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Developing phraseological competence in Italian L2: a study on the effects of Data-driven learning

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Abstract

Recent meta-analyses indicate Data-driven learning (DDL) as a generally effective approach in second language learning, worthy of being integrated in existing teaching and learning practices (Mizumoto & Chujo, 2015; Boulton & Cobb, 2017; Lee et al., 2018). However, these meta-analyses reveal that the effects of the approach vary considerably when taking into account a number of moderator variables, such as teaching context, proficiency level of the learners and type of study design investigating these effects. Furthermore, they point to the limited empirical evidence available for languages other than English, proficiency levels other than upper-intermediate or advanced, and the almost absence of evidence for variables involving the properties of the learning aims. A need for more rigorous research in terms of the research methods adopted is also called for.

This thesis reports on a study based on an 8-week controlled pedagogical intervention focused on verb-noun collocations. The study took place in the context of an Italian L2 university course for Chinese learners. Accuracy data was collected from a total of 123 students by means of an *ad-hoc* phraseological competence test at 4 weeks intervals and analysed through mixed-effects modeling. Learning patterns were analysed overall, in relation to two specific properties of the learning aims (i.e. semantic transparency and L1 congruency) and to two dimensions of collocational knowledge (i.e. definitional and transferable knowledge). An end-of-course questionnaire was administered to elicit learner attitudes towards the approach.

Both the DDL and control conditions in the study displayed U-shaped developmental patterns in most of the cases considered, with no significant differences between them. Retention rates, however, appeared to be better in the DDL rather than the traditional approach. The control condition exhibited a higher degree of variation in comparison to the DDL condition. Despite some initial difficulties, the participants in the study showed overall positive attitudes towards the DDL approach, perceiving the usefulness of focusing on collocations and working on concordances.

These findings contribute to DDL research in the context of Italian L2 teaching and learning from both the pedagogical perspective, related to the operationalising of DDL principles, and from the methodological perspective, concerning the potential of using

mixed-effects modeling in language learning research. The thesis concludes with a description of the main limitations characterising this study, with some indications as to how these could be dealt with in future research.

Acknowledgments

The completion of this thesis involved the support and contribution of many people.

First and foremost, I would like to thank and express my deepest gratitude to my supervisor, Stefania Spina. She was the first one to believe in the value of this project, decided it would be worthy of inclusion in the PhD program at the University for Foreigners of Perugia, and trusted that I had what it took to complete it. She provided me with ceaseless support from the very beginning, when I was still unsure as to which direction I would take, then throughout the very delicate phase of the pedagogical intervention, and finally in the phase of data analysis, crucially introducing me to an area of statistics that I would have very hardly encountered or launched myself in on my own. She was also a remarkable example of passion for knowledge and research integrity, an example that will certainly nurture my future professional endeavours.

I am also indebted to the people I met in the first year of my PhD (2016) on two occasions: the Corpus Linguistics Summer School at Birmingham University and the TaLC Conference in Giessen. Many of them patiently listened to my initial doubts, and helped me think about numerous practical sides of the study, which influenced many of the methodological choices I would later make.

My initial reflections also greatly benefited from conversations with Giacomo Spinelli, fellow PhD candidate at the University of Western Ontario (Canada), who introduced me to analogy-based learning and who would very generously and honestly share his thoughts with me on this study.

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After the pedagogical intervention, I was fortunate enough to spend some time in two of the most highly regarded research centres I know: CECL (Centre for English Corpus Linguistics) at Université catholique de Louvain, and CASS (Centre for Corpus Approaches to Social Science) at Lancaster University. I am grateful to Fanny Meunier, for introducing me to the CECL and supporting my Belgian stay in many different ways, and to all the wonderful researchers I had the chance to meet and work side-by-side with on a daily basis in Louvain-la-Neuve. I am deeply indebted to Sylviane Granger, for suggesting I'd look into L1 congruency, and for her inspiring presence and work in the field, which sparked my very initial interests in learner corpora and corpora for language learning in general during my BA. I am also very grateful to Dana Gablasova, of CASS at Lancaster University, for providing me with precious advice and feedback on my writing and overall study and for introducing me to the lovely members of the Second Language Learning and Teaching and Language Testing research groups at Lancaster University, in particular Michael Ratajczak, fellow PhD candidate at the centre. Michael very patiently and generously guided me through my first systematic and autonomous encounters with R, and gave me some essential statistical advice that would later inform much of my data analysis.

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The coding of collocations for semantic transparency and L1 congruency would not have been possible without the generosity of the 13 raters for the former, and the two expert native Chinese speakers for the latter: to them goes my deepest thank you. And if I had the opportunity to discuss many aspects of the Chinese culture and have a Chinese version of the end-of-course questionnaire it is only thanks to the friendly help I received from Wu Di, Wang Linkai and Fuying Lin.

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Contents

List of Figures

List of Tables

Operational definitions of key terms

This section of the thesis provides a list of the key terms used in the study together with their definitions and a brief indication of how they were operationalised in the present study.

Collocation

A word combination characterised by a number of linguistic properties that cannot be fully predicted on the basis of its individual lexical components.

Data-driven learning (DDL) approach

In the context of the present study, we refer to DDL approach as a teaching and learning approach based on the exposure to multiple instances of sentences extracted from a reference corpus, placed within a sequenced series of activities linked by a common theme.

Definitional knowledge

It is the initial, precise or minimum level of vocabulary knowledge that can be elicited from learners. To do this, multiple-choice test items can be used, where the learner is asked to match a definition with its corresponding word combination.

Emic data

Refers to data collected on the basis of an internal and subject point of view in relation to a given phenomenon. It is generally elicited by means of questionnaire or interviews where the participants of a study are able to express their views.

Etic data

Refers to data collected on the basis of an external and objective point of view in relation to a given phenomenon. It can be elicited by means of a competence test, or any other empirical measuring instrument.

L1 Congruency

In the context of the present study, an Italian collocation will be deemed congruent if it has a corresponding word-for-word translation available in Chinese.

Learning patterns

The way in which predicted probabilities of accuracy vary in time along the four data collection points that are present in this study.

Phraseological competence

Competence that is related to the overall knowledge of a set of formulaic units, in this case, verb-noun collocations.

Phraseology

The study of word combinations.

Retention rate

Difference between language gains in Test 3 and Test 4, considering 8 weeks of pedagogical intervention prior to Test 3, and no intervention between Test 3 and Test 4.

Semantic transparency

In this study, the definition of semantic transparency is based on Howarth's Continuum model (1996, 1998): Howarth identifies free collocations as "combinations of two or more words in which the elements are used in their literal sense. Each component may be substituted without affecting the meaning of the other" (Howarth, 1996: 47). On the other hand, restricted collocations are identified as "combinations in which one component is used in its literal meaning, while the other is used in a specialized sense. The specialized meaning of one element can be figurative, delexical or in some way technical and is an important determinant of limited collocability of the other" (Howarth, 1996:47).

As a result, the degree of semantic transparency will be higher in free collocations and lower in restricted collocations.

In the present study, these two categories of collocations were identified through the calculation of an inter-coder reliability coefficient based on 13 native expert judgments.

Non-DDL approach

A teaching approach that differs from the abovementioned DDL approach in relation to the frequency of input: the sequenced series of activities in this approach are based on single sentences for each of the identified learning aims, and not on multiple examples as in the DDL approach.

Transferable knowledge

The in-depth level of vocabulary knowledge gained by learners. This level of knowledge can be elicited through productive tasks such as writing or gap fill test items.

Verb-noun collocations

Lexical combinations in which the first member is formed by a verb, and the second one is formed by an object noun.

1 Introduction

This chapter introduces the study by describing the research background and the considerations from which it derives, the aims, methods and design that it adopts, as well as its scope and limitations. Finally, it provides an outline of how the overall thesis is structured.

1.1 Background

Developing knowledge and competence in a second language is an undisputed key factor in personal growth and social mobility. English is our current international lingua franca, so for native speakers of other languages this will undeniably be the most important second language to be learned. However, in 2002, the European Commission recommended the "teaching of at least two foreign languages from a very early age"[1], which was further specified in 2012, when the following specific benchmark was set: "by 2020, at least 75% of pupils in lower secondary education should study at least two foreign languages (compared to the present 61%)"[2]. And one of the second languages taught in European schools is, of course, Italian.

As highlighted in the cited EU documents, success in second language learning clearly depends on the progress made in the areas of methodologies and technologies for teaching and learning, which in turn depend on research.

Educational research has the tools and resources to study the effects of teaching methods on learning outcomes and learner attitudes. As a result, innovation in language teaching methods, together with the continuous professional development of language teachers, will necessarily rely upon the availability of rigorous and reliable research in the field.

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[1] European Commission, *Presidency Conclusions. Barcelona European Council, 15-16 March 2012*, p. 19 (http://ec.europa.eu/invest-in-research/pdf/download_en/barcelona_european_council.pdf. Last accessed: 28/11/2018).

[2] European Commission, Commission Staff Working Document "Language competences for employability, mobility and growth", accompanying the document *Rethinking Education: Investing in skills for better socio-economic outcomes*. Strasbourg, 20 November 2012, p. 3 (https://eur-lex.europa.eu/legal-content/EN/ALL/?uri=CELEX:52012DC0669. Last accessed: 28/11/2018)

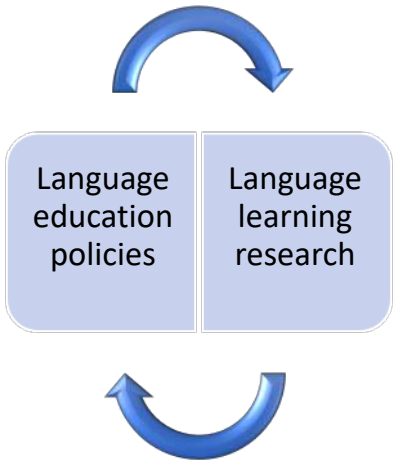
Rod Ellis' *Principles of Instructed Language Learning* stem from decades of language learning research and place formulaicity in the very first of the 10 outlined principles (Ellis, 2005, p. 210); these principles formulated by Rod Ellis and based on SLA research have been adopted by the Ministry of Education in New Zealand to inform language teaching practices in schools (Maley, 2016, p. 14).

As we can see, language education policies and language learning research are interrelated, as they feed each other in striving for ever improved methods, resources and tools for language teaching and learning (Figure 1). Language learning research informs language education policy making, which in turn will set the benchmarks to ensure that the results of research are applied in language teaching and learning contexts at all levels, and that they are extended and improved through time.

What does Corpus linguistics have to offer in the field on language learning research and, in turn, language education policy?

Corpus linguistics unveiled a novel prospective in observing language, which lead to the formulation of new theoretical constructs related to its acquisition, processing and use. The systematic and structured analysis of authentic language use allowed the identification of language phenomena that could hardly be observed in other ways. All of these observed phenomena converged towards the view that language is highly patterned on a number of levels (see 2.2.1). In the area of second language learning, this paved the path to the exploration of ways in which corpus data can shed light on how language learning works and how it can be improved.

FIGURE 1. LANGUAGE EDUCATION POLICIES & LANGUAGE LEARNING RESEARCH



In this sense, two main uses of corpus data in L2 pedagogy have been identified:

- *An indirect use,* where the corpus data is not visible to the learners, and is not used immediately*;*
- *A direct use,* where the corpus data is visible to the learners, and used immediately.

The direct vs. indirect dichotomy in corpus data use in L2 pedagogy, was operationalised as whether the data is visible or not to the learners, was introduced in Leech (1997), and was then extended in terms of immediate or delayed use by Meunier (2010).

These two main uses of corpus data in L2 pedagogical can lead to numerous practical applications. The indirect use can be adopted in syllabus design, using the results from Contrastive Interlanguage Analysis (Granger, 1996, 2015), for instance, and / or textbook vs. reference corpora comparisons (Furkó, 2016) to identify and sequence learning aims, which can then form the backbone of a learning syllabus. The indirect use of corpus data in L2 pedagogy can also be seen in language testing, when data from learner corpora are used as sources of distractors for multiple-choice based tests, or when reference corpora are used to check for the authenticity of the language contained in any given test item (Baker, 2010). Finally, corpus data is used indirectly in learner-targeted lexicography (Paquot, 2012; Granger & Paquot, 2015, 2010; Spina, 2010b, 2010a) and also to inform coursebook design (McCarten, 2010).

On the other hand, we have seen that corpus data can be used directly, making it immediately visible to the learners. This can be done in a paper-based modality, where the output of a corpus is previously selected by the teacher and then printed on paper (Boulton, 2010b), or in a computer-based modality, with learners themselves extracting data from a corpus (Mueller & Jacobsen, 2016). Corpus data can be used directly with different aims (Boulton, 2017): as a reference resource in the context of production activities (Chujo, Oghigian, & Akasegawa, 2015) or as a learning aid in the context of learning activities (Geluso, 2013). The combination of all the ways in which corpus data can be used directly, visibly and immediately by second language learners is known as *Data-driven learning* (DDL).

