the main points of the reflection note was presented in the same order as the questions were answered, to give as accurate an account as possible of the teacher's reflections. In the following chapter, these results will be applied to answer the thesis question and the three subsequent research questions.

5. Discussion

This chapter will discuss how cognitive linguistics can be applied in the EFL classroom. In order to shed light on this research question, the three sub-questions (Section 1.2) are considered in order to concretize the main question, and to see the research from different angles. These research questions inquire as to how cognitive linguistics can be applied to EFL vocabulary teaching, how this application compares to the observed teacher's techniques and procedures, and which possibilities and challenges can be found by implementing these cognitive linguistics teaching ideas. In each subsection, the discussion will look at the implementation period in light of the theory and previous studies (see Chapter 2), before making a comparison to the initial period to point out coinciding and differing aspects of the two periods when considered relevant. Following the comparison, perceived possibilities and challenges will be emphasized to illuminate the feasibility of the implemented teaching practices.

First, the discussion looks at techniques and procedures that approach vocabulary on a deeper level in Section 5.1 'Presentation of Lexical Items', which is connected to the theory of concepts, categorization, frames and encyclopedic knowledge (Sections 2.3 & 2.4). Second, the role of communication and pupil-focus when working with vocabulary is discussed in Section 5.2 'Communication and Focus', in relation to the Usage-based model and CLT (Section 2.4.4). Third, the discussion moves to how our understanding of words at various levels of abstraction (Section 5.3) can be utilized in teaching systematically. Section 5.3 is subdivided into, first, 'The Core Senses' (Section 5.3.1), which is grounded in the concreteness effect, basic-level concepts, imaginability (Section 2.4.3) and embodied cognition (Section 2.5); and, second, 'Systematic expansion' (Section 5.3.2), which revolves around theories and studies of metaphor (Section 2.6). Lastly, the perspective is lifted from specific techniques and procedures to a more holistic view (Section 5.4), centered around the reflection note, in order to pinpoint challenges of the implementation as a whole as experienced by the teacher. Note that the theoretical perspectives outlined and discussed in this thesis are complex and intertwined, and as a result, several parts of the discussion connect to different points in the theory. For example, the cognitive strategies, as discussed in Section 2.3, underlie most of the cognitive principles, thus resurfacing on several occasions.

5.1 Presentation of Lexical Items

5.1.1 Categorization

On several occasions, the implementation period made use of categorization to present or discover novel vocabulary. Two similar techniques were the mind maps (Figure 1 & 2), in which the overarching concepts of these lessons were labels of categories, and related vocabulary was discovered through elicitation techniques. As seen in the teacher-pupil interaction example on Section 4.2.4, the teacher used both open and partially leading questions to guide the pupil group toward the target vocabulary by actively drawing on their prior knowledge. These elicitation techniques, which in turn resulted in rich mind maps, can be seen as elaboration techniques in that they sought to structure, expand and deepen concepts and incorporate novel knowledge (Di Carlo, 2017, p. 122). More specifically, it can be directly related to semantic elaboration, as proposed by Boers and Lindstromberg (2008), since it both connects new items to already known ones, and embeds them in a meaningful scenario (p. 12) – i.e. the scenarios of economy: buyer, seller, etc. Performing these elicitation techniques in a whole-class setting was a conscious choice, and though it might cause less active oral participation and less speaking opportunities, the intention was to have the pupils expand upon – elaborate on – each other's categorical knowledge, not just make use of their own. Also, the whole-class setting offered greater possibilities for teacher-guided elicitation, which proved fruitful, as seen in Figure 1 and 2.

Similarly, the *perceptions on time* (Section 4.2.5) and *shops to visit* (Section 4.2.3) were also approached as a categorization technique, in which the category members were pupils' perceptions and subjective opinions. These procedures ended in the pupils sharing their answers, which aimed to expand categories and exemplify how category members can differ from individual to individual, thus facilitating active engagement by having the pupils voice agreement or disagreement with other pupils' suggestions. In addition to being elaboration and association strategies, as described by Di Carlo (2017, p. 122), the *perceptions on time* procedure can be seen as drawing on embodied cognition. Our perception of time, i.e. our experience of time as relative to mood, is a felt experience that is reflected in our linguistic systems in idioms such as *time flies* or *time stands still.* One should point out that the provided idioms and clauses do not need to be the target vocabulary per se, but a trigger, or prompts (Evans & Green, 2006, p. 159) as discussed in Section 2.4.1, to access the pupils conceptual structure and encourage language use related to the provided concept. The focus, then, is

shifted from a given lexical item, to the many possible items associated with it in an exploratory fashion. While not claiming that the provided lexical item cannot or should not be targeted, a possibility in this specific case could be to elaborate on the metaphorical nature of idioms such as *time flies*. However, this elaboration was not undertaken in this study.

Categorization was not unique to the implementation period, it was also frequently applied in the initial period. Firstly, the entire period was on the topic of *Halloween*, which was not explicitly utilized as a technique or procedure, but offered a framework for the vocabulary, texts and activities to varying degrees. Taking the vocabulary lists into consideration (see Table 2, p. 50), one might question whether *Halloween* constitutes a satisfactory categorization. While popular culture and costumes might have made *witches* and *ghosts* prototypical members of this theme, other words such as *grow*, *light*, *spit*, etc. are not as readily associated with it. An interesting suggestion for further research would be whether items speculated to be more easily associated with the overarching theme are better retained and retrieved. According to prototype theory, certain items are clearer cases of category membership than others (Rosch, 1978, p. 36). Regarding the vocabulary lists, there certainly seems to be a varying degree of typicality. Secondly, the months were also subject to categorization techniques, either as chronological members of the year or as constituents of seasons (4.1.2). This type of category is rigid, in that it has a set number of members to place within predetermined classes. Though the organization of these items do require prior knowledge, such as the chronology of the months and the subdivision of seasons, it can hardly be said to elaborate on the concepts, nor make demands of expanded association.

In the context of cognitive linguistics, this categorization technique is more in line with classification strategies (Di Carlo, 2017, p. 122), as it seeks to classify and organize the knowledge, but not really explore it further. Thirdly, the true-or-false technique (Section 4.1.3) used categorization based on truth-conditions. This type of categorization falls within the same strategies of classification as the months, as the supplied sentences had clear yes-or-no answers, which fit inside rigid yes-or-no categories; making the activity more translation and gist focused, than categorization focused. Fourthly, when the pupils were working with nouns (Section 4.1.3), a less rigid approach was observed. The activity was performed deductively, in that a definition of nouns were requested and received before more specific examples. However, few examples were provided, and seemingly only to substantiate the definition in an introductory sense, thus making the categorization part – though both elaborative and associative – rather limited. One could suggest a prototype focused expansion here, in which

less salient category members were discovered to further explore the metalinguistic function of nouns beyond immediately tangible exemplars. As seen in Section 4.1.3, the pupils' suggestions were *dog, cat, hand* and *cupboard*; all of them with physical referents. An extension could be names of emotions (e.g. anger or fear), which are more abstract and conceivably less prototypical members of the category *noun.*

5.1.2 Deep-level Learning

On the surface, one could argue categorization to be a coinciding aspect of the two periods, but on closer scrutiny, they do differ in some respects. The categories of the implementation period are presented as open and requiring pupil creativity outside previously supplied lexical items. In contrast, the initial period, while actively utilizing categorization, had closed categories with a finite number of members, which seek to organize and memorize a set of pre-defined items. One could argue that the implementation period sought to explore and expand meaning and discover novel items, while the initial period was used to cluster already familiar vocabulary or give a general framework.

Theoretically, the elaboration and association efforts promoted by the implementation period's techniques are relatable to two foundational principles of cognitive linguistics and semantics: that meaning construction is conceptualization and meaning representation is encyclopedic (Evans & Green, 2006, p. 157). These principles are explored in full in the Sections Language and Concepts (2.4.1) and Encyclopedic Knowledge (2.4.2). Based on the preliminary analysis of the applicability of theory to practice (Section 2.4.2), the idea was that the nature of lexical units as prompts for rich concepts, integrated in a dynamic and encyclopedic knowledge structure, made possible a deeper exploration of a lexical item's target concept, as well as associations to other concepts and prompts, consequently expanding upon the given concept in line with the dynamic view (Evans & Green, 2006, p. 221). This notion of favoring a deeper, more comprehensive exploration of a lexical unit's semantics, is rooted in a deep-level approach to vocabulary teaching. The deep-level view is consistent with *semantic elaboration*, as proposed by Boers and Lindstromberg (2008), and builds on the *levels-of-processing theory* (p. 12). It seems pertinent to disclose that this thesis does not directly test efficacy of learning or acquisition, but that many of the theoretical perspectives do. Yet, as demonstrated in the

discussion of categories above, these elaboration and association techniques also appear to foster comprehension, pupil participation and exploration beyond the target vocabulary.

Two teaching procedures that stimulate deep-level vocabulary learning were the *money in town* and *time in town* procedures (see Section 4.2.4 & 4.2.5) – one related to money, the other to time – which operated within semantic frames (Lee, 2001, p. 8). These procedures applied problem-solving and creativity to answer and produce questions relating to time or money, by using vocabulary within the frames of economy, e.g. spending money at a shop leaves less money to save at the bank. Moreover, they follow the same principles of association and elaboration as those discussed in relation to categories, in that they both relate to prior knowledge of money or time, and are contextualized within the frame and the shops and services previously encountered. Additionally, it exemplifies how the different lexical items work in relation to each other, thus having an element of inherent structuring as well.

Proceeding with the notion that new vocabulary can be seen in relation to categories and frames to give it a deep-level focus, a comparison can be made to some of the techniques employed to novel lexical items in the initial period. As a reoccurring procedure, the observed teacher presented weekly vocabulary lists (Table 2) and subsequent vocabulary tests, which supplied a greater number of novel words with direct Norwegian translations. These lists and tests were a well-established routine, as pointed out by the teacher in the reflection note (Section 4.3.1). The vocabulary list technique seemingly offers two advantages when teaching vocabulary, both that a greater number of words can be covered each week and that meaning representations are instantly accessed through first language equivalents. Additionally, the follow up tests based on concrete translation pairs give an easy ground for summative assessment by checking spelling and translation. Similarly, one of the techniques applied to present two of these lists – week one and three – also adhered to a technique of eliciting translation by asking for the meaning of the English word (Section 4.1.2). Furthermore, retention was addressed through repetition, usually in the form of close-ended questions with the target being the specific lexical item, or by the aforementioned closed categorization exercises. For example, the procedure concerned with the months (Section 4.1.2) shows how these close-ended questions were applied, with the context only slightly shifted to birthdays. One could make the argument that the teacher's general approach contains active use of translation as a comprehension technique, and frequent repetition as a retention technique. In fact, she points to the pupils' first language as an important consideration when teaching English (Section 4.3.1).

Arguably, the translation and repetition techniques might find some theoretical support in the context of the Revised Hierarchical model, which claims that at lower L2-proficiency, second language words are more closely linked to the first language words than to the concept (Kroll & Stewart, 1994, p. 158). Thus, second language acquisition, at least at a low L2-proficiency level, is mediated by the first language, consequently becoming a re-labeling of the first language items and their link to the conceptual structure. In other words, the concepts are already there, and the teacher needs only to connect the novel language to the prompts already present in the learner's first language.