The main aim of this study is to analyse the effects of DDL in an Italian L2 pedagogical context. The following paragraph provides an overview of the methods that are involved to be able to do this.

1.2 Aims, methods and design of the study

This study seeks to "add a voice to the conversation" on the effects of DDL in second language learning.[3]

In particular, the study aims to evaluate the effects of DDL in an Italian L2 pedagogical context in relation to learning patterns and learner attitudes, on the basis of empirical evidence. This sets DDL in the middle of a disciplinary continuum, with linguistics and corpus linguistics on one side, and educational research and social sciences on the other, as can be seen in Figure 2. The image in Figure 2 is certainly a simplification, as Linguistics can be seen as an integral part of the social sciences, and not at the opposite end of a continuum.

With specific reference to our study, the peculiar nature of DDL derives from the fact that it is a second language learning approach derived mainly from corpus linguistics, but requires the merging of other fields in order to be evaluated empirically. These fields are the educational sciences, which adopt research methods that are typical of the social sciences.

So if we look at Figure 2, we notice that DDL can be seen as a sub-field of Corpus linguistics, which is in turn a subfield of Linguistics, but also that DDL can be considered as a sub-field of Educational research, which is part of the broader field of Social sciences. This naturally determines a number of consequences on the level of methodology. Conducting the present study, in fact, required the convergence of different methodologies related to different, though partially overlapping, fields of inquiry and practice.

With reference to the specific research context of the present study, Figure 3 shows the five main methodological aspects that the study needed to consider, each one related to an area that was either closer to the linguistics or social sciences end of the continuum described in Figure 2.

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[3] The notion of research reports as voices that are added to an ongoing conversation comes from the following passage in Booth et al.'s *The Craft of Research*: «Some students imagine [the researcher as a] solitary scholar reading in a hushed library. But no place is more filled with imagined voices than a library or lab. Whether you read a book or a lab report, you silently converse with its writer – and through her with everyone else she has read. In fact, every time you go to a written source for information, you join a conversation between writers and readers than began more than five thousand years ago. And when you report your research, you add your voice and can hope that other voices will respond to you, so that you can in turn respond to them» (Booth, Colomb, & Williams, 2008, p. 16).

FIGURE 2. DDL BETWEEN LINGUISTICS AND SOCIAL SCIENCES

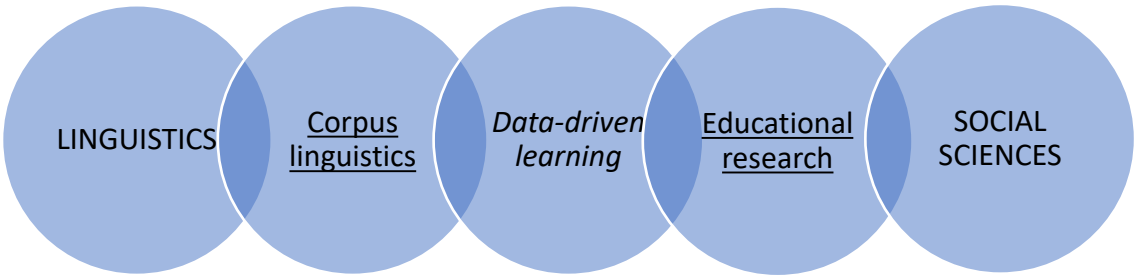
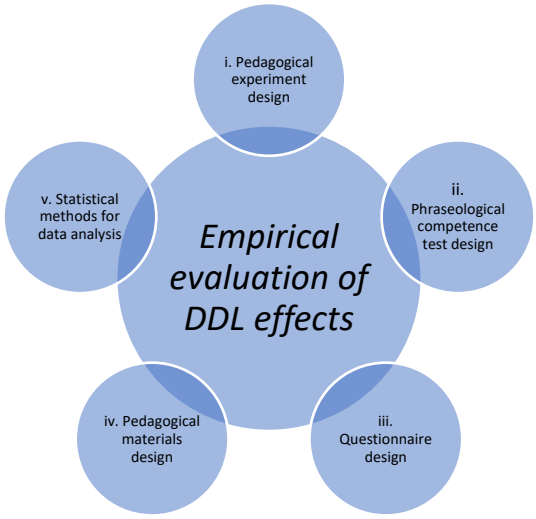


FIGURE 3. CONVERGING METHODS IN THE EMPIRICAL EVALUATION OF DDL EFFECTS



The first aspect was related to how we could construct a pedagogical experiment that would be appropriate for our purposes: what kind of learner population should the study be based on? How should the sampling of the participants be conducted? How long should the experiment be? How should the different conditions in the experiment be operationalised? All these questions pertain to educational research.

The second aspect concerned the design of the first of two data collection instruments, namely the phraseological competence test. How many items should the test contain? What format should the test items reflect? How can the test items be linked to the classroom activities? Here, we find ourselves in the area of language testing, which to some degree overlaps with issues of pedagogical materials design.

The third aspect corresponded to the second data collection instrument, namely the student questionnaire, which begs an additional set of methodological questions. How should the questionnaire items be worded? What kind of format should they be in? How many should they be and what kind of learner attitudes should they elicit? This set of questions connects the study to research on questionnaire design, a major area of focus in the social sciences.

The fourth aspect of our study involved the development of pedagogical materials. How can we identify and sequence learning aims? What type of activities can be designed for developing specific kinds of phraseological competence? Here, we deal with issues that are typical of the field of teaching methods and curriculum design.

Finally, this study required a basic understanding of statistical methods for analyzing data, especially when evaluating accuracy data derived from the phraseological competence test. How can the observed data be analysed in the form of a model with predictive power? What kind of predictive statistical method is the most suitable for the present study? These questions drive us towards the field of inferential statistics.

As can be seen, the methodological components of this study are numerous and varied and were integrated in order to address the research questions formulated in relation to the overall DDL effects over time, the role that specific linguistic properties of the learning aims have in evaluating the effects of DDL, and what the attitudes exhibited by the learners were in relation to the DDL activities that were proposed.

The study adopts a between-groups pseudo-experimental longitudinal design, combining both etic and emic data (see 2.1.5). The etic data is collected by means of a phraseological competence test administered at four points in time, and at four-week intervals, over a time span of 13 weeks. The emic data is collected by means of an end-of-course questionnaire, divided into likert-scale items and open-ended questions.

1.3 Scope of the study

The present study focuses on investigating DDL effects from an etic and emic perspective, and has the following scope.

1. The participants in the study come from a homogenous population of Chinese Learners of Italian, enrolled in a foundation year Italian language course at the University for Foreigners of Perugia;
2. The learning aim that the study focuses on is that of verb-noun collocations;
3. The learning gains for the etic part of the study are measured by means of a phraseological competence test, evenly divided into multiple choice and gap fill items.
4. The DDL learning activities that are present in this study refer to concordance-based activities printed on paper.
5. Learner attitudes for the emic part of the study are elicited through a questionnaire divided into likert scale items and open questions.
6. The linguistic variables considered in analyzing the effects of DDL are semantic transparency and L1 congruency. The dimensions of collocational knowledge that were considered are two: definitional knowledge and transferable knowledge.
7. The analysis of etic data is based on 4 data collection points distributed over the timeframe of 13 weeks.

1.4 Significance of the study

To the best of our knowledge, this is the first empirical study aiming to evaluate the effects of DDL in the context of Italian L2 learning and teaching and on the basis of both etic and emic data. The only other existing empirical studies based on DDL in Italian L2 contexts seem to be the studies carried out by Claire Kennedy and Tiziana Miceli (Kennedy & Miceli, 2001, 2010, 2018), based solely on emic data, i.e. student questionnaires.

The significance of the study derives also from the fact that it tackles the practicalities of using reference and learner corpora of Italian to identify the learning aims of a language learning syllabus, to inform the construction of a phraseological competence test and to

constitute the basis for the development of concordance-based learning activities printed on paper.

It is also, as far as we know, the first empirical DDL study based on a longitudinal design with four data collection points distributed over a timespan of 13 weeks, and also the first DDL study to use the observed data in mixed-effects modeling, in order to build a statistical predictive model of DDL effects.

In terms of the pedagogical treatment of the DDL construct, the study also provides insight into the different paper-based DDL activity types that can be used in the classroom as part of a lesson. It also shows how the DDL activities can be fitted and sequenced within a one-hour lesson.

1.5 Structure of the thesis

After the Introduction outlined in Chapter 1, a literature review is provided in Chapter 2. The literature review concerns the two main field of inquiry pertaining to the thesis, namely DDL and phraseology. Both fields are reviewed in terms of their origins and theoretical developments over time, with a special focus on the state of the art and the main current issues characterising them. Both reviews place particular emphasis on the empirical evidence that is available in relation to the state of what we know, and they are then rounded off by a final paragraph aiming to "fill the gaps and combine the challenges", where the research questions of the study are formulated.

Chapter 3 describes the methods followed in the different parts of the study. First, the overall study design is illustrated, followed by a description of the criteria adopted in identifying the population and selecting the participants in the study; descriptive statistics of the participant samples are also provided. Then, the processes followed in developing the pedagogical materials are outlined, together with the principles guiding syllabus design and lesson planning. The kind of research instruments used as data collection tools are also described in relation to why they were chosen and how they were developed for the needs of the present study. Finally, the criteria adopted in analyzing the data are explained in relation to each research question, together with how the variables were coded, and what statistical procedures were followed in the analysis of the etic and emic data collected.

Chapter 4 contains the results of the study. It is divided according to the kind of data analysed (etic or emic) and according to the research question addressed. It closes with a summary of the results.

Chapter 5 contains the discussion of the results obtained in the study. It is symmetrical to Chapter 4 in structure and provides a summary of the main discussion points at the end.

In Chapter 6, we conclude the study by providing an overview of the findings, by indicating how these contribute to DDL research in general and Italian L2 pedagogical practices in particular, and point out its limitations, tracing some hypotheses for future lines of research.

2 Literature review

This chapter provides a literature review related to the research background of the present study. First, it focuses on Data-driven learning, what this means, how it is justified theoretically, what kind of criticism it has attracted, how it originated and developed over time and what the current state of the art is. Then, it turns to phraseology, how this field of studies has been defined and how it has developed through time and, focusing on collocations and how these have been studied in the context of second language. In both cases, a summary of the main current issues will be outlined. The chapter closes with an attempt to bridge the gaps arising at the intersection between the two fields, by formulating the research questions of the study together with a statement of hypotheses.

2.1 Data-driven learning

This part of the chapter focuses on DDL, its definition, theoretical foundation and development over time, as well as the state of the art in relation to both etic and emic dimensions of empirical research. It closes with an outline of the main current issues.

2.1.1 Key principles and theoretical foundation

This paragraph explains how Data-driven learning (DDL) differs from other teaching and learning approaches, and how it fits into the framework of other teaching theories and methods.

In its essence, DDL can be defined literally as learning that is driven by data (Johns, 1991, p. 3). In the case of second language learning, this implies the availability of authentic data regarding target language usage, which generally comes in the form of a corpus.

The two key features that characterize DDL are:

1. *input enhancement*, referred to the type of content that is presented to the learners (i.e. numerosity of examples), and the way in which the content is presented visually (i.e. KWIC format);
2. *inference-by-analogy,* referred to the learning principle involved in engaging with the content (i.e. guided-discovery of patterns in text).

We will now explain what these two features mean, how they are supported by the literature, and how they fit with teaching principles and linguistic theories.

The type of content that DDL presents to the learners is extracted from corpora. A corpus contains authentic, (sampled to be) representative and machine-readable linguistic data (McEnery, Xiao, & Tono, 2006, p. 5). Because of these characteristics, a corpus is able to provide a picture of real language use in relation to a specific language, language variety or register, and can be searchable by keyword, part of speech, group of words, and so on. In the context of DDL, corpus data has been used in a variety of ways (Leńko-Szymańska & Boulton, 2015), though in its most typical form, DDL is concordance-based.

A concordance is a list of sentences, or chucks of sentences, containing a certain unit of language, which can be a single word or a combination of words. The learner is presented with numerous examples drawn from real communication (Tomasello, 2003), which for this very reason have the potential to show the variability in how a word or word combination is used in relation to different communicative needs. This variability can be observed, for example, in relation to the structural features of the examined unit, for instance the insertion/omission of a determiner in a verb-noun collocation (e.g. *avere* [VERB] *fame* [NOUN], 'to be hungry' vs. *avere* [VERB] *una* [DET] *fame* [NOUN] *incredibile* [ADJECTIVE], 'to be very hungry'), in relation to the different meanings of the unit (e.g. raccontare una storia, 'to tell a story' vs. raccontare storie, 'telling lies'), or in relation to a usage preference of one form of the unit compared to another (e.g. *guardare un film* and *vedere un film* both mean 'to see a film', but the first form is used only 4 times in a 15-line concordance – see Appendix D).

The numerosity of examples provided by the concordance for a single lexical unit is able to ignite frequency effects (Ellis, 2002) in relation to the three dimensions of variability outlined above, and to the many others that can emerge from the observation of a concordance. The frequency effects can then lead to grammaticalization processes that will then determine the interiorization of a regularity (Bybee, 2006; Bybee & Hopper, 2001). These effects find in the concordance an environment of controlled and structured content that is ideal to be used in the classroom, because it condenses the language input from the L1 that a learner will be exposed to in a way that can be viable for a formal

instructional learning context, as it can be variously adapted and integrated within a lesson.

The second feature that characterises the content presented through DDL relates to its visual properties. A set of concordance lines will usually be centered with respect to the node word, and will normally come in the form of an emboldened text; this way of presenting concordance lines is known as KWIC (Key-Word-In-Context) format and contributes considerably to the overall input enhancement (Chapelle, 2003, pp. 40–53) that comes from concordance lines.

The use of concordances in the classroom is able to reflect the fundamental nature of language. As argued by Diane Larsen-Freeman and Lynne Cameron in their volume *Complex systems and Applied linguistics* (Larsen-Freeman & Cameron, 2009), language is a complex system. What this means is that language is inherently characterised by a heterogeneity of elements or agents, dynamism, non-linear development and openness; and because of all these features, language requires adaptation (Larsen-Freeman & Cameron, 2009, p. 36). A natural consequence of the nature of language is that it will not be learnable in a context-free environment (Kirby, 2002, p. 187).

DDL offers a set of principled techniques and resources that allows a learner to observe language in its complexity and dynamism. The enhanced input provided by multiple instances of a given linguistic unit, will constitute, as we will see, the basis for inferencing a regularity in usage, which can then be extended to other communicative contexts.

So what can the learner actually do with concordance lines?

By reading them vertically, and not horizontally, the learner is able to detect patterns in how the observed unit is used in its cotext, that is what comes before and after it. The observation of these patterns will allow the learner to infer meaning, structure and form related to the unit's usage, and use this inference in future uses of the unit.

But why patterns?

Patterns identified as such upon exposure to multiple instances of a single lexical unit form the basis for inferencing a rule of usage. This principle is typical of analogy-based learning (Bod, 2006, 2009). Rens Bod's principles (Bod, 2009, p. 760) state that in learning a language the learner will follow three main phases: 1. All possible meanings will be assigned to a given unit of learning; 2. All the possible meanings will be divided into "submeanings"; 3. The best "submeaning" will be inferred to be used in a given

situation. Analogy-based principles have also been recently introduced in studies regarding corrective feedback, where they have been seen to have an positive effect on retention rates compared to other methods of corrective feedback (Thomas, 2018). The instances deriving from analogy-based research fit perfectly with the affordances of concordance-based DDL. The richness of the input provided by concordance lines generally rest on the sound design criteria that led to the construction of the corpus, as well as on a multitude of searching and sorting options that can provide the learners with a precise data, adhering to their specific leaning needs in a given moment.

In the context of concordance-based DDL, however, the underlying "inference-by-analogy" process takes place through the mechanism of vertical reading. Some of the best examples of concordance-based DDL can be found in Sinclair's *Reading concordances* (Sinclair, 2003). The volume shows how concordances can be used to foster learning in distinguishing homonyms, literal vs. metaphorical meaning, word classes, as so on. Figure 4 provides the first example that can be found in the book, where the learner is driven by the guided observation of the data towards the identification of meaningful patterns. The guiding questions provided by the teacher lead the learner through the exploration of the concordance lines and the patterns within.

In *Reading concordances,* John Sinclair invites the learners to tackle the concordance by taking the following series of steps: look at the words that come before and after a node, that is the unit being learned and that was searched for; look at the sequences that are repeated and try to make an hypothesis in regards to how they may differ from other instances; look at additional evidence in support of your hypothesis, focusing for instance on more distant words; formulate a report of the hypothesis in writing; recycle the same process and use it on all the instances that do not fit the hypothesis (Sinclair, 2003, p. xvi-xvii). All the steps suggested by John Sinclair involve sequential stages of vertical reading, which generate a cumulative evidence that helps the learner interiorize the regularity attached to the use of the target language item.

The fact that DDL aims at fostering favourable conditions for the learners to be able to identify patterns in the multiple sentences containing a single lexical unit tends to determine a higher cognitive load than more traditional pedagogical activities, and this is likely to determine better retention rates.

FIGURE 4. AN EXAMPLE OF CONCORDANCE-BASED DDL FROM SINCLAIR, 2013, P. 3-4

Datafile 01_block.doc

1	on foot between the administration	block	and some cells can take up to 25
2	operations are moves designed to	block	enemy penetrations. The counter-
3	fee are variable. In 1985,	Block	filed 10 million tax returns,
4	the 16th Century, salt was used in	block	form and scraped off with a **knife.**
5	Zulu men for rural areas) and a road	block	had been set up by young men
6	Ltd. could also find itself on the	block	if Sir James Goldsmith succeeds in
7	the livery yard. Although the stable	block	is in darkness, she knows her own
8	cross as he led the crowd on a three-	block	march to police headquarters. He
9	deep pockets, and setting it upon a	block	of stone between himself and the
10	Next to the main assembly	block	of the shipyard in the Baltic port
11	you're a winner! Underneath each	block	of three numbers is a prize **value.**
12	The antagonists fasten onto and	block	off the receptors so that the
13	he would chase one leaf half a	block	or more with his blower, whereupon
14	a yodel, came echoing down from C-	block	's Two-tier. **Bauman**
15	his state partners would be able to	block	such a move. A Montedison spokesman
16	antagonists" he's developed which	block	the chemical signals small cell
17	or have clips or rings put on them to	block	them. Early techniques
18	blindfolded man cried out in the **cell-**	block	yard: about five guards surrounded
19	Minister, Nikolai Ryzhkov, was on the	block	yesterday, not that of Mr
20	effectively took itself off the	block	yesterday and announced a sweeping
21	appeared to be the main stumbling	block	. Yorkshire refused to comment on
22	off ALL THREE numbers in a single	block	you're a winner! Underneath
23	a landscape, the seascape doesn't	block	your sight; it extends beyond it.
24	a turning point in your life. Do not	block	your own good; ask for **guidance.**
25	Another is to go to extremes to	block	your neighbours out of your life,
26	and circumstances that appear to	block	your path. There is a certain
27	nationalists today said they will	block	Yugoslavia's border crossings with
28	see it by our eyes. Siegel: Down the	block	. Ziyad, who runs a souvenir shop

1. Read each example in turn and work out its sense. Do not use a dictionary, but make notes on the meanings.

2. Group the meanings together wherever you can. If in doubt, put them together, so that you end up with a rather small number of senses.

3. Pick out the largest group. Compare your selection with the key.

4. What word classes are found in this group?

5. Do you recognise any phrases, phrasal verbs, idiomatic constructions or the like among the twelve?

6. A barrier can be a concrete physical object or a more abstract thing in politics or social life. Classify the "barrier" instances, taking care not to over-simplify; some instances may not be quite clear in the short context, and some may have a meaning that covers both the concrete and the abstract.

7. Pick out the instances with a physical meaning. Study the four or five words on either side of block, and make notes on any repeated patterns of grammar or vocabulary choice.

8. Try to fit the non-physical barriers into the same categories as are set up in answer to §7.

9. Select the next largest group of instances with the same sort of meaning. Check with the key, and then note any patterns in the surrounding words. Continue with the remaining meanings; do not be surprised if there is little regularity in the patterns when there are very few instances.

10. From the evidence of these examples, summarise the main meanings and uses of block.

This process is linked to statistical learning theories stemming mainly from psycholinguistics (Erickson & Thiessen, 2015; Saffran, Aslin, & Newport, 1996) and especially at its intersection with phonology (Adriaans & Kager, 2010). According to these theories, language learning occurs by implicitly detecting statistical regularities in the linguistic input, which are then used to formulate hypotheses in relation to language use. Hypotheses formulated on the basis on cross-situational statistics are those that are more likely to produce long-lasting learning, because they have a positive effect on memory through the associative mechanisms fostered by experience. Among the numerous models of statistical learning, Erickson & Thiessen in particular argue for the "Extraction and Integration Framework", suggesting that statistical learning accounts of language acquisition should be linked to real language processes, and in particular that "statistical learning consists of two major processes that together explain how learners acquire many aspects of statistical structure. Extraction fundamentally involves a chunking process in which frequently occurring sequences are likely to be chunked into discrete units. Integration involves similarity-weighted aggregation over stored chunks to induce some aspect of central tendency. Critically, this learning then biases the extraction parameter, such that learning influences the kind of chunks that are likely to be subsequently extracted. One main advantage of this conceptualization of statistical learning is that it can explain more than just sensitivity to conditional probabilities." (Erickson & Thiessen, 2015, p. 16).

DDL is reflected by these theories in the sense that DDL provides the best context for inducing the statistical learning and associative mechanisms that already occur naturally in first language acquisition. Because of all the traits that distinguish second language learning from first language acquisition, DDL creates resources for guiding the second language learner towards an effective discovery of regularities in language usage. The work of Michael Tomasello (2005, 2008) further confirms the power of usage-based models in unveiling the ability of the human brain to extract patterns of regularities from linguistic input.

But DDL reflects also a number of widely supported teaching principles. DDL relies above all on a learner-centred approach, which is in line with the principles of constructivist theory (Phillips, 1995). As Tom Cobb explains, "knowledge encoded from data by learners themselves will be more flexible, transferable, and useful than knowledge

encoded and transmitted to them by an instructor" (Cobb, 1999, p. 15). As a result, in line with some the most recent communicative approaches to second language teaching, in DDL the learner has been defined as a "detective" (Johns, 1997), a "researcher-scientist" (Cobb, 1999) or a traveler (Bernardini, 2000), while the teacher is seen more like a "demonstrator" (Ana Frankenberg-Garcia, 2012), a "collaborator" (Boulton, 2011a) or a "guide" (Charles, 2014).

This inductive learner-centred approach in DDL often takes on the form of inductive collaborative guided-discovery, which is common in current communicative teaching syllabi. A sequence of tasks is devised by the teacher in order to let groups of learners discover patterns in a concordance by collaborating with each other, as well as with the guidance of the teacher, as needed. By discussing and comparing with peers, learning is more motivating and tends to be more memorable. Pattern hunting can also be carried out without any form of pre-established tasks devised by the teacher, especially in the cases of advanced students exploring a corpus more or less autonomously, or less advanced students exploring a suitably constructed corpus for their learning needs. The fact that the activities are learner-centred and based predominantly on induction nurtures leaner involvement and motivation, ultimately determining a more favorable learning environment (Laufer & Hulstijn, 2001).

DDL fits into the *Lexical approach* (Lewis, 1997, 2000; Lewis & Gough, 2008), which favours a view of "grammaticalised lexis" and places it as the core of the learning aims a teacher will set. DDL provides the lexical approach with principled methods and resources to apply these principles in practice.

In terms of linguistic theory, DDL rests firmly within Firth's *contextual theory of meaning* (Firth, 1957). The quote "You shall know a word by the company it keeps" (Firth, 1962, p. 11) is possibly one of the most frequently found in the literature on corpus linguistics and word combinations. Indeed, Firth's work was highly influential in development of Sinclair's theory and practice. Firth supervised Sinclair's early work, and Sinclair then applied the notion of observing language in its context of occurrence throughout his whole career, relying on the ever-developing corpus tools and resources allowing for increasingly more sophisticated searches on corpora that could contain increasingly larger amounts of text.

So, if we shall know a word by the company it keeps, then we can also say that we shall know a sentence by the company it keep*s*: the difference between two sentences can emerge from a concordance so that we are able to differentiate between synonyms, or between the literal and metaphorical meaning of a word or word combination in the sentences, and so on.

In every case, it is a matter of context, and in the most typical case of DDL the context is that of a concordance. Within the concordance, the observer is able to compare and contrast, which is an activity that is common in many other disciplines, including art history, for instance, where the features of a work of art are identified by comparing it with another: the characterising features are identified more clearly only if juxtaposed with something that differs from them. This same principle is what guides the grouping of sentences in a concordance according to sensible criteria that help the learner make sense of the utterances and of their communicative purpose. In all these cases, these operations would be impossible were they devoid of their natural context of occurrence.

DDL seems to make many theories meet: complexity theory, analogy-based learning, learner-centredness, constructivism and the lexical approach. As a result, not only can DDL be said to be a pedagogical approach that reaches the parts that other teaching cannot reach (Boulton, 2008), but it's also an approach the embraces a number of theories from different fields that other teaching and learning approaches don't embrace.

2.1.2 Rebuttals to DDL criticism

Despite all the above mentioned arguments supporting DDL, the approach has not been immune from criticism. We will now describe the main critical arguments that have been raised against DDL, and address them in the form of rebuttals.

Most of the criticism deriving from a teachers' perspective is summarised in Boulton & Cobb (2017, p. 351): working with computers is something that both teachers and learners are still reluctant do to; reading concordances implies gaining meaning from the text in a way that is utterly different from the more familiar ways we are all used (i.e. horizontal reading); the data contained in corpora are rarely appropriate for learner needs; and finally, working with corpora requires preliminary extensive training, which teachers may

find more time-consuming compared to simply guiding the students to the use of a dictionary.