However, these techniques are problematic in several respects. Firstly, as theorized in the Revised Hierarchy model, the second language-to-concept bond strengthens concurrently with increased proficiency (Tokowicz, 2015, p. 47), and, as discovered by De Groot and Keijzer (2000), the more concrete L2-words draw directly on the concept even at low L2-proficiency. If one can apply teaching techniques that foster deep-level vocabulary learning from the start, one might hope to strengthen the second language-to-concept connection from an early stage in addition to circumventing the L1-mediation for concrete L2-words. Secondly, exploring concepts requires a consideration of its rich network of associations, thus demanding a greater degree of cognitive effort, which theoretically should aid long term retention. As suggested in the levels-of-processing theory, semantic coding occur at a deeper level than do orthographic or phonetic (Boers & Lindstromberg, 2008, p. 12). In addition, semantically coded words are more easily retrieved semantically (Ranganath et al., 2012, pp. 118-119). Arguably, the vocabulary list technique codes orthographically and phonologically, but semantically it is only presented for encoding as a translation, therefore retrieving it in different communicative or productive contexts may be hindered due to this simple semantic presentation. Thirdly, the first language and second language word perceived as equivalents when translated, may not share an exactly similar concept. While certain items, such as *pumpkin* or *owl* (Table 2, p. 50), refer to quite concrete entities in both languages, others may not. The idiomatic nature of expressions, such as *give me a hand* (Table 2), make direct translation inaccurate or quite simply wrong. Other words, such as *except*, *light* or *grow* (Table 2), are polysemous, which in turn makes a direct translation only partial. Fourthly, since encyclopaedic knowledge and concepts are dynamic, one could argue that teaching which is ripe with elaboration and association techniques can foster expansion of the conceptual structure, as well as aiding comprehension and retention of the new lexical items by unpacking its semantic content and connecting it to other concepts. As argued in Section 2.4.1, subjective experience is one

influential factor in the formation of the conceptual structure, which is not addressed in teacher-centred and translation-driven techniques.

5.1.3 Incremental Learning

There are three challenges of teaching that promotes deep-level vocabulary learning, namely those of comprehension, proficiency and time. As the teacher mentions in the reflection note, she supplies translations when perceived necessary (Section 4.3.1), and translations permeate her teaching both whether teaching intentional or incidental vocabulary (Section 4.1). This focus on translation might indicate the view that the pupils should comprehend the meaning of a novel form instantaneously, while the more explorative nature of a deep-level view might entail a delay between presentation of form and comprehension of meaning. This point is a major difference between the two approaches, as what may be perceived as a challenge in the translation-heavy approach motivated by pupil confusion or participation anxiety caused by a lack of understanding, is a wanted attribute in the deep-level view. Arguably, a challenge lies in changing teacher and pupil perception to a state where incremental comprehension is acceptable and normalized. One could see incremental learning in connection to CLT, in which the desire to communicate a message is the driving factor for the learner to figure out the language to convey said message.

Naturally, comprehension can be related to proficiency, as higher levels of proficiency entail the linguistic ability to participate more actively. During the technique where the pupils were supposed to find similarities in time and money expressions (Section 4.2.4), one of the lower proficiency pupils opted out of the exercise due to lack of comprehension. The pupil struggled with comprehending the sentence, and therefore chose not to participate. This instance might hint to a stigma surrounding comprehension, which should be addressed if the techniques rely on delayed or gradual comprehension. Furthermore, several of the studies presented in Chapter 2 were carried out on university level, while none were conducted in on a primary school level. Arguably, semantic elaboration looks differently for a university student then for a fourth grader, both due to their linguistic capacity to elaborate, and the more evolved state of their conceptual structure. Lastly, the amount of time required to explore vocabulary through concepts and categories is far greater than simply supplying the learner with the translation

equivalent. This challenge was expressed by the teacher as well, who referred to unforeseen circumstances as breaking the time frame (Section 4.3.3).

Additionally, as seen throughout the implementation period (Section 4.2), the lesson plans had to be continually revisited due to these unforeseen circumstances or the sheer misjudgement of the researcher when considering time on task. However, three counterarguments can be made in defence of time-consuming elaboration strategy. One is that the vocabulary given in the vocabulary lists received continuous attention by repetition throughout the week, which accumulated in a lot of time spent on the same lexical items, despite their effective presentation. Another is that the depth inherent in the cognitive techniques aids retention and offers a contextualization which connects the novel vocabulary to previous knowledge. There is no competence aim requiring the teacher to be fast, while there are competence aims which require learning and using vocabulary. Lastly, the teacher described her English lessons each week as similarly constructed (see Section 4.3.1). The reoccurring breach in the time frame might be due to the change in routine between the two periods, which required the pupils to adapt to new ways of thinking and working.

5.2 Communication and Focus

Another point of divergence between the two periods was the organization of the pupils, as shown in Table 1 and 3, the first period was highly teacher-centered, while the second featured more pupil-centered techniques and procedures. As suggested in the account of CLT and communication in the cognitive framework (Section 2.4.4), the emergent view of language in the Usage-based model gives precedence to a communicative-centered approach, as opposed to an instructional one. In light of the conception that a greater degree of engagement gives more active processing, and therefore cultivates language development (Whong, 2013, p. 123), one could argue that a teacher should facilitate this engagement – i.e. promote pupil language production – in order to assist active processing, and consequently expedite the vocabulary learning process.

However, in spite of the seeming endorsement of CLT, this method differs from the implemented method in several respects. Firstly, the techniques involved in the categorization and association activities described in Revisiting Time and Money (Section 4.2.5), and both

the time and the money mind maps, had their main focus on the lexical items. As a result, these activities did not follow the more incidental acquisition approach of learning the items from communication, instead, they relied on communication as a tool for the pupils to actively engage with the language items through association and elaboration strategies. Secondly, though the Usage-based model refers to authentic language use, which correlates with the CLT notion of using authentic language, much of the language use in the implementation period was engineered by the researcher. One might argue that language can be engineered to resemble authentic language, but in this thesis, it was engineered to best accommodate the envisioned techniques and procedures.

Though the request for authentic language content in the classroom is a seemingly shared ambition of cognitive linguistics and CLT, carrying it out in practice was another matter. The pupils' age entails natural restraints on proficiency, and this specific pupil group involved in this research project had very little experience in expressing English, especially in a creative and lengthy fashion. This claim is substantiated in two ways; firstly, in the amount of time spent on teacher-centered, whole-class techniques (Table 1) of the initial period, and; secondly, in the context of the teacher's reflections on differences from her own teaching (Section 4.3.4) in which she described the sound-level as heightened and the techniques as more group-organized and demanding of creativity. Arguably, engineered input and output offer an incremental approach toward language production by pupils of lower English proficiency by supplying a language framework from which to speak or write. On the one hand, the texts and utterances are not authentic in the sense, or to the degree, envisioned by CLT or the Usage-based model; yet on the other hand, they do provide opportunity for active language use through engineered input and output, which is a higher level of engagement than are teacher-centered instructions.

Furthermore, the technique which had the pupils making questions for each other (Section 4.2.4) began with engineered input in the questions and lexical items supplied by the researcher in the previous task, before having the pupils utilize this input in their own written production. Not only did this technique lead to written production and oral interaction in the following activity, but it also revealed the rich associations held by the pupils. While making their own questions, the pupils actively called upon the teacher to ask about lexical items they could use in their questions, such as cars and other expensive wares. In line with CLT, which claims that the desire to communicate is a driving factor in language learning (Harmer, 2015, p. 47), these techniques showed how pupils sought out English language to express their

creativity. In comparison, the initial period, with its focus on teacher-centered instructions (Table 1), offered no opportunities for creative work. Arguably, facilitating a more pupil-centered focus with requirements put on pupil expression is closer to the cognitive linguistic view. However, as discussed in Section 5.1, there are several techniques that are teacher-centered which should be given due consideration. Purely communicative approaches, wherein incidental vocabulary acquisition is the intent, do not necessarily adhere to the cognitive principles of elaboration or association in a concrete sense.

Interestingly, there seems to be few clear-cut contrasts between CLT and the envisioned method built on cognitive principles, even though they differ in a few aspects. The notion described by Harmer (2015), suggesting that form should come through communication, seems somewhat rigid. If one considers the mind maps (Figure 1 & 2) and the categorization and association activity described in Section 4.2.5, one sees a wealth of knowledge and participation from the pupils which hopefully entail deeper levels of processing. Conceivably, a lesson based on pure communication or incidental vocabulary acquisition might miss out on such learning and sharing opportunities.

These activities also give the teacher the opportunity to actively help label, categorize and draw associations from the pupils, as observed during the mind map on shops and services (Figure 1). This activity saw active use of both personal experience and metonymy. The intention was to draw on the pupils' subjective experiences in order to uncover and share category members of the superordinate category of *shops and services*. However, most of the answers were proper nouns of different shops, such as XXL, taken from places the pupil had actually visited. These types of answers could either indicate that the pupils had more basic-level concepts in memory (Lakoff, 1987; Rosch, 1978), since these are concrete and specific instances of the category, or that they lacked the English vocabulary to express the more general term. However, based on the tendency of the pupils to supply a Norwegian equivalent when lacking an English term, one might at least speculate that there is a basic-level effect.

In order to lift it to a higher categorical level, the teacher started inquiring the pupils as to what could be purchased at the different shops. For example, XXL sells sports stuff, therefore it is a sports shop. This elicitation was not planned, but it presented a possibility for using cognitive linguistics in the classroom. As for many shops and services, the category – e.g. sports shop – is perceived and labeled due to what it offers, which is a category member, thus it is metonymically structured. This metonymical technique shows a potential use of cognitive

linguistics to explore language and point out the connections between category members and linguistic form. Though metonymy was unintentionally utilized in this example, it hints to a technique which promotes pupil participation and reflection, as well as tying it directly to the more concrete exemplars provided by the pupils. Though substantial scrutiny has been directed at the instructional techniques observed in the initial period, equal scrutiny should be levied at a purely communicative approach as well. One might see a dichotomy between the instructional and communicative approaches, but one could argue that cognitive linguistics lends support to aspects of both. Arguably, neither a purely communicative activity nor an instructional monologue offer much in terms of deeper exploration of language through elaboration or association, as the former focuses on content gist and incidental learning, and the latter takes active pupil engagement out of the equation.

5.3 Levels of Abstraction

As discussed above (Section 5.1) the techniques and procedures applied to present vocabulary in the two periods differed on perceived depth to which the lexical items were explored – especially when analyzed from the principles of concepts, categorization, encyclopedic knowledge, and cognitive learning strategies, but the selection of vocabulary is also significant. A coinciding aspect of both periods' selection was their origin in the textbook chapters. Yet, while the initial period entailed words provided in the chapter and categorized under the framework of *Halloween* to varying degrees, as discussed in Section 5.1, the implementation period selected vocabulary due to perceived interconnectedness of the items. This interconnectedness has till now been considered as the lexical items' ties to conceptual structure, encyclopedic knowledge and semantic frames. However, the notion of the items at different levels of abstraction, and as motivated (Lakoff, 1987, pp. 346-347), was another important foundation for the selection. In other words, the thesis sought to explore whether the systematicity in language proposed by cognitive linguistics, such as embodied cognition or metaphor, could be applied directly to teaching practice, rather than the more arbitrary presentation of words loosely grouped in themes.

5.3.1 The Core Senses

A principle underlying several techniques in the implementation period was embodied cognition as an approach to teach core senses of words and phrases. Concerning embodied cognition, as discussed in Section 2.5.1, Tyler and Evans (2003) state: "Our world, as mediated by our bodies perceptual apparatus (our physiology and neural architectures, in short, our bodies) gives rise to conceptual structure, that is, to thoughts and concepts" (pp. 23-24). This premise, alongside Holme's (2012) suggestions of making new lexical items more memorable by using the movements, gestures, and physical imagery which were the ground for initial conceptualization (p. 9), is manifested in the lesson plans' techniques for teaching prepositions. The intent was to aid comprehension of the prepositions by tying their phonological poles – the utterance of the preposition in a sentence – to its semantic poles by using movements, thus circumventing the L1 translation. As seen in Section 4.2.2, the movement techniques – both with teacher and pupil commands – functioned without notable challenge, perhaps with the exception of the few instances in which a pupil copied another pupil's movement. However, this sort of physical demonstration gives the pupils an opportunity to learn from their peers, which, arguably, makes the copying less problematic, unless it persists in the same pupil's conduct. As pointed out by Tyler et al. (2011): "one of the most fundamental human experiences is viewing spatial scenes, i.e. objects in relation to each other" (p. 183). One could argue that pupils copying other pupils' movements could facilitate prepositional learning through physical imagery, as the spatial relation is still observed. When it comes to comprehension, the apparent success of teaching these prepositions through physical movements breathes new life into Asher's (1969) TPR-hypothesis as an instructional technique; swiftly connecting the semantic and phonetic poles. Additionally, these techniques may find some support in the concreteness effect researched by De Groot and Keijzer (2000), as discussed in Section 2.4.3, which concluded that concrete words were easier to learn (pp. 1-49). As explained by Tokowicz (2015), concreteness concerns the words perceptibility (p. 81), so by employing techniques which directly engage the perceptual apparatus, one should facilitate both easier encoding and better retention.

Moreover, the techniques which made use of the ball-and-box and Lego-model visuals had similar intentions; teaching the concrete sense of prepositions – i.e. spatial relations – by actively working with representations of the core meaning of each preposition, while the final exercise sought to test whether the pupils had internalized the novel items enough to draw on

them. As seen in Table 5, certain of the novel items – mainly *to the left of* and *to the right of* – were highly susceptible to substitution by another item – in most cases *next to*. One might speculate that, given the correctness of the answer in substitution with *next to*, the pupils comprehend which concept is required to describe the spatial scene in question, but another lexical item is already more closely associated with that particular spatial relation. A possibility in this particular case could be for the teacher to further elaborate on the subtler differences between the concept prompted by *next to* and the concepts prompted by *to the left of* and *to the right of*. For instance, if a desk is placed next to the wall, then the pupil can obey the command *Stand next to the desk* or *stand to the right of the desk*, however, due to the inability of the body to walk through walls, the command *stand to the left of the desk* would be impossible to obey.

Another challenge which was noticed in the *prepositions cloze test* was the spelling errors (Table 5), which possibly follows the high semantic focus of the techniques – and of the entire implementation period – which left form-focus in a state of neglect. Arguably, this challenge shows a weakness of the lesson plans, in that the focus lacks equilibrium when it comes to the form-meaning binary, especially orthographically. When it comes to focus on form, as alluded to in Section 2.3.2, Boers and Lindstromberg (2008) suggest structural elaboration by recognizing or noticing formal features of words (p. 12). A concrete example is seen repeatedly in the preposition *to the right of*, in which *right* is often spelled *rait* og *reit*. A possibility in this instance could be to have the pupils examine similar structural items – such as *light*; which appeared on the wordlist the week before – and puzzle out the sound to spelling relationship, further searching for examples of other similar -ight-ending words. However, structural elaboration of this sort was not given sufficient attention in this project, and it therefore remains a weakness of approaching vocabulary with a deeper level perspective of this thesis, with its focus on semantics.

Conversely, several techniques applied by the teacher in the initial period did have a form focus. Firstly, the vocabulary tests entailed spelling error corrections as well as translation requirements, which had to be corrected upon their return. Secondly, the songs and poems were read until the end rhymes before they were translated, or listened to on a record before being performed. Conceivably, end rhymes at least give the opportunity to notice similarities in morphology, while listening to a recording, through supplying a native speaker as language model, offers some opportunities to notice the phonetic form. Thirdly, the workbook exercise which had the pupils fill in missing letters to complete the names of the months (Håkenstad et

al., 2014b, p. 24) was arguably exclusively focused on spelling, as it required no more than filling in two to five missing letters.

One could maintain that all these activities pertain to some degree of structural elaboration, at least in the loosest definitions of the terms *notice* or *recognize* structural elements, as are the suggested techniques by Boers and Lindstromberg (2008, p. 12). The aforementioned activities do supply an opportunity to notice structural similarities, the missing letters exercise perhaps most saliently so. Whether it is elaboration or not, or whether or not it was recognized by the pupils are different matters. The vocabulary test technique grants structural *attention*, but by rote memorization, rather than any explicit pointing out of structural similarities to other lexical items. Notably, the missing letters exercise practices orthography, and might conceivably lead to notice of similarities in the endings of certain months – Jan*uary,* Febr*uary*, etc. – though not directly, nor was any such similarity mentioned by the teacher. Comparably, the songs and poems fall under the same category as the missing letters exercise, in which a certain notice is possible, but never expanded upon or remarked. Thus, one could argue that these techniques provide a possibility of *noticing* structural elements – not similarities – or at best offer structural *attention*, but they lack the focal points and comparative analyses which constitute structural *elaboration*.

While these techniques may not contribute completely to structural elaboration, they do at least present and practice the forms of the words orthographically to a greater extent than does the embodied teaching suggested above. After all, form is an important counterpart to the semantic pole, which arguably contribute to language production in communication. However, whether knowledge of form should be promoted by structural elaboration, be subject to presentation and practice, or simply be left to incidental acquisition is beyond the scope of this thesis. Yet, given the perceived inclination of the pupils to write out words closer to their phonetic representation, as seen in Table 5, some degree of form-focus would be advised, thus suggesting a balance between semantic elaboration – and semantic depth – and structural elaboration – and focus-on-form.

Another aspect of teaching core senses of lexical items is their degree of concreteness, as discussed in Section 2.4.3, based on the findings of De Groot and Keijzer (2000). As explained by Tokowicz (2015), concreteness concerns the referent's perceptibility (p. 81), and is grounded in the dual-coding theory, which claims that some lexical items are encoded and stored both as a mental images and as a verbal models (Cook, 2006, p. 1079). The notion of

perceptibility was integrated in a literal and visual sense in the lesson plans, by using illustrations and real-life pictures in several techniques. Firstly, in the work on prepositions, the *prepositions graphics* technique (Section 4.2.2) provided simple graphics of different objects' spatial relations, while requiring the pupils to actively engage with the visuals by retrieving the verbal representation of the respective graphics. This technique is perhaps most closely associated with the Direct Method, as discussed in Section 2.5.2, as it sought to connect the prepositions to the graphic directly. This connection is attempted because the graphics provide simple representations of the *concrete senses* of the prepositions semantics, thus being more easily subject to visual representation based on their concreteness.

Secondly, the *preposition cloze test* (Section 4.2.2) entailed the completion of sentences by using prepositions based on a rich cartoon-image above the text. This technique was applied to check whether or not the new lexical items had been internalized. Though it should be noted that cloze tests are not necessarily advocated by this thesis, as they often require retrieval of specific items in a set context, it was utilized here in a deliberately open way in relation to a picture to examine whether the pupils readily retrieved the novel vocabulary, or relied on prior lexical items. As already alluded to above, certain prepositions – especially those with shorter alternatives – where highly susceptible to substitution. One might speculate that there is a prototypicality effect here; as mentioned in Section 2.3.1, Rosch (1978) states that: "by prototypes of categories we have generally meant the clearest cases of category membership defined operationally by people's judgements of goodness membership in the category (p. 36). Conceivably, then, several of the pupils see the spatial relation of 'one object placed atop another' better described by *on* than *on top of,* thus *on* constitute a better candidate for category membership. Another possibility could be that many of the pupils had internalized the form *on,* and in failing to retrieve *on top of, on* was the natural choice. At least in the context of prepositions, the use of illustrations offered enough openness to discover such relationships.

Thirdly, a component of the money and time maps (Sections 4.2.4 & 4.2.5) was visual, as the maps were sheets on which a selection of shops and services were spread haphazardly to represent a town. Additionally, the money map also had tiny, cut-out money notes, while the time map had clock cut-outs representing a set amount of time. In the *money in town* procedure, the role of human experience of commercial events, as stated by Fillmore (1976, p. 25) and discussed in Section 2.4.2, in language was foundational. On the role of experience in language, as seen in Section 2.5.1, Lakoff (1987) writes: "Human language is based on human concepts, which are in turn motivated by human experience" (p. 206). Since the use of actual

money in an actual town in English was an improbable teaching technique, illustrations were made to make the scenario palpable. The money notes were meant to replicate the experience of money spent equals less money saved, etc. The use of notes representing time will be discussed in Section 5.3.2

Similarly, several of the techniques observed during the initial period also entailed illustrations (Section 4.1.4). These techniques can be divided into three categories based on purpose; (1) presenting novel vocabulary, as seen in the teacher-centered flashcard technique; and (2) practice vocabulary, as observed in the walk-about technique, and the pair activity where one pupil flashed a card while the other retrieved the name of the month illustrated on said card. Both (1) and (2) are reminiscent of the Direct Method, as discussed in Section 2.5.2, in that they attempt to connect a word directly to its illustrated referent. As pointed out by Drew and Sørheim (2016), this method is effective when teaching communication on a basic level (p. 24). One might argue that, when building a vocabulary threshold to enable communication, these techniques are a possible path to reach this goal by facilitating rapid semantic representations.

Taking into account perceptibility as a constituting factor for concreteness, as explained by Tokowicz (2015, p. 81), and the dual-coding theory's visual-spatial component outlined by Cook (2006, p. 1079), both discussed in Section 2.4.3, as well as basic-level categories (Lakoff, 2013), discussed in Section 2.4.3, one may clarify the definition of teaching on a basic level, as certain words are more concrete and perceptible. As observed in the initial period, words such as *ghost, witch* and *sweets* were all presented and practiced using illustrations (Section 4.1.4), but they belong on various levels of perceptibility, and subsequently in the categorical hierarchy. While *ghost* and *witch* are basic-level concepts – one can easily conjure a mental image of a witch – *sweets* are at a superordinate level of categorization – one cannot get a neutral mental image of sweets across the category. Consequently, the more basic-level concepts are, theoretically speaking, more receptive to a Direct Method teaching, while a superordinate term – e.g. *sweets* – could possibly benefit from a more category-centered technique in order to explore its members.