Most of these criticisms can be addressed by suggesting specific ways in which the observed limitations can be overcome. The unfamiliarity of working with computers can be overcome with the many learner friendly corpus-search web interfaces (justtheword, SkELL, BNC lab, etc.) that have become available in the past few years, and further possible developments in mobile-based versions of DDL can contribute in overcoming these perceived difficulties. Furthermore, the paper-based version is always an option not only to control and select the output of the corpus so that it is suitable for the learner, as we will see shortly, but also to create different DDL activity types, as will be seen in this study.

The unfamiliarity of reading groups of sentences vertically and not horizontally is something that can be overcome with specific kinds of pedagogical techniques and activity design. Novelty in pedagogy has been seen as something that usually sparks the learners' interest and curiosity, and ultimately fosters motivation.

As previously mentioned, a teacher can ensure that the corpus data used is appropriate for learners, both in terms of difficulty and genre, by manually selecting the corpus data and presenting it in a paper-based format, or by relying on a corpus made of graded readers, or by using one of the learner friendly corpus searching tools such as SkELL, which will automatically select good examples for the learner.

Finally, the idea that DDL requires extensive prior corpus training is not corroborated by the empirical findings that will be discussed shortly (see 2.1.5.1): not only are most DDL studies devoid of any preliminary practical introduction to corpora and DDL, but this aspect does not seem to be significant in determining the effectiveness of the approach (Lee at al., 2018). This eliminates the issue of it being time-consuming, at the expense of other parts of teaching.

Other criticisms to DDL are more theoretical. Two of the main ones come from John Widdowson and are discussed in Braun (2005) and Chambers (2007).

In a 1978 publication, Widdowson makes a distinction between genuineness of the text and authenticity of the discourse (Widdowson, 1978). The rationale for this distinction is that using genuinely produced texts, instead of made up ones, for instance, is not a guarantee for learning: in order for the learning to take place, the learners need to

"authenticate" the texts, meaning that they need to establish a relationship with them (Braun, 2005).

This authentication process can, however, be fostered by corpora in a number of ways: by making sure they reflect the needs of the learners and that they contain texts that are pedagogically relevant for their specific learning needs and by adopting appropriate pedagogical strategies to ensure they are authenticated by the learners, which Braun details in her work (Braun, 2005, p. 53-55).

Furthermore, Angela Chambers (2007, p. 120) comments on DDL studies eliciting learner impressions related to using corpora, where the learners frequently speak of "authenticity" and the fact that the data they observe is "real" (Cheng, Warren, & Xun-feng, 2003). So despite Widdowson's objections, learner perceptions seem to go in the direction of considering corpus data as truly authentic.

A final criticism relates to the fact that the cotext of a lexical item, which can be observed in a set of concordance lines, is not enough for the learner to reconstruct a meaningful context of use within which being able to learn meaningfully (Widdowson, 2003, p. 83). This cotext vs. context argument is effectively discussed in Braun (2005), where work on Relevance Theory is cited to address the issue.

Braun relates that "we do not perceive a communicative situation directly but […] we construct a context in our mind, drawing on our perceptual abilities, our knowledge about the communicative situation in question, our previous experience with it, our attitudes towards it, our background knowledge as well as textual clues (including co-text) and other factors. If communication is to be successful, a relevant context has to be constructed by the discourse participants" (Braun, 2005, p. 52).

Braun's argument shifts the "context vs. cotext" issue to a "cotext to context" pedagogy, which can certainly be applied within DDL, given the appropriate resources and strategies. Again, Chambers points to DDL literature where learners having worked with corpus data speak of "context" (Chambers, 2007, p. 11). Even though this can be ascribed to the fact that the term, and associated concept, of "cotext" is less familiar to learners, they still use the term of "context" to describe their experience, indicating a perceived closeness to what is more generally and widely implied by the term. This indicated that concordances, to their eyes, are able to create a particular kind of context in which they can learn something new and transfer it to other contexts, in the wider sense of the term.

2.1.3 Origins and development over time

The first corpora appear in the early 1960s, and one of their main aims was the following: to improve the description of the English language so that the practices and materials associated with teaching and learning English as a foreign language could improve as well. This aspect is evident when reading the article with which Randolphe Quirk introduces the project *Survey of English Usage:* "It may seem strange to hear of plans for a survey of English usage when one reflects for how long and by how many and with what degree of attention the English language has been studied. The position is, however, that the masses of materials compiled over the years prove quite inadequate to serve as the basis of even elementary teaching-grammars, a fact which has emerged rather suddenly and with particular starkness in recent years, when increasing attempts have been made to improve and extend the teaching of English as a foreign language." (Quirk 1960: 40).

In 1960, he thus underlines the inadequacy of language materials collected up until that point in time in order to serve as a basis for the creation of pedagogically oriented grammar books. As a result, the subsequent years were characterised by a spread of corpus compilation projects geared towards collecting authentic data from both natives and non-native speakers of a certain language.

However, it is not until the late 1960s and early 1970s that we have the first mention of corpora being used directly with students, which takes place in the UK (Cobb & Boulton, 2015, p. 482), and not until the work by Sandra McKay (1980) that we have the first published report of using corpora with students. In McKay's work, the aim was to foster the learning of verbs by raising awareness in relation to the integration of the syntactic, semantic and pragmatic dimensions of a unit within a set of concordance lines.

But the expression "Data-driven learning" was formulated in the early 1980s by Tim Johns, an English teacher and researcher for about 30 years at Birmingham University, UK. Tim Johns embodied a rare figure at the intersection between teaching methodology and corpus linguistics. His earliest publications made a considerable mark in the field of teaching methodology. This is the case for the TALO vs. TAVI distinction, introduced in the article published together with Florence Davies (Johns & Davies, 1983). TALO stands for "text as a linguistic object", while TAVI for "text as a vehicle of information".

This distinction helps the teacher in the process of lesson planning and designing learning activities and it is still widely used today in all major high-quality teacher training programs, including the CELTA (Certificate of English Language Teaching to Adults) program, certified by Cambridge English Language Assessment, which is part of the University of Cambridge[4].

Tim Johns is remembered by the many people who knew him and worked with him as an original mind primarily devoted to teaching. One of these people is John Higgins, who presented a recollection of Tim Johns' work at the BAAL Corpus Linguistics SIG event for 2018, entitled *New directions in DDL* and held at Coventry University[5]. Higgins explained just how involved Tim Johns was in teaching students, experimenting new ways in using corpora and making them useful for the needs of the students.

If DDL developed the way it did, leading to the numerous varieties in the applications that would come in the years following Tim Johns' initial work, it is thanks to Johns' extensive experience in the classroom, together with John Sinclair's research and practice insight.

The version of DDL implemented by Tim Johns was a reflection of the teaching context he found himself in. At Birmingham University, he taught English for Academic Purposes in the English for International Students Unit. The students would typically have an upper-intermediate or advanced level of proficiency. His implementation of DDL was generally geared toward error resolution via an inducted procedure of pattern hunting via a set of concordance lines. In his kibbitzers, that is data-driven discussions on language points[6], he often tells of how serendipitous (Bernardini, 2000) the discovery was, putting both the teacher and the student in the same "researchers' seat".

Tim Johns applied a truly leaner-centred approach, and way primarily focused on his everyday teaching. This is why his publishing efforts were perhaps quantitatively modest but highly informed by his experiences from the field, and this is what makes them highly relevant in any study addressing DDL and the evaluation of its effectiveness. Figure 5

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[4] The main worldwide organisation offering the CELTA qualification is International House. More information about this can be found on the following page: https://ihworld.com/teach/improve-your-teaching-skills/celta/, last accessed: 29/10/2018).

[5] The video of John Higgins' presentation is available at the following link: http://baal-clsig.weebly.com/past-events.html (last accessed: 29/10/2018).

[6] The full list of kibbitzers shared by Tim Johns is still available at the following link: https://lexically.net/TimJohns/Kibbitzer/homepage.htm (last accessed: 29/10/2018).

shows a photograph of Randolphe Quirk showing Tim Johns an early CALL program. It is a highly meaningful photograph, if we think that it was taken in 1982 or 1983, and that the subsequent years would see a proliferation of experimentation in the field of DDL.

Tim Johns kept a webpage, with a section entirely devoted to DDL[7]. Today, one of the few links that are still working is the one that leads to the page containing the kibbitzers. But how did DDL develop over time after Tim Johns's major work? A research timeline on DDL was published in 2017 aiming to answer the question (Boulton, 2017). The timeline contains 52 studies drawn from a sample of 205 studies, including the 25 most cited articles in the field, and the most significant ones according to a personal selection of the author. They are divided into four main categories: 1. Theoretical underpinnings; 2. Descriptive papers; 3. Empirical evaluations (a. emic papers on learner attitudes and learner behaviours in using corpora; b. etic papers on the effects of using corpora as learning aids or reference resources); 4. Surveys and syntheses. Figure 6 contains a quantitative timeline of the 52 studies selected in Boulton (2017). As can be seen easily, the largest group is made of empirical studies, indicating that a lot of attention has been geared towards finding empirical evidence that sustains the effectiveness of DDL.

FIGURE 5. PHOTOGRAPH OF TIM JOHNS WITH RANDOLPHE QUIRK[8]

[7] The Tim Johns Homepage: https://lexically.net/TimJohns/Kibbitzer/homepage.htm (last accessed: 29/10/2018)

[8] This photograph was taken from Mike Scott's page on Tim John (https://lexically.net/personal_pages/memories%20of%20Tim%20Johns.html, last accessed: 29/10/2018)

If we look at all the empirical studies on DDL included in Boulton & Cobb (2017), we can see that in terms of proficiency levels represented, DDL started with a higher attention devoted to lower-intermediate proficiency level learners compared to other proficiency level learners, which then increases up to the 2005-2009, but then drops between 2010 and 2014, with intermediate level being the most represented level in empirical studies, closely followed by upper intermediate and advanced (Figure 7).

FIGURE 6. QUANTITATIVE TIMELINE OF 52 KEY DDL STUDIES

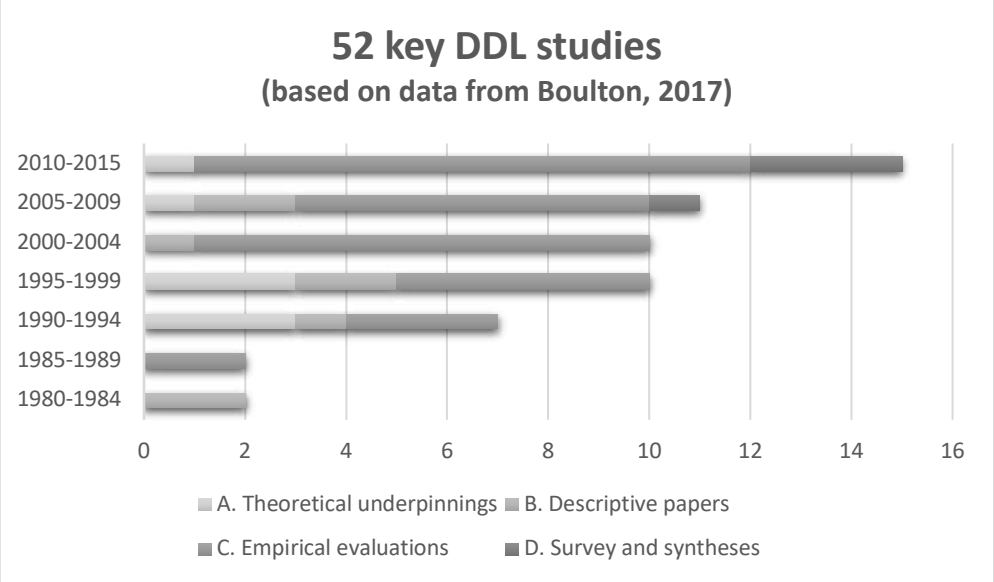
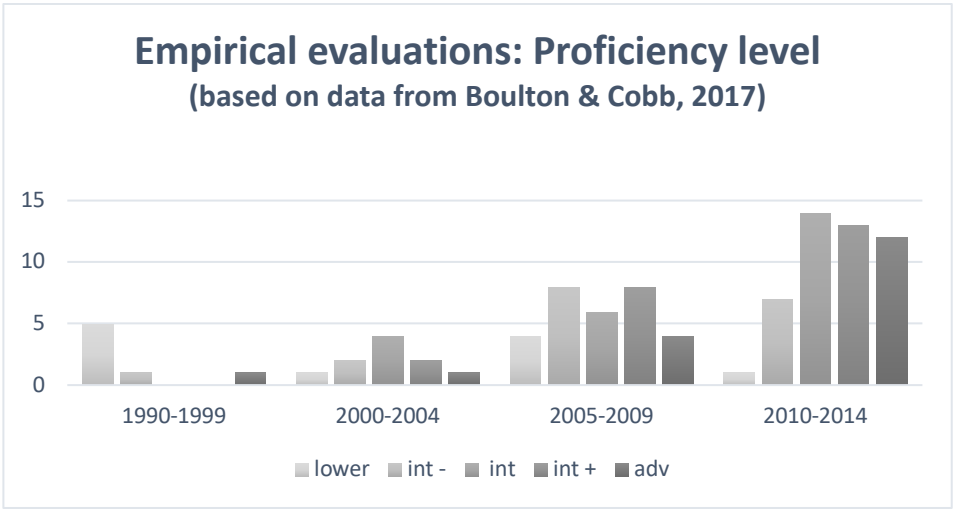


FIGURE 7. TIMELINE OF PROFICIENCY LEVELS IN DDL EMPIRICAL STUDIES

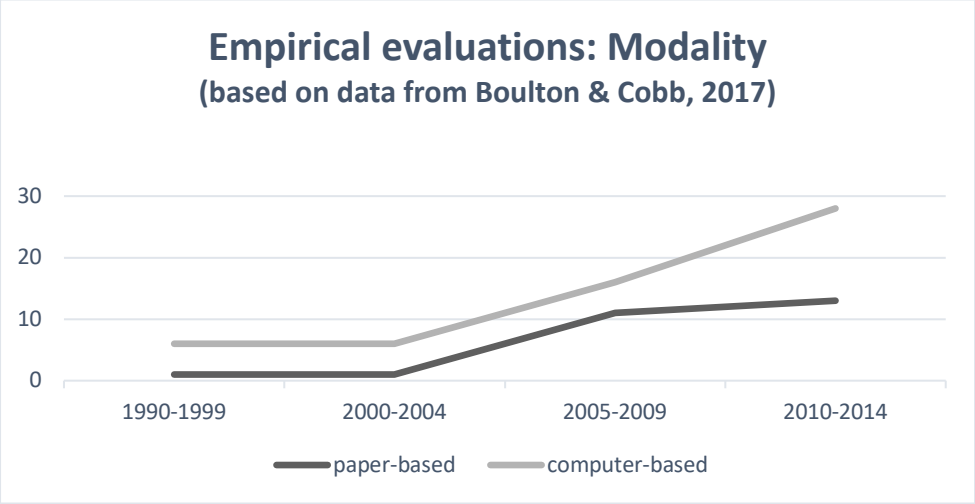


Intermediate, upper intermediate and advanced levels of proficiency represent 83% of the total between 2010 and 2014, 60% between 2005 and 2009, 70% between 2000 and 2004 and 1.43% between 1990 and 1999.

One may note that all second language learners go through lower proficiency levels, many reach an intermediate proficiency level, but only few reach an upper intermediate or advanced level, and this would yield for greater attention devoted to lower proficiency levels. However, as an approach that originated in a university context and continues to be developed and expanded mainly in university settings, it is understandable that in most cases the proficiency level of the students involved in the experimentation has been from intermediate upwards.

On the other hand, if we look at the modality with which DDL was used in these empirical studies, and focus on the distinction between paper-based and computer-based DDL, we notice an upward trend in the use of computer-based DDL (Figure 8). This could be due to two factors: 1. the larger availability of corpora online and/or software tools that could easily be used by learners to explore self-made corpora; 2. an increased attention devoted the upper-intermediate or advanced learners, who are better equipped with online corpora, often belonging to the reference type, so the same that a linguist or researcher would use.

FIGURE 8. TIMELINE OF CORPUS USE MODALITY IN DDL EMPIRICAL STUDIES



In fact, paper-based DDL is often the option chosen when using DDL with lower proficiency level learners, because it allows the teacher to manually select the concordance lines, and amend possible errors or forms deemed unsuitable for this level. Figure 8 shows how the two modalities of DDL were represented with a balance up to the years between 2005 and 2009, but then markedly diverged between 2010 and 2014 with the computer-based modality considerably taking off[9].

However, we can have a closer look at the 28 studies published between 2010 and 2014 and characterised by computer-based DDL and see how these are distributed in relation to proficiency levels[10]. By looking at Table 1, we can see that most of the computer-based DDL studies involved intermediate or upper intermediate learners. In all these cases, we can see that learner-friendly software interfaces were used. The increase in corpus querying software interfaces developed for learners more than for researchers might explain the steep increase in computer-based DDL between 2010 and 2014, in comparison to previous years. The advantage of these interfaces is that the corpus is made accessible to a larger variety of learners, without requiring any technical knowledge in relation to querying languages. The lower proficiency end of the spectrum is, however, the most underrepresented, possibly because of the lack of many options specifically suitable for learners at this level.

2.1.4 DDL in L2 Italian learning and teaching

Has DDL landed into the context of Italian L2 learning and teaching? The first answer to this question would be "no", or "not really". But if we consider the broader theme of "corpora in Italian L2 pedagogy" things change.

Italian scholars have been interested in how corpora can be used to teach Italian as an L2 for at least twenty-five years. The very first publication appeared on ReCALL in 1993, and was published by Loredana Polezzi, teaching at the time Italian for specific purposes

[9] The cases where a mixed paper-based and computer-based approach was used were counted in both categories.

[10] The studies marked as "int?" in the supplementary materials provided in Boulton & Cobb (2017), because the papers they refer to were not explicit about the level, were counted as "int".

at the University of Warwick, UK. Her learners were post-graduate students of Renaissance Studies. In order to apply DDL in an LSP (Language for Specific Purposes)

TABLE 1. SOFTWARE USE IN COMPUTER-BASED DDL, 2010-2014

Interaction type	Proficiency level	N. of studies	Bibliographical reference	Type of PC interaction (software)
PC & MIXED (PC/PAPER)	adv	6	Chang, 2012, 2010	Own
			Pirmoradin & Tabatabaei, 2012	CD-ROM ?
			Bale, 2013a; 2013b	Backbone (Online)
			Daskalovska, 2014	BYU
	int+	7	Poole, 2012	own
			Buyse & Verlinde, 2013	Linguee
			Gao, 2011	CERT parallel Chinese-English concordancer
			Çelik, 2011	BYU
			Oghigian & Chujo, 2012a; 2012b	BYU, PERC, Springer Exampler, AntConc
			Yoon & Jo, 2014	LexTutor
	int	11	Chen, 2011	WebCollocate, Hong Kong Polytechnic VLC Web Concordancer
			Nam, 2010a; 2010b	Collins Collocation Sampler
			Moreno Jaén, 2010	Collins Collocation Sampler
			Kayaoğlu, 2013	BYU
			Yang et al., 2013	CALL program
			Abu Alshaar & Abuseileek, 2013	BYU
			Chatpunnarangsee, 2013	LexTutor
			Gordani, 2013	NatCorp, Cobuild Sampler
			Hadi, 2013	AntConc
			Tian, 2014	BYU
	int-	1	Boulton, 2011a	BYU
	low	3	Oghigian & Chujo, 2010	ParaConc
			Chujo et al., 2013	AntPConc
			Chujo & Oghigian, 2012	ParaConc

Note: based on data from Boulton & Cobb, 2017 – Supplementary materials, Appendix S2.

context with beginner level students, Polezzi created what she called a "didactic language corpus", which contained the written transcriptions of the researcher's lectures on Italian Renaissance. She effectively put into practice the notion of devising needs' driven corpora for language learners, and in her paper she provides some examples as to the kind of activities based on this corpus that she used in the classroom to introduce minimal elements of grammar, in a way that would be suitable for beginner level learners of Italian L2.

Other notable work related to using corpora in the Italian L2 classroom has been conducted as of the late 1990s at Griffith University, Australia. Claire Kennedy and Tiziana Miceli have now published three studies based on emic data regarding their use of a corpus of Italian written texts in university courses of Italian L2 (Kennedy & Miceli, 2001, 2010, 2017). Their work is among the most citied in DDL literature and was included in the DDL research timeline published on *Language Teaching* (Boulton, 2017).

Publications in Italian and in Italy devoted to DDL start appearing in 2001. Manuela Sassi and Maria Luigia Ceccotti from the Istituto di Linguistica Computazionale of Pisa start to describe the search functions in some Italian corpora and argue their potential within a pedagogic context (Sassi & Ceccotti, 2001).

A few years later, a group of researchers based in Turin start not only to explore the pedagogic potential of corpora, but they build a learner corpus together with a comparable native corpus and start exploring the possibility of using them pedagogically. The studies based on both, namely VALICO (Varietà Apprendimento Lingua Italiana Corpus Online) and VINCA (Varietà di Italiano di Nativi Corpus Appaiato) have been recently collected in two volumes (Corino, Colombo, & Marello, 2017; Corino & Onesti, 2017). Learner corpora are seen as a useful source of distractors in the development of testing materials (Marello, 2009), learning activities (Marello, 2012), as well as for didactic sources in MA courses with linguistics subjects: in these cases, MA students are guided towards the analysis of learner errors contained in VALICO and also of the analysis of errors made by the automatic pos tagger used (Corino & Marello, 2009). In the subsequent years, Elisa Corino has continued to published on how DDL and the use of corpora in both Italian L2 teaching contexts (Corino, 2014a, 2016) and teacher training courses (Corino, 2014b) can be developed.

The use of corpora for Italian L2 teaching and learning had already been introduced in teacher training a few years earlier by Rosanna Ducati and Paola Leone, who at a teacher training event in Italy presented a number of very practical uses of corpora for the development of learning activities for Italian L2 students (Ducati & Leone, 2009).

Further examples of how corpora can be used in the Italian L2 classroom are provided in Guidetti et al. (2012), and the rationale of DDL is comprehensively described and promoted in Viganò (2011). A variationist perspective is provided in Chiari (2011), where three written and three oral corpora of Italian are described in terms of their potential in the acquisition of sociolinguistic variation in Italian language usage.

Despite the fact that the total number of DDL studies in an Italian L2 context total only 15, they embrace a wide timespan and cover a diversified number of potential applications, demonstrating a continued and varied interest in the topic.

The studies published are however mainly descriptive. There are no studies aiming towards an empirical evaluation of the effectiveness of DDL for Italian L2 learning based on etic data, and only Kennedy & Miceli provide empirical evidence concerning the emic perspective. The teacher training experiences described in the published literature were often isolated attempts and are yet to find a systematic integration in teacher training courses.

The year 2018, however, marked the first organised attempt to bridge the gap between DDL and school teachers in Italy: the Centro Linguistico di Ateneo of the University of Turin organised the conference "Data-driven learning: a scaffolding methodology for foreign language and CLIL classes" which helped introduce DDL to teachers working in the Turin area.

In terms of research, the present study constitutes the first attempt to evaluate the effectiveness of DDL for learning Italian L2 combining etic and emic perspectives, but also aiming to explore the conditions that are needed for its successful implementation in the classrooms, namely how activities can be developed, how lessons can be planned effectively and how corpus tools can be improved to be increasingly more learner-friendly.

2.1.5 State of the art

Does DDL actually work? What kind of empirical evidence is there in relation to how and which variables influence its effectiveness? In order to answer these questions, we can look at empirical data reflecting both etic (see 2.1.5.1) and emic (see 2.1.5.2) perspectives.

The etic/emic dichotomy derives from Cultural anthropology, and was introduced by Kenneth Pike in 1954, modeling the phonetic/phonemic dichotomy that was already present and productive in Linguistics (Pike, 1967). As we can read in the *Concise Dictionary of Social and Cultural Anthropology*, "an emic representation of the ideas or actions of the members of a culture is drawn from the views of its own participants; an etic one is drawn from outside. For example, the external observer may regard certain phenomena as symptoms of a disease—this is an etic judgment. But the cultural group in question may recognise other symptoms as characteristic of a particular illness that is not recognised elsewhere—this would be called an emic explanation." (Morris, 2012, p. 80). And although the boundaries on this dichotomy seem to be debated in the field (Headland, Pike, & Harris, 1990), it has nonetheless been adopted in Applied Linguistics, as an effective way to provide a more comprehensive understanding of a research problem, as part of mixed-methods research designs (Riazi, 2017).

In relation to the research on DDL, the emic perspective can be identified with any form of empirical data that is elicited from the learners, expressing their views and feelings on experiencing DDL. These can come in the form of closed likert-scale items or open-ended questions in a questionnaire, semi-structured oral interviews or focus groups. On the other hand, the etic dimension can be identified with empirical observations related to language gains as an effect of corpus use, as well as with observations related to the procedures with which learners autonomously sift through concordance lines. A notable area of research in this last sense has been nurtured by studies based on tracking learners' searches when taking part in computer corpus-based activities: these studies have been able to identify the most common search patterns, concluding that they do not coincide with the full potential of corpus search functions (Pérez-Paredes, Sánchez-Tornel, Alcaraz Calero, & Jiménez, 2011; Pérez-Paredes, Sánchez-Tornel, & Calero, 2012).

In line with the scope of the present study, our review will only focus on the etic empirical evidence related to language gains as an effect of corpus use, and emic empirical evidence

related to the learners' views and feelings of the experience. For the etic perspective we will review the three meta-analyses that are available, while for the emic perspective we will consider a selection of a few key publications.