In addition, one could have the pupils actively engage and contribute to the exploration of the term by leading a discussion on what constitutes sweets, thus enabling personal engagement and prototype theory. Moreover, certain words are more abstract, such as *ordinary* or *need,* or highly idiomatic and metaphorical, such as *give me a hand*, were the Direct Method falls short.

For example, the image of a witch flying on a broom as an illustration of the concept *flies across* seems inaccurate; which element of the illustration does the verbal information denote? This inquiry seems paramount for any teacher using illustrations, as one may risk the *split-attention effect*, as alluded to in Section 2.4.3, which states that when visual and verbal information is hard to connect, it increases the cognitive load on working memory, instead of the positive effect of dual-coding (Cook, 2006, pp. 1079-1080). On the one hand, the split-attention effect is problematic when the pictures are encountered in textbooks or other incidental scenarios in which they are not necessarily explained, which would require the learners to puzzle out its relation to the text on their own, thus adding to the cognitive load. On the other hand, when the pictures are the focus of the activity, as in the flashcard technique where the pupils guessed the months from different nature illustrations, the point of the activity is to try retrieving the verbal information already possessed, not directly code novel information. Therefore, one might consider a distinction between illustrations as a technique for encoding novel lexical items, and as a practice routine. Furthermore, one should reflect on whether the intent of the exercise is to invest cognitive work in a specific item for the sake of memorability, or avoid the cognitive load in techniques for the presentation of vocabulary.

In a broad sense, this Section has outlined two challenges when it comes to the selection of vocabulary. The first pertains to levels of abstraction, wherein one should consider whether the vocabulary is easily imaginable in relation to category membership and concreteness, whether it is susceptible to illustration or TPR-techniques, and whether it is metaphorical or otherwise abstract. This point is a consideration of the vocabulary. The second is concerned with whether the illustrations or pictures are too complex or confusing, or contain too many elements. This point is a consideration of the illustration material. Both points can be seen as different sides of the same coin, and the argument made here is that cognitive linguistics, through basic-level categories, the concreteness effect and embodied cognition, can offer some insight into how and when the different techniques are suitable. Furthermore, in the context of teaching vocabulary for deep-level learning, as discussed in Section 5.1, teaching vocabulary through flashcards are swift ways of presenting the words, but it should be kept in mind that they are neither contextualized nor explored with any cognitive depth. Additionally, the incremental learning through gradual comprehension, as discussed in Section 5.1.3, would be undermined when using techniques resembling the Direct Method, although the Direct Method is perceivably more time efficient.

5.3.2 Systematic Expansion

Having discussed embodiment and imaginability as principles of teaching concrete, core senses of lexical items, the discussion moves to the teaching of higher levels of abstraction. On metaphors, as examined in Section 2.6.1, Lakoff and Johnson (1980) write: "Our ordinary conceptual system, in terms of which we both think and act, is fundamentally metaphoric in nature" (p. 3). Moreover, its connection to language is pointed out by Nacey (2013): "the words we use are derivatives of the metaphors structuring our thoughts" (p. 12). The basic idea, as argued by Geeraerts (2010), is in essence to comprehend one concept through another (p. 213). These points of systematicity were integrated in the lesson plans through the TIME IS MONEY conceptual metaphor, as discussed in Section 2.6.3, in (1) the procedure of locating and comparing time and money expressions in English, then relating them to Norwegian expression of similar character, and in (2) the *money in town* and *time in town* procedures. The intent was to teach both concepts through the high correlation of their linguistic expressions, that is, by using the systematic connection between how people talk and think about time and money in similar ways. As pointed out in Section 2.6.3, Nacey (2013) explains that: "a metaphor such as this one [time is money] is rich in entailments due to various perceived structural similarities, whereby certain features of a 'source' domain (i.e. money) are mapped onto a 'target' domain (i.e. time)" (p. 13). The mapping is a form of motivation, as discussed in Section 2.6.4, which according to Lakoff (1987) is the systematic relationship between knowledge through radial categorization, metaphor or metonymy (pp. 346-347). The motivation of this particular metaphor is that of viewing both time and money as valuable commodities and limited resources (Lakoff & Johnson, 1980, pp. 7-8).

The first procedure, as described in Section 4.2.4, sought to have the pupils first locate time or money expressions, depending on which text they were handed, then form groups and find similarities between the two. The comparison technique was grounded in *perceptual resemblance*, which proports that some metaphoric mappings are associated through perceived feature resemblance (Tyler & Evans, 2003, pp. 32-36), which the learners were supposed to discover by comparing shared linguistic features. However, several challenges arose; firstly, the pupils' knowledge of the source domain – i.e. money – was lacking when it came to its linguistic representation; secondly, their teacher expressed some uncertainties as to what the technique entailed, asking if they were supposed to translate it and repeatedly consulting the researcher as to how it was to be carried out; and thirdly, many of the pupils did not readily

see the similarities between the expressions due to slight variations in the sentences in which the expressions were embedded.

There were three potentially challenging key issues of this procedure; the researcher's assumption that the pupils had a firmer grasp of expressions concerning money; that the teacher was not properly instructed as to how the activity was supposed to unfold; and that the teacher's usual style was more concrete and translation-centered, than analytical. These issues can be seen in light of Boer's (2004) fourth practical concern, discussed in Section 2.6.4, namely that younger, lower-proficiency learners require more extensive teacher guidance as they lack the vocabulary to perform the analysis (p. 221), a concern made more problematic due to the unclear instructions. In addition, one could argue that in an intervention-like study such as this one, the proposed techniques may differ fundamentally in their handling of language, which entails that the learner needs to not only employ cognitive effort in solving the assignment, but in comprehending *how* to solve it as well. This point leads into Boers (2004) first practical concern, wherein he claims that teaching metaphoric extensions requires time and dedication, and that: "a one-off eye-opener… is not sufficient to yield a long-term advantage in retention" (p. 216). Time, then, becomes a major challenge in integrating metaphor theory in the EFL classroom. If this research is any indication, then this sort of teaching puts intense pressure on the teacher's knowledge, and requires continuous, time-consuming attention. In fact, as presented in Section 4.3.3, the teacher, reflecting on the temporal aspect of the implementation period, wrote that the only reason such teaching techniques were possible, was due to the researcher planning and adapting them continuously. Moreover, the extensive need for guidance not only puts pressure on the teacher when it comes to time, but also requires more linguistic knowledge to perform the guidance when it comes to content.

Arguably, the first procedure had an inductive undertone; the motivations – time/money as valuable commodities and limited resources – were not touched on before the noticing technique. Instead, the pupils were supposed to notice the similarities first; hopefully investing cognitive effort in discovering the linguistics correlations on their own. However, due to the seeming failure of this procedure, a more incremental course was elected. The adapted procedures consisted of first teaching the source domain through the money map procedure (see Section 4.2.4), then making explicit the motivational link through a whole class elicitation technique, described in Section 4.2.5, before moving into an analogous procedure to the money map procedure, in the time map procedure.

To emphasize the perceptual resemblance between the two concepts – i.e. time and money – the entire procedure of the money map was duplicated, with the exception of substituting the money language and materials with time-themed ones. In so doing, time got a concrete value illustrated and applied in the same vein as with the money notes. The time-related procedure is inspired by the principle of enhanced metaphor awareness, discussed in Section 2.6.4. On this principle, Boers (2004) suggests grouping idioms under common metaphoric themes, and explicitly show the imagery of idioms by referring to the literal or original meaning (p. 211). Though one might discuss whether the selected vocabulary of time and money is idiomatic, the techniques suggested by Boers (2004) do not solely concern idiomaticity. As was asserted by the researcher in Section 2.6.4, one can make a variation of these principles by teaching from concreteness toward higher levels of abstraction, thus constituting a certain *directionality* in the selection of vocabulary and the teaching of extended senses.

As glimpsed in the elicitation technique concerning time is money, the pupils, though prompted by the teacher, independently made relevant reflection touching on the motivational link between the two concepts. This instance supports the claim of Boers (2004) that metaphoric extensions can be taught at different proficiency and age levels, but it also exemplifies the teacher knowledge requirements, as mentioned above. Notably, an argument can be made that this particular metaphoric mapping, due to its high correlation in lexical expressions, satisfies Boers (2004) fifth and sixth practical concerns of transparency and vagueness (pp. 224-227). Firstly, the TIME IS MONEY metaphor has a high degree of transparency, as the metaphoric themes – time/ money is valuable and limited resources – are the only themes on which the mapping relies. Secondly, the mapping can hardly be considered vague, as the correlation between the expressions is high, and the metaphor seems to be highly conventionalized both in English and Norwegian.

Additionally, Boers (2004) second practical concern, whether the metaphoric awareness should be receptive or productive in focus (p. 217), was kept toward a receptive focus. When building a vocabulary threshold in order to enable communication, teaching the conventional language seems more pertinent early on, than to start experimenting with language before that threshold is reached. Conceivably, such productivity would require second language skills beyond those possessed by fourth graders. Lastly, with regards to Boers (2004) third practical concern of cognitive style (p. 223), no measurements were made. Any such endeavor was beyond the possibilities of the study or scope of this thesis. One could speculate however, that since the proposed metaphorically oriented procedures in this project took a more incremental

course from source domain to target domain, the requirements of the learner to puzzle out the source of provided figurative language is somewhat alleviated. It should be kept in mind, however, that certain pupils may possess cognitive styles – e.g. as *analyzers* and *imagers* – which may be more amenable to this style of teaching.

The direct approach to metaphor was perhaps the greatest differing aspect of the two periods, as much of the selected vocabulary of the initial period denoted more concrete senses (Table 2), and was not systematically connected on a linguistic level, only tied to themes. Figurative language came to the forefront in one scenario when the teacher presented the idiom *give me a hand* as a vocabulary list item in week 3 (Section 4.1.2). The explanation that was given was a verbal description of the intended meaning behind the idiom, a warning not to take it literally, and the statement that it is a common English expression. Such incidental scenarios offer an opportunity to enhance metaphor awareness. As stated by Boers (2004):

> The imagery behind idioms can be made explicit by referring to the literal (or original) meaning; learners can be encouraged to invest cognitive effort in trying to figure out the meaning of idioms independently; and idioms can be grouped under common metaphoric themes. (p. 211)

One possibility, then, could simply be for the teacher to explain how, for example, helping someone lift something is to use your hands to help bear the load, thus the expression *give me a hand*. Another possibility, which also entails principles of embodiment through TPR, could be for the teacher to actually try lifting or carrying something, and asking a pupil for a hand in doing so. A third possibility could be to group the metaphor under a common theme of body parts metaphors, by having the learners come up with as many body-related metaphors – such as *use your head*, *fingers crossed, etc.* – as possible. On the one hand, approaching idioms in this manner is much more time-consuming and demanding of teacher knowledge. Yet, one the other hand, such techniques would entail semantic elaboration of a much deeper level than verbal description, thus finding perches in the levels-of-processing theory (Boers & Lindstromberg, 2008, p. 12).