2.1.5.1 The etic perspective

A meta-analysis is a quantitative synthesis of empirical studies, aiming to provide an overall estimate of the effect of one variable over another, while seeking patterns in the findings of the studies under consideration, in order to detect specific features affecting the results (Cramer & Howitt, 2004, p. 101). Meta-analyses are based on the notion of effect size, which is defined as "the size of the effect (influence) of the independent variable on the dependent variable", and is commonly measured by Cohen's *d*, (Sage, p. 102), that is the "the difference between two means divided by the combined standard deviation" (Cobb & Boulton, 2015, p. 489). A meta-analysis will combine the effect sizes of different empirical studies into one overall figure. In general, the benchmark threshold for interpreting *d* values were $d = 0.2$ for small, $d = 0.5$ for medium and $d = 1.0$ for strong effect according to Cohen (1988), but have been adapted by Oswald & Plonsky (2010) and Plonsky & Oswald (2014) for studies in second language research: in this context, in fact, the benchmark thresholds should be $d = 0.4$, $d = 0.7$ and $d = 1.0$ for small, medium and large effects respectively (Oswald & Plonsky, 2010, p. 99), and $d = 0.6$, $d = 1.0$ and $d = 1.4$ for studies based on a pre-post or within-groups designs (Plonsky & Oswald, 2014, p. 889).

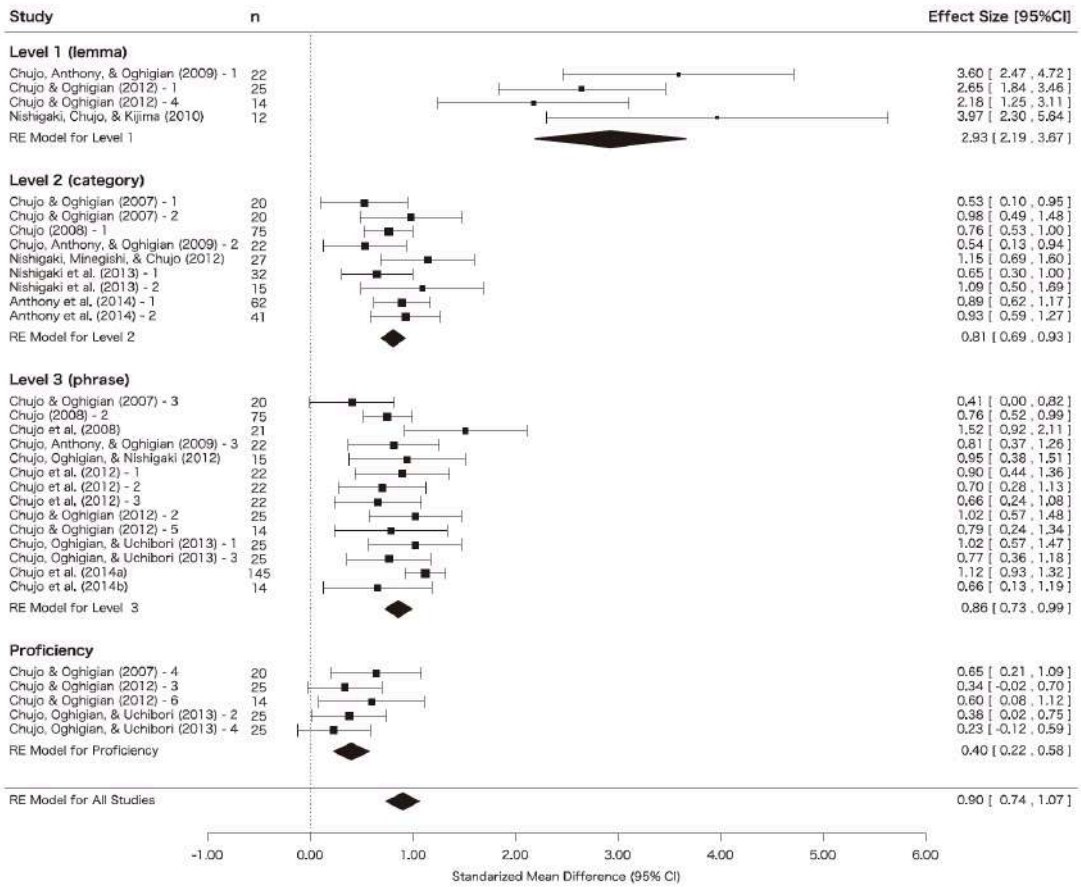
With regards to DDL, we currently have three published meta-analyses:

a. Mizumoto, A., & Chujo, K. (2015). A Meta-analysis of Data-driven Learning Approach in the Japanese EFL Classroom. *English Corpus Studies*, *22*, 1–18.
b. Boulton, A., & Cobb, T. (2017). Corpus use in language learning: A meta-analysis. *Language Learning*, *67*(2), 348–393.
c. Lee, H., Warschauer, M., & Lee, J. H. (2018). The Effects of Corpus Use on Second Language Vocabulary Learning: A Multilevel Meta-analysis. *Applied Linguistics*.

Taking stock of Cobb & Boulton's preliminary meta-analysis published in 2015 (Cobb & Boulton, 2015), Mizumoto & Chujo (2015) conduct a meta-analysis of DDL studies

carried out in Japanese teaching and learning contexts. These had been excluded from Cobb & Boulton's work, mostly because they were partly published in the Japanese language. Mizumoto & Chujo focus their analysis on studies conducted in Japan, with English as the target language, and tests used to collect quantitative data in relation to the effect of DDL. They synthesise their findings with a forest plot (Figure 9) according to how effective DDL is in relation to three major outcome variables that were present in the studies under consideration: learning at the level of lemma, category, phrase and overall proficiency. The analysis is based on the calculation of Cohen's *d*. The largest effect size found was for lemma (2.93), followed at quite some distance by phrase (0.86) and category (0.81) and finally by proficiency (0.40). The overall effect size found was 0.90, which according to the scale provided by Plonsky & Oswald corresponds to a medium effect size.

FIGURE 9. FOREST PLOT OF META-ANALYSIS RESULTS IN MIZUMOTO & CHUJO (2015, P.9)



The authors explain that the observation of smaller effect sizes at the level of changes in proficiency is to be expected, on the grounds that in the case of the TOEIC (Test of English for International Communication) a total amount of at least 100 hours of language training are required to hope for any observable gains in terms of language proficiency (Mizumoto & Chujo, 2015, p. 10).

Boulton & Cobb (2017) completes the preliminary meta-analysis published in 2015 by the same authors, providing a broader perspective. This research synthesis includes 88 unique samples drawn from 64 separate studies, and includes both within and between groups studies. It also considers, for the first time, a large number of moderator variables (25 in total, with a total of 40 different levels for both within and between groups designs) related to the quality of the publication, the context of the study and the nature of corpus use involved. This time, the analysis is based on the calculation of unbiased *d*, which differently from Cohen's *d,* takes into account the issue of weighting in the case of studies with small samples, which happen to be quite frequent in the field of DDL research (Boulton & Cobb, 2017, p. 13).

Overall, the average effect sizes found were 1.50 for within groups, pre/post test designs, and 0.95 for between groups, control/experimental designs. In terms of moderator variables, the authors report 60% producing large effect sizes, and 24.5% producing medium effect sizes (Boulton & Cobb, 2017, p. 39). Table 2 provides the specific values for the d_{unb} in relation to the moderator variables at each of the different levels being considered. The smallest effect sizes are detected in between groups, control/experimental designs, in situations where the sample sizes exceeds 50 students (0.34) and the proficiency level of the students in lower intermediate (0.32).

These findings are not entirely surprising: on the one hand, large samples may involve large proportions of internal variability which may be difficult to account for; on the other hand, lower intermediate proficiency level students may require additional scaffolding and adaptation as opposed to their upper intermediate or advanced counterparts.

Lee et al. (2018) is the most recently published meta-analysis that is available for DDL empirical studies. It differs from the first two in a number of aspects. First, it focuses only on corpus use for L2 vocabulary learning. Second, it includes different dimensions of collocational knowledge in the spectrum of moderator variables, based on Henriksen's

TABLE 2. EFFECT SIZES FOR MODERATOR VARIABLES IN BOULTON & COBB (2017, APPENDIX S7)

Category	MV	P/P	C/E
		M (d_{unb})	M (d_{unb})
Publication date	1991-2005	1,45	0,82
	2006-2010	1,26	0,93
	2011-2014	1,61	1,08
Publication type	journals	1,60	1,05
	PhDs	1,49	
	other		
Journal prestige	ranked	1,67	1,13
	unranked	1,54	1,01
Length	1-10 pages		
	11-20 pages	1,77	1,00
	20+ pages	1,18	
EG sample size	<20	1,17	
	20-49	1,59	0,95
	50+	1,54	0,34
Control	comparison		1,06
	identical		
Constitution	intact groups		0,81
	random assignment		0,84
Instruments	selected response	1,44	
	constrained response	1,89	0,75
	free response	0,86	1,00
	mixed		
Statistical tests	0	0,60	
	1	1,60	1,19
	2+	1,70	0,81
Other instruments	0	1,62	0,91
	1	1,27	1,00
	2+	1,71	0,91
Region	Asia	1,55	0,84
	Middle East	2,07	1,39
	Europe	1,15	0,95
	North America	0,95	
Context	foreign language	1,56	1,03
	second language	0,95	
L1	Chinese	1,81	
	Romance		
	Japanese		
	Persian (Farsi)		
	Thai		
	Arabic		
	Other		
	Mixed	1,35	

Category	MV	P/P	C/E
		M (d_{unb})	M (d_{unb})
Proficiency	advanced	1,58	
	intermediate +	1,34	0,71
	intermediate	1,72	1,27
	intermediate –	1,40	0,32
	lower		
Speciality	languages	1,84	1,23
	social sciences		
	other sciences	1,24	0,86
	mixed	1,61	
Institution	school		
	uni 1	1,41	0,96
	uni 2-3		0,45
	PG		
Ecology	class	1,55	1,06
	lab	1,65	
Duration	short	1,54	0,89
	medium	1,89	0,85
	long	1,31	1,05
Interaction	concordancer	1,80	0,93
	CALL program	1,41	
	paper	1,06	0,52
	mixed		
Corpus size	<1m words		
	1-99m words	1,53	
	>100m words	1,66	1,09
Corpus type	public	1,42	0,62
	local	1,67	1,16
	parallel		
Objective	LGP	1,54	1,16
	LSP		
	LAP	1,14	
Use	learning	1,56	0,98
	reference	1,36	0,82
Language skill	listening		
	speaking		
	reading		
	writing	1,12	
	translation		
Language aspect	vocabulary	1,54	0,68
	lexicogrammar	1,54	0,75
	grammar	1,24	
	discourse		

Note: black = large ES; dark grey = medium ES; light grey = small ES; white = negligible.

framework (Henriksen, 1999). Finally, it adopts multilevel regression, conducting a meta-analysis at the level of single effect sizes and at the level of combined studies.

The authors find medium effect size in the post-tests (d_{unb} = 0.74) and small effect size in the delayed post-tests (d_{unb} = 0.64). However, the adjusted mean effect sizes across moderators show a great degree of variation. In particular, if we look at the values of the regression analysis with clustered SE, in-depth knowledge of collocations exhibits the largest effect sizes (0.87 in post-test, 0.86 in delayed post-test), as opposed to productive use ability (0.43 in post-test, 0.21 in delayed post-test) or precise knowledge (0.42 in post-test, 0.37 in delayed post-test). This would indicate that DDL is more effective at the level of in-depth knowledge of collocations, rather than at the more superficial levels of knowledge. This could be due to the higher cognitive load implied, at least at the very initial stages of pattern hunting through a concordance, which would then determine a more profound knowledge of what was hunted for.

In terms of proficiency levels, again we can see in Table 3 how when we consider the effect sizes for lower levels of proficiency, the values are comparably lower than higher levels, in both post-test (0.47) and delayed post-test (0.29) phases, with a drop in the latter. This confirms the fact that there is probably an issue when it comes to adapting corpus use for lower proficiency level learners, and perhaps research and teaching methods are simply not there yet in order to ensure that DDL is available and fruitful at all proficiency levels, and not just at upper-intermediate or advanced levels, where the need for adapting corpus data is reduced. The highest effect sizes are found in cases of mixed computer and paper-based treatments (see Table 4).

If we compare these three meta-analyses we notice an increase in sophistication in the methods adopted to analyse the data derived from the empirical DDL studies, as well as an increased attention devoted to all the moderator variables that constitute the building blocks of each study, and that can play a role in terms of influencing the ultimate results. In particular, Lee et al.'s meta-analysis contributes with a considerable step forward in considering the learning properties of collocations, namely the different dimensions of knowledge that correspond to the task eliciting learner knowledge and that ends up in the meta-analysis, as well as factoring in the influence of preliminary corpus training on the effectiveness of the approach.

Table 5 provides a summary of the three meta-analyses, showing how differently effect sizes appear according to the different moderator variables and research designs considered.

To sum up, on the basis on the three meta-analyses available we can say that DDL seems to be most effective:

1. with vocabulary;
2. in within-groups designs;
3. in a foreign language context;
4. at higher levels of proficiency;
5. with mixed paper/computer-based modalities;
6. for in-depth knowledge of vocabulary;
7. with more than 10 sessions.

However, these meta-analysis do not take into account the linguistic properties of the learning aims, which in the case of collocations have so minutely been analysed and operationalised by corpus linguists and psycholinguists (see 2.2.2).

If formulaic units such as collocations have been described in terms of a wide range of linguistic properties, both on a quantitative and qualitative dimension which often overlap, then it would make sense to consider how these properties may influence the effectiveness of an approach such as DDL, based on similarity-based generalisations through pattern hunting.

In connecting the overall findings of the meta-analyses with the present study we find some critical points: lower proficiency learners and controlled studies generally produce smaller effect sizes; none of the studies in the meta-analyses referred to Italian L2 vocabulary learning; none of the studies in the meta-analyses included linguistic properties of the learning aims as moderator variables.

In relation to the last critical point, the choice made by the authors of the meta-analyses was unavoidable: dealing with a large body of learning aims meant making it quite difficult to trace linguistic properties of the learning aims in each study that would be theoretically be justifiable in hypothesising an effect on the outcome of a DDL treatment. The narrower focus of a single study inevitably allows to have a greater control over such variables, which is why we decided to include semantic transparency and L1 congruency in the current study (see 3.6.1.2).

TABLE 3. META-ANALYSIS FINDINGS IN LEE ET. AL (2018, APPENDIX 7) - A

Full models for regression analyses

Table 1. Two regression analyses for publication & population data moderators

Independent Variables of Interest	Posttest Effect Sizes		Follow-up Effect Sizes	
	Multilevel Regression Analysis with Random Intercept	Regression Analysis with Clustered SE	Multilevel Regression Analysis with Random Intercept	Regression Analysis with Clustered SE
	Adjusted Means (Predictied margins)	Adjusted Means (Predictied margins)	Adjusted Means (Predictied margins)	Adjusted Means (Predictied margins)
1. Publication & Population Data				
(1) Publication type				
A. Journal article	0.74*** (0.08)	0.72*** (0.06)	0.99*** (0.14)	0.95*** (0.06)
B. PhD dissertation	0.42* (0.18)	0.46* (0.21)	0.08 (0.16)	0.09 (0.24)
C. Conference paper / Book chapter	1.08* (0.45)	1.15** (0.38)	-	-
(2) Region				
A. Asia	0.53*** (0.11)	0.53*** (0.09)		
B. Middle East	1.05*** (0.13)	1.05*** (0.13)	Not estimable	
C. Other (e.g. Europe and US)	0.53*** (0.15)	0.51*** (0.14)		
(3) Proficiency				
A. Low	0.47*** (0.13)	0.49** (0.14)	0.29 (0.18)	0.34** (0.10)
B. Intermediate	0.69*** (0.09)	0.73*** (0.10)	0.57*** (0.13)	0.69** (0.17)
C. High	1.27*** (0.31)	1.23*** (0.20)	0.79* (0.37)	0.93*** (0.20)
D. Mixed	0.74* (0.35)	0.62* (0.27)	-	-
(4) Specialty				
A. Languages	0.62** (0.20)	0.67*** (0.19)	0.36 (0.29)	0.43** (0.14)
B. Other	0.54*** (0.14)	0.53** (0.15)	0.23 (0.49)	0.35*** (0.05)
C. Mixed	0.75*** (0.09)	0.78*** (0.09)	0.56*** (0.12)	0.68*** (0.12)
Number of ES (*n*)	77	77	34	34
Number of Unique Sample (*k*)	38	38	13	13

TABLE 4. META-ANALYSIS FINDINGS IN LEE ET AL. (2018, APPENDIX 7) - B

Table 2. Two regression analyses for treatment data moderators				
	Posttest Effect Sizes		Follow-up Effect Sizes	
Independent Variables of Interest	Multilevel Regression Analysis with Random Intercept	Regression Analysis with Clustered SE	Multilevel Regression Analysis with Random Intercept	Regression Analysis with Clustered SE
	Adjusted Means (Predictied margins)	Adjusted Means (Predictied margins)	Adjusted Means (Predictied margins)	Adjusted Means (Predictied margins)
2. Treatment Data				
(1) Interaction type				
A. Paper-based	0.55*** (0.14)	0.53* (0.20)	0.70*** (0.19)	0.72* (0.28)
B. CALL program	0.70** (0.23)	0.73*** (0.17)	-	-
C. Concordancer	0.72*** (0.14)	0.75*** (0.14)	0.39*** (0.09)	0.48*** (0.08)
D. Mixed (e.g. paper-based + concordancer)	1.30*** (0.32)	1.23*** (0.30)	1.11*** (0.27)	1.18*** (0.13)
(2) Corpus type				
A. Public corpus (e.g. Brown, BNC, OANC)	0.65*** (0.11)	0.67*** (0.12)		
B. Local corpus (e.g. own, specialized, graded)	0.59** (0.20)	0.63*** (0.17)	Not estimable	
C. Pre-selected concordance lines	0.98*** (0.28)	0.99** (0.32)		
(3) L2 vocabulary dimension				
A. Precise knowledge	0.40** (0.13)	0.42* (0.16)	0.29 (0.17)	0.37 (0.21)
B. In-depth knowledge	0.91*** (0.10)	0.87*** (0.09)	0.77*** (0.13)	0.86*** (0.12)
C. Productive use ability	0.55** (0.18)	0.43*** (0.11)	0.18 (0.17)	0.21 (0.14)
(4) Training				
A. Not received	0.58** (0.22)	0.61** (0.19)	Not estimable	
B. Received	0.72*** (0.08)	0.72*** (0.10)		
(5) Duration				
A. Short (> 2 hours in total or only 1 session)	0.68** (0.21)	0.64* (0.25)	1.24*** (0.22)	1.28*** (0.06)
B. Medium (about 3 to 8 sessions)	0.55*** (0.13)	0.56*** (0.13)	0.23* (0.11)	0.32* (0.11)
C. Long (< 10 sessions in total)	0.90*** (0.14)	0.86*** (0.14)	0.75*** (0.16)	0.77*** (0.18)
Number of ES (*n*)	77	77	34	34
Number of Unique Sample (*k*)	38	38	13	13

TABLE 5. SUMMARY OF META-ANALYSES ON DDL

	Mizumoto & Chujo, 2015	*Boulton & Cobb, 2017*	*Lee et al., 2018*
Inclusion criteria	- Studies conducted in Japan - English as target language - All learning aims	- English as target language - Studies published in English - All learning aims	- English and languages other than English as target language - Vocabulary only as learning aim
Design	Only within groups (pre/post-test)	Within and between groups (pre/post-test and control/experimental)	Only between groups (control/experimental)
Moderator variables	1. Language learning focus (lemma, category, phrase, proficiency)	1. Publication date, 2. Publication type, 3. Journal prestige, 4. Paper length, 5. EG sample size, 6. Control type, 7. Constitution of groups, 8. Instruments, 9. Statistical tests, 10. Other instruments, 11. Region, 12. Context, 13. L1, 14. Proficiency, 15. Specialty, 16. Institution, 17. Ecology, 18. Duration, 19. Interaction, 20. Corpus size, 21. Corpus type, 22. Objective, 23. Use, 24. Language skill, 25. Language aspect.	1. Publication type, 2. Region, 3. Proficiency, 4. Specialty, 5. Interaction type, 6. Corpus type, 7. L2 vocabulary dimension, 8. Training, 9. Duration.
N. of individual samples	32	88	38 (post-test) 13 (delayed post-test)
Type of measure	Cohen's *d*	Unbiased *d*	Multilevel regression Unbiased *d*
Overall result	$d = 0.90$	$d_{unb} = 1.51$ (within groups, pre/post-test) $d_{unb} = 0.95$ (between groups, control/experimental)	$d_{unb} = 0.74$ (post-tests) $d_{unb} = 0.64$ (delayed post-tests)
Interpretation of results according to Plonsky & Oswald, 2014	Medium effect size	Large effect size (within groups, pre/post-test) Medium effect size (between groups, control/experimental)	Medium effect size (post-tests) Small effect size (delayed post-tests)

2.1.5.2 The emic perspective

This paragraph provides an overview of the studies focusing on the emic perspective of DDL research. In line with the scope of the present study, it focuses on the studies describing direct accounts of learners' reactions to working with corpora and/or corpus-based materials, often elicited by means of a questionnaire.

As we have seen, the DDL studies based on etic data have been comprehensively meta-analysed a number of times in recent years, in order to provide researchers in the field with an overview on the state of the art related to the effectiveness of the approach, which moderator variables influence this and to what degree. This is not the case for the DDL studies based on emic data: the survey and synthesis section in the DDL Research Timeline on DDL published on *Language Teaching* (Boulton, 2017), in fact, lists only one survey study on learner perceptions on corpus use. This is a study published by Angela Chambers in 2007 (Chambers, 2007), where a number of qualitative studies related to the emic perspective are reviewed, some of which focusing specifically on learner attitudes toward using corpora and, at times, elicited by means of a questionnaire. Chambers considers a total of 10 studies:

1. Bernardini, S. (2000). Systematising serendipity: Proposals for concordancing large corpora with language learners. In L. Burnard & T. McEnery (Eds.), *Rethinking Language Pedagogy from a Corpus Perspective* (pp. 225–234). Frankfurt: Peter Lang.

2. Bernardini, S. (2002). Exploring new directions for discovery learning. In B. Kettemann & G. Marko (Eds.), *Teaching and learning by doing corpus analysis*. Amsterdam - New York: Rodopi.

3. Chambers, A. (2005). Integrating corpus consultation in language studies. *Language Learning and Technology*, *9*(2), 111–125.

4. Chambers, A., & O'Sullivan, D. (2004). Corpus consultation and advanced learners' writing skills in French. *ReCALL*, *16*(01).

5. Cheng, W., Warren, M., & Xun-feng, X. (2003). The language learner as language researcher: putting corpus linguistics on the timetable. *System*, *31*(2), 173–186.

6. Johns, T. (1997). Contexts: background, development and trialling of a concordance- based CALL program. In A. Wichmann, S. Fligelstone, T. McEnery, & G. Knowles (Eds.), *Teaching and Language Corpora* (pp. 100–115). Harlow: Addison Wesley Longman.

7. Kennedy, C., & Miceli, T. (2001). An evaluation of intermediate students' approaches to corpus investigation. *Language Learning & Technology*, *5*(3), 77–90.

8. Kennedy, C., & Miceli, T. (2010). Corpus-assisted creative writing: Introducing intermediate Italian learners to a corpus as a reference resource. *Language Learning & Technology*, *14*(1), 28–44.

9. Sun, Y.-C. (2003). Learning process, strategies and web-based concordancers: a case study. *British Journal of Educational Technology*, *34*(5), 601–613.

10. Yoon, H., & Hirvela, A. (2004). ESL student attitudes toward corpus use in L2 writing. *Journal of Second Language Writing*, *13*(4), 257–283.

After highlighting and describing the wide variety characterising these studies in terms of target languages, size and content of corpora being used and types of corpus consultation in relation to different aims, Chambers provides a review of the positive reactions to corpus use, combining the findings from the different studies considered. The positive comments of the students are divided into those regarding the relevance and authenticity of the data, and those related to the inductive nature of the learning process involved in the corpus consultation (Chambers, 2007, p. 11). In the first case, Chambers observes that generally learners show considerable appreciation for the authenticity of the texts they explore, commenting positively on the opportunity to explore real language usage. This is quite noteworthy, as Chambers points out, if we consider the debate on the authenticity of concordances that we discussed in 2.1.2. Also, other aspects that were positively commented upon were the availability of numerous examples, which was seen as a clear advantage over dictionaries.

With regard to the inductive learning involved in the corpus consultation, the students found it motivating and empowering, because they had a say in the learning process. The comment of students never finding the kind of opportunities offered by a corpus when using a textbook leads Chambers to conclude that the direction should not be that of a corpus-dominated pedagogy, but that corpora should inform existing pedagogical resources (Chambers, 2007, p. 12).

Negative attitudes expressed by the students in relation to corpus use are also summarised by Chambers. These include the fact that working with corpora is difficult, time-consuming and tedious, which highlights the issue of preliminary corpus training in order to possible remove these obstacles for the learners (Chambers, 2007, p. 12).

However, the great variety noted by Chambers in the studies included in her survey was related not only to the kind of DDL treatment involved, but also to the variety of data collection tools used: questionnaires with open and / or closed questions, interviews, focus groups, and so on. This itself calls for more homogeneity in order to be able to compare different studies.

In more recent years, a scale to measure learners' perceived benefits from DDL was developed by a group of researchers in Japan (Mizumoto, Chujo, & Yokota, 2016), which, to the best of our knowledge, is the only validated data collection tool developed for exploring DDL effects at the emic level. The authors, in fact, performed all the necessary procedures in order to assess the reliability of the tool: the questionnaire was pilot-tested first, then item analyses and exploratory factor analyses were performed with subsequent revisions to the original item pool, and finally the questionnaire was administered to 267 university EFL students. After the administration, the psychometric properties of the questionnaire (i.e. its validity and reliability as a research instrument) were assessed and confirmed. Tables 6 and 7 contain the items that were developed.