Furthermore, referring the idiom to physical imagery through TPR should, theoretically, aid dual-coding (Cook, 2006, p. 1079), as well. Another technique of applying embodied experience to explain figurative language, though more indirectly than TPR, was attempted with the *time flies* and *time stands still* idioms. By using categorization, the pupils had to relate their experiences of the passing of time to each expression, thus defining them through their

category members. The idioms rely on the conceptual metaphor THE PASSING OF TIME IS MOTION (Lakoff, 1990, p. 55), and the technique relied on the pupils perception of time relative to enjoyment or boredom.

5.4 A Holistic Perspective

The previous discussion has concentrated on specific techniques and procedures; their theoretical anchoring, their possibilities and challenges in the classroom, and their similarities or differences with the techniques and procedures applied by the observed teacher. However, one may inquire whether a cognitive linguistics teaching method can be envisioned in a holistic fashion, as was attempted in the three-week implementation period, and the challenges and possibilities this course entails. In the reflection note (Section 4.3), the teacher outlined four challenges she experienced while integrating the lesson plans. These challenges concerned time constraints, control and classroom management, pupil proficiency, and teacher knowledge.

Firstly, the planning and execution of the lessons demanded a lot of time, which would not have been doable for a full-time working teacher. This challenge has been touched upon throughout the discussion, and when juxtaposing the preliminary lesson plans (see Appendix 7.1) with the realized lesson plans (see Section 4), one can clearly see that several techniques and procedures were excluded due to time-constraints. However, it should be kept in mind that the techniques and procedures were experimental and unfamiliar to both the teacher and the pupils; a teacher and class more intimately familiar with a cognitive approach to teaching may prove more effective in its execution and planning. Moreover, as observed throughout the implementation period (Section 4.2), the teacher carried over her thorough and translation-focused review of the aims and each individual technique. As discussed above, this thorough review might hinder the more explorative nature of the depth-oriented approach, in addition to making demands on time. Activities initiated without such introductory routines could, on the one hand, cut down on time-consumption and add to the discovery aspect of the assignment, or, on the other hand, cause comprehension problems and confusion among the pupils. While this thesis does advocate for delayed comprehension of the lexical items, which were often translated through elicitations in the introduction, it is important to point out that the comprehension of the task itself – what to do and how to do it – is another matter. In other

words, if the pupils are confused as to what they are supposed to do in the task, it may be a source of anxiety and uncertainty. Such considerations are ultimately up to the teacher, but the notion remains that immediate comprehension is not always necessary, or even desirable.

The second challenge voiced in the reflection note concerned classroom management. With the general increase in pair and group work, as can be seen by comparing Table 1 and Table 3, and the increase in communicative activities (Section 5.2), the teacher expressed a difficulty in keeping track of all pupils and an increased noise level, though the latter she framed in a positive sense (Sections 4.3.3 and 4.3.4). She also pointed to the relatively small class size of twelve as a forgiving number when working with a more pupil-centred organization (Section 4.3.3). On the one hand, the style observed in the initial period does offer more supervision, be it through concrete results on vocabulary tests, verification of comprehension through translation or the ability to monitor participation rate in a whole-class setting. On the other hand, the more divided organizational patterns offer a greater amount of speaking opportunities, thus enabling active engagement, as well as opening for accessing and sharing of prior – and often subjective – knowledge. Crucially, it is the curriculum aims that must be in focus; if group and pair work support knowledge promotion, then one might consider sacrificing some control. Each class varies in size and is rarely homogenous, so it is up to the teacher to decide whether relenting some control is an advantage or a hindrance to learning.

A third challenge alluded to in the reflection note was pupil proficiency; pointing to the lesson plans as requiring higher English proficiency skills than her teaching style, which is contingent upon a good class milieu (Section 4.3.3). This point became especially important when a lower proficiency pupil opted out of an activity due to lack of understanding. Moreover, the teacher mentions motivation – in the pedagogical sense – and creating a safe atmosphere with a low bar for participation as central teaching principles (Section 4.3.1). Adapting the education to all perceived proficiency-levels was a lacking component in the lesson plans. Though the suggested techniques and procedures attempted to utilize a range of physical activity, illustrations, reading, writing and subjective experiences, to encompass as many learning styles and personalities as possible, certain procedures failed to differentiate when language difficulty was concerned. For example, the reading assignments containing either time or money expressions only had one level of difficulty, which could conceivably have been solved through constructing other texts. Differentiation was instead addressed by offering a multitude of different teaching activities, which aimed at reaching every pupils through variation, or by drawing on subjective experiences, which allowed everyone to contribute what they knew.

Though the differentiation aspect was lacking in certain respects, an advantage with the pupil-centered techniques of the implementation period was that the active engagement with the language made visible the pupils' proficiency-levels. The teacher observed that the implementation period offered techniques which revealed an English language repertoire in her pupils of which she was previously unaware (Section 4.3.4). One could argue that the implementation period supplied more English language production opportunities, as justified through Whong's (2013) argument that "higher levels of engagement with language lead to more active processing, which is what is needed for language development" (p. 123), discussed in Section 2.4.4. Not only can these English language production opportunities foster active processing, but they could also reveal pupil proficiency to the teacher. To assess the learner's language skills, and subsequently adapt and differentiate the teaching accordingly, the learner's proficiency needs to be visible.

A fourth challenge pertains to the requirements on teacher knowledge. The teacher points out that the implemented methods – i.e. techniques and procedures – demand a lot of the teacher (Section 4.3.3). From a holistic point of view, having knowledge of the systematicity proposed in language – as discussed in Section 5.3 – and the nature of concepts and categorization – as discussed in Section 5.1 – do require an extensive knowledge of cognitive linguistics. This thesis has attempted to illuminate the vast and complex nature of this research, yet the list is far from exhausted. Furthermore, the principles are not readily made available for a fourth grade, or any primary school class for that matter. One of the greatest challenges undertaken by this project was to relate theoretical and general research to a specific teaching reality. This demands a lot more work than can conceivably be undertaken by a full-time teacher. However, vocabulary teaching with a cognitive foundation can be found in several teacher-trainer books (Flognfeldt & Lund, 2016; Thornbury, 2002), which can be a source for scientifically grounded techniques. As a direction for further research, more studies should explore how to apply the rich field of cognitive linguistics to concrete techniques and procedures for teaching any age group or proficiency level, as attempted by this project.

6. Conclusion

This thesis sought to explore the field of cognitive linguistics and relate it to actual teaching practice, and this chapter will provide concluding remarks and some answers to the questions posed. The thesis asked the overarching question: *how can research in cognitive linguistics be applied to teaching vocabulary in the EFL classroom?* In undertaking this inquiry, three subsequent research questions were posed, and these will be answered in turn in the following.

To relate theories and experimental studies to didactics, the first question posed was: *how can cognitive linguistics be applied to English vocabulary teaching?* A basis was found in more general cognitive theories, such as theories of memory in *dual-coding theory* and *levels-of-processing theory*, and cognitive learning strategies, such as *classification, elaboration* and *association* strategies. To work with vocabulary on a deeper level of processing – what was referred to as deep-level vocabulary learning – the vocabulary items were approached as categories in an interconnected network – i.e. encyclopedic knowledge. Concretely, these categories were explored on category membership, as parts of larger frames, and as connected to each other, as well as associated with the pupils' prior knowledge. Furthermore, the theory seemed to favor an active engagement with the language, which resulted in both higher degree of pupil participation and a more comprehensive look at the semantics of words and expressions.

Additionally, cognitive linguistics principles were applied as a theoretical framework against which pre-existing methods were scrutinized. As a result, aspects of the Direct Method – the use of imagery; physical or illustrated – was deemed applicable for concrete or basic-level concepts when encoding and comprehension was concerned, which built on the principle of embodied cognition and found grounds in dual-coding theory, with the reservation of this method lacking the depth of elaboration or association which might have consequences for long-term retention. Also, some foothold was found in the CLT paradigm, as communication facilitates active engagement with the language, and, in light of the usage-based model, language emerges through a need for communication. These aspects were observed in the town map procedures, where the pupils sought novel words to express their intended meaning. However, the more incidental approach to vocabulary inherent in CLT was problematized and supplemented by engineered input and output, which were found to help the pupils begin to produce language and to reflect more deeply on specific lexical items.

To examine the didactical implications of cognitive linguistics in light of authentic teaching practice, the next questions inquired how: *such an application compare to the teaching practice observed in the EFL classroom?* The initial period differed from the implementation period in its frequent use of translation, both to ensure the pupils understanding, and as techniques of reading and problem-solving. The implementation period intended to have the pupil more incrementally increase comprehension through elaboration, association and problem-solving. Both periods coincided in their use of imagery to represent concepts, perhaps most saliently when the teacher used flashcards directly tied to words, and the researcher suggested TPR directly tied to sentences with prepositions. However, the implementation period employed imagery more as materials to work with in group activities – e.g. the town maps – while the initial period applied imagery as presentation and repetition techniques directly tied to a specific word. Moreover, the lesson plans as a whole treated language as systematically related; attempting to connect the concrete to the abstract. While the teacher presented vocabulary in lists, with varying degrees of connectedness to an overarching theme.

One might also note that the teacher mentioned general pedagogical theories as sources of methodological inspiration (see Section 4.3.2), while the research relied predominantly on linguistic theory. One could argue that any theoretical substantiation of teaching techniques is a positive thing, yet in teaching English language, more linguistic theory should enter the classroom going forward. In doing so, one can imagine a unity of general pedagogical theory, theory on language, and the reality of teaching. A study on teachers' relation to general pedagogic theory versus more subject specific theory would be an interesting topic for future inquiry.

Lastly, to consider the possibilities for an integration of cognitive principles in vocabulary teaching, the final research question asked: *which possibilities and challenges does this implementation pose?* In short, the techniques and procedures proposed in the lesson plans give more opportunities for the teacher to discover the pupils' rich associations, and to have them more actively approach language, both in communication and elaboration. Furthermore, viewing language as systematic outlines a *directionality* of teaching, in which one can consider the level of abstraction of a given word, expression or idiom, and thus make an informed choice as to *what* vocabulary to select and *how* to go about teaching it. Depending on the class, one can for instance have them puzzle out figurative language, or, as exemplified in this thesis, teach from the concrete toward the abstract. Additionally, knowledge of language as systematic provides strategies with which to tackle incidental, figurative language in a more

depth-oriented way by exploring the concrete origin of the idiom. Another possibility, as alluded to above, is to use cognitive linguistics as a theoretical framework against which to check one's desired teaching techniques. Many of the challenges were found when taking a more holistic perspective. Four main challenges were outlined; the planning and execution of such in-depth techniques are very time-consuming, the more pupil-centered techniques make classroom management and pupil guidance more difficult, the language requirements are higher, and the demands on teacher knowledge is more extensive. However, the pupil-centered techniques elicited visible pupil behavior, which to a greater extent revealed the pupils' English repertoire. According to the teacher, the extent of this repertoire was previously unknown to her. Thus, it was argued that active pupil engagement entails more opportunities to assess language skills, and subsequently differentiate the teaching to fit said assessment.

On the whole, the rich field of cognitive linguistics can offer an extensive framework from which techniques and procedures may be developed. However, there are plenty of challenges. Much of the field is either lofty theoretical principles or studies performed on a university level sample, so relating it to a fourth grade EFL class triggers challenges such as proficiency, maturity, and teaching and learning habits, in addition to the inherent challenge in interpreting the research and theories in the first place. Not all of the proposed techniques were used, either because of the scope of the research or the difficulty in relating it to the appropriate age-group, nor was the field exhausted when discussing theory or former studies. Structural focus was left aside for the benefit of a more semantic approach, which may have consequences for the pupils' orthographic competence. Additionally, though several of the theories and studies utilized had a retention focus, this study focused on comprehension and vocabulary exploration. Holistically, if cognitive linguistics is to become a viable framework for teaching of English as a foreign language, more concrete studies are needed on the effects of such methodology in a variety of classrooms across age-group and size. Crucially, though word retention is an important part of learning a language – what is not remembered is hard to use – further studies should also take into account the multiplex nature of teaching. In this supposed post-method era, the suggestion is not to make cognitive linguistics into the grand new method, rather, one could consider it to be a strong theoretical framework *from which* to extract viable teaching techniques and procedures, and *against which* to view methodological choices.

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7. Appendices

7.1 Appedix 1: First Drafts of the Lesson Plans

Date	Lesson #1	4th Grade	English	Lesson Duration: 45 min.	Lesson Subject: Positions and Prepositions (1)
LK06: Forstå betydningen av ord og uttrykk ut fra sammenhengen de er brukt i.			**Aims presented to the pupils:**		"See how we can use prepositions to describe where things are." / "See hvordan vi kan bruke preposisjoner for å beskrive hvor ting er."

Time	Goal	Activity	Org.	Mat.
5 min	Introduce the topic and its aims.	- Write the aim(s) on the blackboard. Explain to the pupils that we're working with prepositions and that we will be using movement and lego-tasks to better understand them.	Whole class	None
10 min	Learn preposition meaning through physical activity. - on top of - to the left of - to the right of - under - between - in front of - behind	- Tell the pupils briefly that we can use prepositions to describe where things are placed. - Use the phrases: "Everyone stand in front of your desks", "everyone stand behind your desks" "NAME stand on top of your chair", "NAME sit under your desk, "NAME stand to the left/right of your chair". "NAME stand between NAME and NAME". Have the pupils repeat: "NAME is standing in front of his/hers desk", etc. - Write the prepositions on the blackboard. - Have a pupil give a command like the teacher did. Next, the pupil who got the command gives the next command, etc.	Whole class	None
10 min	Apply the knowledge of prepositions in puzzle solving.	- Explain the task: each pair (or group) will get a puzzle sheet explaining how to build their lego model. - Divide the class into pairs or groups of three. - When everyone is done building, trade the models with other pairs/groups. Make sure an A group gets a B model, and vice versa.	Pairs or groups of 3	See 1
15 min	Describe a model using prepositions.	- Explain the task: each pupil in the pair (or group) shall try to write down how the model is built using prepositions. E.g. "The red block is in front of the blue block." But each pupil sits on a different side of the model. - Each pupil reads their explanations of their model to the other pupil in the pair. - Are the descriptions different? Why? - Hand in the descriptions.	Pairs or groups of 3	Pencil Paper
5 min	Test the knowledge of prepositions .	- Use the phrases "Simon says: stand behind your desk", "sit under your desks", "stand on top of your chairs", etc. in a game of Simon Says (kongen befaler). Those who do the action without the teacher having said "Simon says…" first, is out of the game.	Whole class	None

Figure 7.1: Preliminary lesson plans of the first lesson of week one, prior to revision.

Date	Lesson #2	4th Grade	English	Lesson Duration: 45 min	Lesson Subject: Prepositions (2)	
LK06:	- Forstå betydningen av ord og uttrykk ut fra sammenhengen de er brukt i. - Bruke noen vanlige småord og enkle stave- og setningsmønstre.			**Aims presented to the pupils:**	Use prepositions to explain where things are placed / Bruke preposisjoner for å forklare hvor ting står.	

Time	Goal	Activity	Org.	Mat.
5 min	Introduce the aims and the lesson.	- Write the aims on the blackboard. Explain that we will continue working with the prepositions for Monday in different ways. Repeat that prepositions can help us in describing where things are placed.	Whole class	None
5 min	Repetition of the word sounds and their meaning.	- 'Simon says'. Ex. "Simon says: stand in front of your desks." Etc. Those who fail to do the command, or does it without the teacher saying "Simon says" is out of the game. - Make sure that every preposition is used at least once.	Whole class	None
15 min	Match word sounds with concepts/meaning.	- Divide the pupils into pairs. - Each pair gets a set of sentences and a set of illustrations. - Pupil 1 reads a sentence out loud, while pupil 2 must find the illustration s/he thinks fits the best. - Trade so that pupil 2 has the sentences and vice versa. - Make new pairs and repeat the exercise.	Pairs	See 2
20 min	Retrieve knowledge of prepositions to complete a description of an image. Test the prepositional knowledge.	- The pupils sit individually with their work sheet. - The task is to look at the picture and try to find the most suitable preposition to fill the gap. - The work sheet is handed in to the teacher at the end of the lesson.	Alone	See 3

Figure 7.2: Preliminary lesson plans of the second lesson of week one, prior to revision.

Date	Lesson #3	4th Grade	English	Lesson Duration: 90 min	Lesson Subject: Learn words and expressions pertaining to shops and services
LK06:	- forstå og bruke engelske ord, uttrykk og setningsmønstre knyttet til egne behov og følelser, dagligliv, fritid og interesser.			Aims presented to the pupils:	Learn about shops and services you can find in a town or city.

Time	Goal	Activity	Org.	Mat.
10 min	Introduce the topic and aims of the day.	- Write the aims on the blackboard. - Tell the class briefly that we will be looking at different shops and services one can visit in town. - Explain briefly how shops often offer wares to sell, and other places offers services such as fixing your teeth or cutting your hair.	Whole class	None

20 min	Draw on old knowledge and elicit information.	- Make a mind map (sun model) on the blackboard with the word "Shops and services" inside the bubble.
		- Ask the pupils if they know of any words for places you can buy something in town.
		- The following words will be covered in the lesson:
		  • Supermarket Bakery
		  • Toyshop Hairdresser´s
		  • Cinema Café
		  • Bookshop
		- If only some (or none) of these appear, try to hint at them by, for example, asking where you can buy coffee (café).
		- If they suggest other stores or services then write them down as well.
		- If any from the list is missing when the time runs out, write the missing words into the model.
		- Are any of these in Tangen or Stange?
			Whole class	None

10 min	Practice pronunciation of the new signs to tie the word sound to the concept.	- Divide the pupils into pairs. - Write "What is that?" and "That is a bookshop!" on the blackboard as examples. - Each get a set of word/image pairings turned face down. - Pupil 1 asks: "What is that?" and points to an upside down paper. - Pupil 2 must guess by using the phrase: "That is a bookshop". - If the guess is right, they get the image as a point, if it is wrong, it is turned back around. - Next, pupil 2 asks pupil 1.	Pairs	See 3
15 min	Tie different concepts to the different words. *MOVED TO THE END OF THE LESSON*	- The pupils are divided into three groups of fours. - Each group gets a bunch of images, which they must sort under the word they think fits best.	Groups of 4	See 4
15 min	Tie different concepts to their verbal description.	- The pupils remain in their groups of fours. - Each group gets worksheet 4. - The worksheet will have some sentences describing certain shopping activities and services, etc. - The groups must decide which shop or service best fits the sentences. - There may be more than one correct answer.	Groups of 4.	See 5
20 min	Produce sentences using the new signs (words) and rank the new information. *SKIPPED, TO BECOME HOMEWORK*	- The pupils work individually. - First, they must make a list from 1 to 7 of which shops or services they would like to visit the most (1 being most wanted, 7 being least wanted). - While they make their lists, write the sentences "I would love to go to the. . .", I would like to go to the. . .," and "I don't want to go to the. . ." on the blackboard. - After making their lists, the pupils must write the sentences "I would like to go to the. . .", "I would love to go to the. . .," and "I don't want to go to the. . ." using all the words (seven sentences total). - Hand in the paper at the end of the lesson.	Alone	Papir Pencil

Figure 7.3: Preliminary lesson plans of the third lesson of week one, prior to revision.

Date	Lesson #4	4th Grade	English	Lesson Duration: 75 min	Lesson Subject: Prepositions and shops and services	
LK06:	- Bruke enkle lytte- og talestrategier. - Identifisere situasjoner der det kan være nyttig eller nødvendig å kunne engelsk.			**Aims presented to the pupils:**	Use prepositions to find places on a map. Ask for information and answer when asked for information.	

Time	Goal	Activity	Org.	Mat.
10 min	Introduce the topics and aims of the lesson.	- Write the aims on the blackboard. - We are continuing to work with both our prepositions and our town shops and services. - We are going through the homework and having a little test at the end.	Whole Class	None
15 min	Practice speaking and listening to English.	- The pupils walk around in the classroom and ask each other to present the homework sentences. - They must have spoken to every other pupil at least once. - Write the following on the blackboard: "Could I hear your sentence, please?" - The pupil answers with one of his/hers sentences, then asks the other pupil to hear his/hers sentence.	Walk-about	None
10 min	Practice speaking and listening to English in a whole class setting.	- Each pupil reads one of his/her sentences aloud in class.	Whole class	None

20 min	Use both prepositions and the new nouns in the context of a town map.	- Stairs 4 workbook, page 86, task 34.
		- One pupil is an English tourist asking for direction, the other must help him/her.
		- Pupil 1 must ask pupil 2 where certain things are located on the other pupil's map.
		- For example:
		  • Pupil 1: "Where is the toyshop?"
		  • Pupil 2: "It is to the left of the bookshop."
		  • Pupil 1: "Thank you"
		- Have them make up their own questions.
			Pairs	Stairs 4

20 min	Assess the pupils' use of the novel prepositions.	- The pupils work alone without help from other pupils or the teacher. - Every pupil answers the worksheet as good as s/he can. - Hand in the worksheet.	Alone	See 6

Figure 7.4: Preliminary lesson plans of the fourth lesson of week one, prior to revision.

Date	Lesson #5	4th Grade	English	Lesson Duration: 45 min	Lesson Subject: Time and Money		
LK06:	- finne likheter mellom ord og uttrykksmåter i engelsk og eget morsmål. - lese, forstå og skrive engelske ord og uttrykk knyttet til egne behov og følelser, dagligliv, fritid og interesser.			Aims presented to the pupils:	- Explore some typical expressions of time and money in English.		

Time	Goal	Activity	Org.	Mat.
10 min	Introduce the aims and topic of the lesson	- write the aim on the blackboard - Explain that we are looking at typical expressions for time and money and will do so by exploring different texts. - Explain that the pupils will work in pairs and must first read the texts to each other. - Then they must underline the sentences in the text where they find 'time' or 'money' expressions. - Ask in the class if they know what they mean before explaining or translating them.	Whole class	None
15 min	Notice some typical expressions and idioms concerning time and money.	- Divide the pupils so that half of them are As and the other half are Bs. - Make pairs where A pupils work together, an B pupils work together (one pair is either two A pupils, or two B pupils). - The pupils read the texts to each other in the pairs, underlining all the sentences where they find 'time' or 'money' (depending on the text). - If there are any difficult words, try to guess their meaning, then ask the teacher. - What is the text about? Discuss in the pairs.	Pairs	See 7 A+B
15 min	Find connections between the typical time and money expressions and discuss possible similarities with L1 (Norwegian).	- Divide the pupils into new pairs, so that an A pupil and a B pupil form one pair. - The pairs read their texts to each other. - Write down the similar expressions of time and money they have underlined in a list. Are there any other expressions that are not the same for time and money? - How can you say these sentences in Norwegian? - Hand in the work at the end of class.	Pairs	See 7 A+B
5 min	Explain the homework of the week	- Hand out the worksheet - In part one of the worksheet, they must list the top ten shops or services they would like to spend time. - In part two of the worksheet, they must write full sentences on three shops or services from their lists concerning one thing they can buy there. - For example: *You can buy teddy bears at the toyshop.* Or: *You can buy a haircut at the hairdresser's.*	Whole class	See 8

Figure 7.5: Preliminary lesson plans of the fifth lesson of week two, prior to revision.

Date	Lesson #6	4th Grade	English	Lesson Duration: 45 min	Lesson Subject: Expressions of Money
LK06:	- finne likheter mellom ord og uttrykksmåter i engelsk og eget morsmål. - lese, forstå og skrive engelske ord og uttrykk knyttet til egne behov og følelser, dagligliv, fritid og interesser.			Aims presented to the pupils:	- See what we know about money. - Discuss similarities between English and Norwegian expressions of money.

Time	Goal	Activity	Org.	Mat.
10 min	Introduce the aims and topic of the lesson.	- Write the aims on the blackboard. - Explain that we are continuing working on the expressions from last time, do they remember any?	Whole class	None
20 min	Draw from prior knowledge to see connections between concepts and activate prior knowledge structures.	- **Make a mind map with 'money' in the middle.** - Do they know any English words about money? - What is money? - Ask if they remember any expressions that have to do with money. - Where can money be earned? (Different professions, allowance) - Do they know any professions relating to the shops or services we've covered? (for example: Restaurant: waitress, chef). - Where can you save money? (Bank, money box, piggy bank) - Does any of the pupils have an allowance?	Whole class	None
15 min	Find similarities or differences to the L1 expressions.	- Divide the pupils into pairs. - Read the text about money. - Discuss in the pairs what the different, underlined expressions would be in Norwegian. - Write down the translations. - Make groups of three or four. - Does everyone have similar translations?	Groups of 3	See 9

Figure 7.6: Preliminary lesson plans of the sixth lesson of week two, prior to revision.

Date	Lesson #7	4th Grade	English	Lesson Duration: 90 min	Lesson Subject: Exploring different expressions of time and money
LK06:	- lese, forstå og skrive engelske ord og uttrykk knyttet til egne behov og følelser, dagligliv, fritid og interesser. - finne likheter mellom ord og uttrykksmåter i engelsk og eget morsmål.			**Aims presented to the pupils:**	- Continue the discussion of the money expressions. - Use the expressions we have seen in a question game.

Time	Goal	Activity	Org.	Mat.
10 min	Introduce the topics and aims of the lesson.	- Write the aims on the blackboard. - First, we will be continuing with the activity from yesterday. - Second, we are going to use a game to explore the use of money in a town.	Whole class	None
20 min	Find similarities or differences to the L1 expressions.	- Continue with the worksheets from yesterday. - Form groups and compare results. Are the translations the same?	Pairs Groups of 4	See 9
20 min	Use the expressions of money, and shops and services to answer questions related to economy	- Each group gets a paper with different shops and services on it. - The restaurant has its menu in Stairs 4, textbook pp. 98-99. - The pupils draw notes describing someone's use of money, then asks a question (for example: 'how much money does Jake have to spare?') - First, they must place the money as described in the note; - Then, they must answer the question (for example: 'John has 20 pounds to spare.') - Use full sentences.	Groups of 3.	See 10
20 min	Use the expressions of money, and shops and services to make questions for other groups.	- By using the question cards as models, the groups make their own question cards. - Just like the previous cards, they must describe how the person on the card spends money, then ask a question (how much does she have to spare? How much did she save? Etc.)	Groups of 3.	See 10
20 min	Use the expressions of money, and shops and services to answer other pupils' questions.	- The pupils trade their self-made cards with one of the other groups. - The groups try to answer the newly made cards.	Groups of 3.	See 10

Figure 7.7: Preliminary lesson plans of the seventh lesson of week two, prior to revision.

Date	Lesson #8	4th Grade	English	Lesson Duration: 90 min	Lesson Subject: Expressions of money.
LK06:	- identifisere situasjoner der det kan være nyttig eller nødvendig å kunne engelsk. - forstå og bruke ord og uttrykk knyttet til priser, mengder, form og størrelser i kommunikasjon om dagligliv, fritid og interesser.			Aims presented to the pupils:	- Practice expressions that has to do with money. - Practice ordering food and drinks at a restaurant.

Time	Goal	Activity	Org.	Mat.
10 min	Introduce the topic and aims	- Write the aims on the blackboard - Ask for clarification of the central terms: *Spend money, earn money, save money, have money to spare, waste money, buyer/buy, seller/sell, steal money.*	Whole class	None
20 min	Use the expressions of money, and shops and services to answer questions related to economy.	- Complete the work on the money question-cards.	Group of 3.	See 10
25 min	Practice making questions and the written form of the expressions.	- Make you own questions. - Trade the questions with the other groups. - Answer the other groups questions.	Group of 3.	Pencil & paper
20 min	*This activity was skipped* See the connections between buyer/seller, buy/sell and earn/spend, identify useful scenarios to know English, and practice pronunciation.	- Divide the pupils into pairs. - Each pupil gets a tag that says 'buyer' or 'seller', the scenario is at a restaurant. - Buyer: "I would like the . . ., please." - Seller: "That will be x pounds." - The seller hands over the money. - Buyer: "Thank you very much" - Who earns money? Who spends money?	Pairs	Stairs 4
15 min	Practice communication and pronunciation.	- Checking homework - Walk-about: the pupils walk around the classroom an talk to every other pupil. - When they meet a pupil, they exchange one of their sentences.	Walk-about	Homework

Figure 7.8: Preliminary lesson plans of the eighth lesson of week two, prior to revision.

Date	Lesson #9	4th Grade	English	Lesson Duration: 45 min	Lesson Subject: Look at similarities between time and money expressions.
LK06:	- finne likheter mellom ord og uttrykksmåter i engelsk og eget morsmål. - forstå hovedinnholdet i enkle tekster om kjente emner.			Aims presented to the pupils:	- Look at how expressions of time and money are similar.

Time	Goal	Activity	Org.	Mat.
10 min	Introduce the topic and aims.	- Write the aims on the blackboard. - Explain that many expressions of time can be said just like the expressions we've seen about money. - Ask why they thing that is so. - What does the expression "Time is money" mean? Write it one the blackboard. - If no one answer, explain that we can thing of both time and money as something valuable, and that we can often talk about time as if it is money.	Whole class	None
25 min	Notice the similar or different expressions of time and money.	- Divide the pupils into groups of three. - The pupils read the new text about time to each other. What is this text about? - Using the text about money (the one with the underlined expressions), they must try to find similar expressions in the text about time. - Are there some expressions about money that is not used about time? - Each pupil in the group writes down the expressions next to each other on the worksheet. - example: spend time – spend money - Can we do the same thing in Norwegian?	Groups of 3.	See 7 A & B.
10 min	Explain the homework. Rank information of a personal character.	- Homework week 10: - On (1), the pupils must make a list of the five things they spend the **most** time on during a day. - On (2), the pupils must write full sentences (as in the example) telling us whether they like to spend **more** or **less** time doing that activity.	Whole class	Homework week 10

Figure 7.9: Preliminary lesson plans of the ninth lesson of week three, prior to revision.

Date	Lesson #10	4th Grade	English	Lesson Duration: 45 min	Lesson Subject: Working with expressions of time
LK06:	• finne likheter mellom ord og uttrykksmåter i engelsk og eget morsmål. • lese, forstå og skrive engelske ord og uttrykk knyttet til egne behov og følelser, dagligliv, fritid og interesser.			**Aims presented to the pupils:**	- Look at how expressions of time and money are similar. - Look at how time can feel different when we're having fun or we're bored.

Time	Goal	Activity	Org.	Mat.
10 min	Introduce the aims and topic of the lesson.	- Write the aims on the blackboard. - Explain that we continue working with expressions of time.	Whole class	None
15 min	Notice the similar or different expressions of time and money.	- Finish the noticing activity from last time (finding similar expressions for time and money). - Write the expressions in the column sheets. - Are they the same in Norwegian?	Groups of 3	See 7 A&B
20 min	See how we can talk about time as movement and how it is related to the feeling of time.	- The pupils remain in their groups. - Explain how we can talk about time as moving, not just as money. - Ask when if they've ever felt like time flies or time stands still. - Ask why they think it is that time flies when you're having fun, and time stands still when you're bored. (Watching football, for example, might make it seem like time flies to some pupils, while standing still for others). - Hand out the worksheet: the pupils must fill in different activities on the different mind maps when they felt time flying, time standing still or time was wasted. - If there is time to spare, compare their suggestions with another group.	Groups of 3	See 11

Figure 7.10: Preliminary lesson plans of the tenth lesson of week three, prior to revision.

Date	Lesson #11	4th Grade	English	Lesson Duration: 60 min	Lesson Subject: The many meanings of words
LK06:	- lese, forstå og skrive engelske ord og uttrykk knyttet til egne behov og følelser, dagligliv, fritid og interesser.			Aims presented to the pupils:	- Explore how we tell time in English. - Explore how people spend time in town.

Time	Goal	Activity	Org.	Mat.
10 min	Introduce the topic and aims	- Write the aims on the blackboard. - Explain that we will be using our new expressions of time to answer and make questions. - But first, we shall talk about the clock or watch.	Whole class	None
15 min	Illustrate the meaning of 'to' and 'past' and relate it to telling time in English.	- (1) Have two pupils face each other while the others are watching. - Ask one to go to the other, then ask another pupil walk *past* the two pupils. - Ask different pupils to either go past or to something in the classroom (desks, flowers, etc.) - (2) Make a circle on the blackboard (a clock), write in the hours (1-12). - Explain how the word *past* is used when the hand has gone *past* the 12 mark. - And that the word *to* is used because the minute hand is walking *to* the twelve, after passing 6 (half past three, for example).	Whole class	None
35 min	Apply the expressions of time and knowledge of the clock in a town scenario.	- Just like the money and town map exercise, except this one is about time. - Use the small clocks that show different amounts of minutes (in red) to illustrate and answer the question cards. Write down the answers on the cards. - Make your own questions to other groups.	Groups of 3.	See 11

Figure 7.11: Preliminary lesson plans of the eleventh lesson of week three, prior to revision.

Date	Lesson #12	4th Grade	English	Lesson Duration: 75 min	Lesson Subject: Different ways to look at time
LK06:	– lese, forstå og skrive engelske ord og uttrykk knyttet til egne behov og følelser, dagligliv, fritid og interesser.			Aims presented to the pupils:	- Continue looking at people spending time in town. - Look at the different ways we talk about and experience time.

Time	Goal	Activity	Org.	Mat.
10 min	Introduce the topic and aims.	- Write the aims on the blackboard.	Whole class	None
25 min	Complete the work on relating time expressions to a town scenario.	- Divide the pupils in the same groups of three as yesterday. - Continue making and answering questions using the time expressions and town map. - Form groups of 6 from the groups of 3. - Present and answer each other's self-made questions.	Groups of 3.	See 11.
25 min	Associate and categorize different activities with different expressions.	- Divide the pupils into groups of 3. - On the worksheet are bubbles with expressions like: 'Time flies when...' or 'Time stands still when...' (We have talked about how having fun makes time fly, while being bored makes time stand still). - The pupils must fill out as many activities they can think of that matches the bubbles (like small mind maps).	Groups of 3.	See 12.
15 min	Share, summarize and discuss the different answers.	- Have pupils present their suggestions on the mind map (not every suggestion). - Discuss agreements or disagreements among the answers (some might think football is a waste of time, others might think it's not. Some may think time flies during English lessons, others not). - What are some ways to save time? What are some ways to save money? - What makes time move fastest? Slowest?	Whole class	Former exercise

Figure 7.12: Preliminary lesson plans of the twelfth lesson of week three, prior to revision.

7.2 Appendix 2: Reflection Note

Refleksjonsnotat: metoder i engelskundervisningen

Hvem: *Her skrev læreren inn informasjon vedrørende seg selv og skolen hun jobber ved, som er anonymisert.*

1. **Hvilke metoder og/eller prinsipper oppfatter du som sentrale eller gode i engelskundervisningen?**
2. **Hvilke tanker og vurderinger ligger til grunne for dine valg av metode i engelskundervisningen?**

Svar på spørsmål 1 og 2:

Elevens morsmål, alder, kompetanse i faget og modningsnivå er faktorer som en bør vite noe om når en skal undervise i språkfag som engelsk. I mitt tilfelle er aldergruppa født i 2007, og tilhører 4. trinn. Gruppa er relativt homogen og samkjørt. Jeg bruker læreverket Stairs, fra Cappelendamm, noe fra Quest fra Aschehoug, samt annet materiell tilgjengelig på skolen og nettet, som noen av hjelpemidlene til å nå målene i Kunnskapsløftet.

Min hovedtilnærming til undervisningen er at den skal være allsidig og positivt ladet. Jeg ønsker at elevene skal bli motiverte for faget, og glade i engelsk. Målet er at elevene skal våge å bruke den engelsken de kan, både muntlig og skriftlig. Målet er at terskelen skal være lav for å «hive seg utpå». Derfor er hovedspråket engelsk i disse timene, både for liten og stor. Jeg oversetter og forklarer der det er nødvendig. Ris er et fremmedord, veiledning, oppmuntring og ros er nøkkelen til opplevelse av mestring. Ukene er ofte noenlunde likt bygget opp. Mandag starter vi med gjennomgang av målene for uka, nytt stoff og lekser. På onsdag og torsdag arbeider vi ofte på stasjoner med oppgaver i workbook, på ark, spill, rollespill, engelske bøker, oppgaver på smartbaord eller pc. Læreverket Stairs har gode nettsider knyttet opp mot hvert emne. På fredag pleier vi å gjennomgå leksa, samt at vi har en

gloseprøve. Jeg prøver å bygge opp ukene slik at elevene møter de nye emnene og ordene gjennom ulike tilnærminger. Det første møtet er som regel i en tekst og ved gjennomgang av glosene. Deretter møter de ordene og frasene i ulike former for oppgaver, samt at de øver på ordene hjemme. Målet er at gjentakelsene og repetisjonene gjennom ulike oppgaver, skriftlig og muntlig, skal hjelpe elevene med å bygge opp ordforrådet og gradvis øke forståelse for språket.

3. Hvilke inspirasjonskilder henter du metodene dine fra?

Det viktigste i møte med elevene, uavhengig av fag, er det menneskesynet en har og som en formidler. Hvert barn må trives på skolen, oppleve at det har venner, bli møtt på sitt nivå, føle seg sett og verdsatt for å kunne lære. Med dette som utgangspunkt står det stadig mer tydelig for meg at kontakten lærer-elev er uvurderlig. Hvor viktig det er å møte hvert enkelt barn der det er, med sine forutsetninger for læring, utvikling og motivasjon. Med dette synet i bunn, støtter jeg meg også til Vygotsky sine teorier om samspillet lærer-elev, Bruners spiralmodell og Piagets assimilasjonsteori. Vi må bygge stein på stein i læringsprosessene, samtidig som jeg kanskje ønsker i større grad å nærme meg Bruners tanker om Learning by discovery. -Noe du blant annet har vist meg *NAVN_FORSKER*. Materiellet vi har tilgjengelig på skolen er også med og påvirker metodevalgene i noe grad.

4. Hva opplevde du som nytt i undervisningsoppleggene fra uke 7, 8 & 9, og hva var kjent fra før?

1. Gjennomgang av mål var kjent.
2. Du hadde lite eller ingen fokus på gloser, noe jeg pleier å ha.
3. Du hadde hovedfokus på oppgaver rundt tematikken, The town, samt preposisjoner. Det virket som om alle elevene fikk godt grep om ord, begreper og setninger knyttet opp mot disse temaene, uavhengig av glosepugging.
4. Tankekartene på tavla motiverte elevene, og fikk fram mange av de forkunnskapene elevene hadde. Vi har brukt denne innfallsvinkelen i andre fag, men lite i engelsk.
5. Elevene arbeidet oftere i grupper for å løse oppgaver, enn i mine timer.

6. Elevene arbeidet i større grad med oppgaver løsrevet fra tilgjengelig læremateriell, enn hva de er vant til.

7. Det var mere lyd enn til vanlig i klasserommet, positivt ladet sådan.

8. Elevene arbeidet med problemløsningsoppgaver, der de i større grad måtte ta i bruk kreativiteten og det engelske språket enn i mange av mine timer.

9. Elevene skrev store mengder egenprodusert tekst, og viste at de mestret mer engelsk enn jeg var klar over.

10. Elvene var svært motiverte i arbeidet med de ulike oppgavene, mer enn til vanlig.

11. Mitt inntrykk var at majoriteten av elevene var mer motivert enn de vanligvis er, samtidig som de fikk brukt og produsert mer engelsk enn til vanlig.

5. Hvilke *fordeler* opplevde du i utførelsen av de nye oppleggene?

Mange av oppgavene, både om preposisjoner, The town og klokka, krevde en eller annen form for aktivitet av elevene. I tillegg var aktivitetene varierte og satte i gang kreativiteten hos elevene. *NAVN_FORSKER* mestret å bygge stein på stein, slik at alt det nye etter hvert ble en helhet og noe elevene følte at de mestret. Mot slutten av perioden opplevde jeg at elevene i større grad enn før mestret å formulere egne setninger muntlig og skriftlig på engelsk. Det var tydelig at eleven lot seg motivere og engasjere av oppgavetypene.

6. Hvilke *utfordringer* eller *ulemper* opplevde du i utførelsen av de nye oppleggene?

Alle oppleggene var kreative og fungerte godt. I en hektisk hverdag tror jeg at enkelte av disse oppgavene vil være for tidkrevende å forberede, og noen også litt tidkrevende å gjennomføre. Nå fikk jeg dem servert av *NAVN_FORSKER*, og dermed ble det et godt resultat. Noen ganger følte jeg at jeg ikke hadde helt oversikt over alle gruppene, og at jeg burde vært flere steder samtidig. Andre ganger rakk vi ikke å bli helt ferdig med det planlagte opplegget. Jeg brukte nok litt lengre tid enn det *NAVN_FORSKER* hadde planlagt, samt at uforutsette ting oppstod. Dette er en del av hverdagen, og *NAVN_FORSKER* tilpasset dette til neste time. I en større klasse kan det tenkes at noen av oppleggene vil være noe mer vanskelig å gjennomføre, da gruppene trenger en del bistand

underveis. Vår klasse er en strukturert og arbeidsom klasse. I mindre strukturerte og urolige klasser kan noen av disse oppgavene flyte mer ut, om det ikke er voksne som mestrer å styre aktivitetene.

Gruppene var flinke til å inkludere de svakeste elevene. Samtidig krevde dette opplegget noe mer av engelskferdighetene til den enkelte elev. I og med at mange av oppgavene var to og to, eller i større grupper, kunne de sterke hjelpe de mer svake elevene. En elev synes nok at de nye og mer selvstendige arbeidsformene ble litt skremmende og vanskelig. Eleven meldte seg litt ut, og virket mer usikker og utrygg en vanlig.

7. Har du andre kommentarer og refleksjoner rundt perioden og utførelsen?

Ideelt sett har jeg veldig tro på arbeidsformene *NAVN_FORSKER* brukte. Mitt inntrykk etter endt periode er at eleven lærte mye om hovedtemaene, samtidig som de gjorde et sprang inn i produksjon av egne setninger både muntlig og skriftlig. De var veldig aktive og ivrige i muntlig og skriftlig arbeid hele veien. De plukket opp nye uttrykk, ord og vendinger, og gjorde dem til sine egne.

Denne klassen gjør det til vanlig godt på gloseprøvene hver fredag, da de er flinke til å øve. Samtidig ser jeg at jeg kanskje ikke er flink nok til å ha hovedfokus på de sentrale ordene og frasene for hvert tema, og at faren er stor for at de ukentlige glosene kan falle ut igjen. Det var en tankevekker hvor dyktige eleven ble til å bruke de sentrale begrepene rundt emnene den perioden *NAVN_FORSKER* var hos oss, og mest sannsynlig har lagret disse i langtidsminnet. Jeg tror at lærere som evner å legge opp undervisningen på denne måten, kan bidra til et meget godt læringsutbytte for elevene. Dette krever mye av læreren, og er nok ikke en form som passer for alle.

Min eldste datter går i *KLASSETRINN*. Hun har en lærer som nylig har tatt etterutdanning i engelsk, og som i teorien ser ut til å ha et ønske om en undervisning mer lik den *NAVN_FORSKER* har gjennomført. I denne lærerens tilfelle kan det virke som om det er lite trøkk i timen, samt få lekser. Det er ingen gloser, gloseprøver eller andre prøver. Vi får heller ingen årsplan hjem som vi kan følge. Min datter er relativt pliktoppfyllende. Hun gjør det læreren sier, men helst ikke mer. Hun har hatt svært liten utvikling i engelsk dette året. Det jeg prøver å si, er at om læreren ikke mestrer å legge nok til rette for læring i

timene, og heller ikke gir lekser i lærebøkene, også frarøver foreldrene noe av muligheten til å følge opp barnet hjemme. Derfor er min konklusjon som følger: En lærer som vil og mestrer å gjennomføre en metodikk ala det *NAVN_FORSKER* viste oss, vil høste engasjerte elever og gode resultater. Men; alt avhenger av læreren. Denne undervisningsformen krever noe mer enn den tradisjonelle. For min del har jeg lært mye av prosessen, og håper å benytte det jeg har lært i mitt videre arbeid som engelsklærer.