TABLE 6. QUESTIONNAIRE ITEMS FOR LEARNERS' PERCEIVED PREFERENCES AND BENEFITS OF DDL (MIZUMOTO ET AL., 2016, P. 238)

The advantage of DDL is:
Item 01 I can see the target sentences in real use.
Item 02 I can see many sentences that include the target structure.
Item 03 It shows many frequently used example sentences.
Item 04 I can visualize the practical usage.
Item 05 It shows the context where the words are often used.
Item 06 I can see a large number of English sentences easily.
Item 07 I can see many more example sentences than in a dictionary.
Item 08 I can get to see Japanese translations.
Item 09 I was able to understand in what meaning the word is used.
Item 10 I can discover a usage I did not know.
Item 11 This type of learning is not passive but active.
Item 12 I can search for and learn target sentences independently.
Item 13 It is different from traditional or regular English learning.
Item 14 I can use software I have never used before.
Item 15 We don't use English textbooks; instead, we use computers.
Item 16 I start to think about what part of speech words belong to.
Item 17 Words are displayed in an organized manner.
Item 18 I can visualize the various word forms such as inflections and derivations.

TABLE 7. QUESTIONNAIRE ITEMS FOR MEASURING LEARNERS' TASK VALUES (MIZUMOTO ET AL., 2016, P. 239)

Through the tasks in the classroom, I feel:
Item 01 I was able to improve my English ability.
Item 02 They were useful for grammar and vocabulary learning.
Item 03 The learned grammar and vocabulary were easily fixed in memory.
Item 04 The activities were enjoyable.
Item 05 I was able to understand the grammar and vocabulary items I did not know.
Item 06 They were helpful in understanding the target grammar and vocabulary items.

The questionnaire was divided into 18 items aimed at eliciting the learners' perceived preferences and benefits related to DDL, and 6 items aimed to measure learners' task values: what the authors mean here is the value the learners place on the tasks, in terms of whether they feel they are useful in the short and long term. In both cases, the students were asked to make a selection on a 6-point likert scale, ranging from 1 (not at all true of me) to 6 (very true of me). What the researchers found was that an increased perception of the benefits emerging from the items in Table 6 correlated with an increased perception of the value of the tasks, as elicited from the items in Table 7.

This tool constitutes a remarkable sign of progress in investigating the effectiveness of DDL at the emic level, and will hopefully find numerous applications in future studies.

2.1.6 Main current issues

Our review of the literature on DDL reveals at least three main current issues: a. the need for better designed and better reported studies; b. the need to bridge the gap between L2 teachers and L2 researchers and make DDL practices sustainable; c. the need to adapt corpus data to lower proficiency learners.

A recurring theme in the meta-analyses conducting on the empirical DDL studies based on etic data has been the need for more methodological rigour. This concerns both the way in which a study is designed and how it is then reported. Most researchers working on DDL come from a linguistics or corpus linguistics background, which does not inherently equip them with the methodological skills derived from the social sciences. As

argued in the introduction, in order to evaluate the effectiveness of a teaching and learning approach, the researcher needs to integrate his or her linguistic knowledge with the methods coming from the educational sciences. A number of research designs are possible and, as we have seen, the choice of one particular design over another will have a considerable influence on the kind of obtainable results. Boulton & Cobb (2017) showed us how differently the values related to the effectiveness of DDL behave when comparing between-groups and within-groups studies: in the second case, the contrasts between traditional vs. experimental teaching approach are more easily detected in light of the sample group being the same. And even the integration of an emic perspective into a within-groups design is likely to provide greater insight in the sense that questions could be aimed at eliciting attitudes of the learners related to both the approaches they were exposed to. In this sense, a richer body of emic data could be collected, and could then inform subsequent research.

The emic perspective in evaluating DDL effectiveness is vital especially in regards to the operationalisation of the treatment. Most of the papers on DDL presented at the last Teaching and Language Corpora conference[11] dealt with the different forms that DDL can take, and only a few on empirically evaluations of its effectiveness or how teachers can be involved in spreading its adoption. This indicates that we are at the very exciting phase of exploring the affordances of DDL, which is of course linked with the development of new tools which broaden the scope of DDL.

At the same time, the evaluation of how effective DDL is and what concurs to make it effective still requires attention in terms of the variables of interest involved. As Anne O'Keefe compellingly argued in her keynote speech at TaLC 2018 (O'Keeffe, 2018), the many variables that have so far received little attention include those linked to the nature of the target items set as learning aims, the nature of the tasks, both in terms of research design and actual treatment, and the characteristics of the learners of the teachers involved in the evaluative process. Furthermore, O'Keefe highlights the need to think of DDL effectiveness in relation to SLA theories, and discusses the position that DDL may have within the implicit vs. explicit interface debate (Graus & Coppen, 2016; Han & Finneran, 2014). Evaluating DDL in light of this theoretical debate requires rethinking

[11] Held between 18-21 July 2018 at the University of Cambridge (https://www.educ.cam.ac.uk/events/conferences/talc2018/, last accessed: 2/11/2018).

the methodological choices that inform DDL studies starting from variables and research design, and giving more consideration to the longitudinal dimension, for instance. Making DDL studies robust requires better reporting to allow for verification and reproducibility.

Another need that is felt in the DDL research community is to bridge the gap between teachers and researchers. To this end, a number of studies are dealing with attitudes of teachers towards DDL. One of the latest surveys in this sense was conducted by Chris Tribble and published in Leńko-Szymańska & Boulton (2015), and was aimed at language teachers and teacher trainers. The respondents were 560, mainly university lectures or language teachers, with up to 3 years of experience in using corpora for teaching purposes, working with university students in language courses for academic purposes and at upper-intermediate or advanced proficiency levels. Less than 10% of the respondents were teacher educators, and yet one may argue that if DDL is to take off in teaching environments beyond universities, it would need to step into teacher training programs.

Within the research world, a number of scholars are working to identify the elements that are able to make a teacher training course focused on using corpora in the classroom effective (Leńko-Szymańska, 2014), while reflecting on the specific characteristics of a given teaching context. In this sense, Mukherjee (2004) describes the experience of a workshop tailored for English language teachers in Germany, relying on the notion that the teacher's perspective is central in the promotion and popularisation of DDL.

Within the teaching world, a step forward in this sense is given by Ben Naismith (2016), who shows some affordable ways in which the concept of using corpora in the classroom can be integrated in CELTA programs, which are one of the most sought out teacher training programs by aspiring English teachers, because of its worldwide recognition. Key principles of DDL such as authenticity, multitude of examples and quantitative information on language usage can be easily introduced into the classroom as needed with tools such as Google Books Ngram Viewer or simplified corpus interfaces such as www.just-the-word.com.

A number of publications by research scholars have also tried to bridge this gap, providing teachers with an introduction to corpus linguistics and how the second language classroom can benefit from it. A recent publication in this sense is *Corpus Linguistics for*

English Teachers: Tools, Online Resources, and Classroom by Eric Friginal (Friginal, 2008); others are listed in Tribble (Tribble, 2015, p. 54) and a comprehensive analysis of which publications actually constitute DDL materials accessible in practice by teachers is provided in Boulton (Boulton, 2010a). The end of 2018 marks the publication of *A Guide to Using Corpora for English Language Learners*, tailored for learners working autonomously, and written by Robert Poole (Poole, 2018).

A more systematic collaboration between L2 researchers, L2 teachers and L2 teacher trainers would also help address the third issue, which is that of adapting corpus data to lower competence leaning levels. The duality between hands-on and hands-off (Cobb & Boulton, 2015) or soft and hard versions of DDL (Gabrielatos, 2005) has been extensively discussed in the literature. A soft, hands-off approach, involving a paper-based approach to corpus data, has been seen beneficial not only in the case of lower level competence learners, but also for the early stages in the introduction of DDL even in more advanced competence level classrooms. The novelty of the DDL approach, where learners are asked to explore language through authentic examples and make a generalisation that can be usable in their own language production, can be softened by a preliminary exposure to paper-based concordances. This has the advantage of allowing learners to discover one component of the approach at a time: after the concordance data observed on paper, they may go on to explore similar kinds of data with a more hands-on approach, through a computer software.

Mukherjee (2004) notes that DDL activities can be sequenced according to a cline starting from more guided and scaffolded teacher-centred tasks to freer, learner-centred exploration of corpus data; this cline can be complemented with the passage from paper-based to computer-based DDL activities. In Boulton (2010b) we find a classroom-based experiment where lower competence learners are exposed to concordance-based tasks prepared by the teacher/researcher before the lesson. The learners are then tested for competence and asked questions in an end-of-experiment questionnaire. One questionnaire item asks the learners whether they would have liked to explore the concordance data on their own, by means of a computer program. The data shows little enthusiasm in this sense, possibly due to the unfamiliarity with the concept.

As pointed out in Boulton (2010), paper-based DDL is, nevertheless, the original form of DDL envisioned by Tim Johns (Higgins & Johns, 1984), which he retained throughout

his entire career (Johns, 2002). With the ever renewed need to adapt DDL for lower level competence learners, this option is still quite central.

The problem of adapting authentic corpus data to lower competence learners has been dealt with by adopting four main approaches. These involve corpus data filtering, corpus data manipulation, corpus data selection and scaffolding for restricted pattern hunting.

SkELL, Sketch Engine for English Language Learning (Baisa & Suchomel, 2014), is based on the Sketch Engine Corpora and represents one of the best examples of corpus data filtering for L2 language learners. It provides learners with a user-friendly web interface where words or groups of words can be searched and their use in context can be observed through 40 good examples selected by the algorithm. Complex language as well sentences containing multiple clauses and a number of other textual complexity features are dispreferred by the algorithm, which selects (likely to be) trouble-free examples for the learners, so that they can use the tool like a dictionary with examples, instead of a dictionary with definitions.

Chujo, Oghigian & Akasegawa (Chujo & Oghigian, 2012; Chujo et al., 2015) have built SCoRE, the Sentence Corpus of Remedial English. The researchers have manually selected and adapted instances from a corpus so that they could be retrieved by the learners in a simplified manner. This way, learners can gain a hands-on experience of DDL, while being exposed to a simplified input.

Although adapting corpus data to learner needs may seem to hinder the authenticity of the data, one may argue that what is relevant, that is the authenticity of the context of occurrence, is preserved. Data manipulation for learner needs is part of input enhancement strategies, which are particularly frequent in CALL approaches to language learning (Chapelle, 2003), and of lexicography practices where the goal is to create a resource that is useful to the learners, and corpus data is adapted to meet their learning needs (Granger & Paquot, 2010, 2015; Paquot, 2012). This can be thought of as needs-driven concordance data (Braun, 2005).

A third way of overcoming the issue of adapting corpus data to lower competence learners has been that of building level specific corpora. One example going in this direction is the Simplified English Wikipedia Project, which has been carried out to offer a more simplified empirical base for language discovery (Hendry & Sheepy, 2017). The idea of using graded readers in DDL aimed at lower proficiency level learners has been discussed

(Allan, 2009; Gavioli & Aston, 2001), but no large scale attempts have been undertaken so far.

A final way in which a corpus can be adapted to lower proficiency learners is by scaffolding the learning and guiding the learners to search the corpus with simple and level-appropriate queries. This way, the teacher will guide the learner towards a restricted observation of the learning aim. Although this will not avoid the possible presence of cotexts containing language that is too difficult for the learners, thus hindering the pattern-hunting process, it could be used for specific cases in a hands-on context, or, more effectively, in hands-off mode with paper-based materials.

An additional issue which DDL researches faces is the link to SLA theories and statistical learning theories in general. Few studies have tackled this aspect so far (Flowerdew, 2015), so future lines of theoretical research on DDL could certainly provide us with precious insight which would go in the direction of providing a more and more robust justification for integrating DDL into L2 classrooms.

Lastly, research on DDL is still heavily reliant on studies related to English as a second language. Very few are, in fact, the studies considering languages other than English; one rare example is Vyatkina (2016). The major meta-analyses on DDL effectiveness have only so far included studies published in English, thus excluding possible papers written in other languages, and related to English language learning.

The following part of this chapter provides a literature review for the other field of research that this study is based: phraseology.

2.2 Phraseology

In designing a pedagogical experiment aimed at evaluating the effects of DDL on the development of language competence over time, one is faced with the issue of choosing a language area to focus on, setting it as the learning aim of the pedagogical treatment.
Our choice of focusing on phraseological competence, through the lens of a very specific phraseological unit, namely verb-noun collocations, could not have been disjointed by the most recent research regarding the nature of language and how it is acquired, used and processed in both native and non-native contexts.
The following paragraphs will describe the theoretical and empirical framework justifying our focus on collocations in DDL.

2.2.1 The pervasive nature of phraseology: a brief overview

Language is formulaic (or phraseological). What this means is that words have a tendency to co-occur and gain their meaning through the particular syntagmatic context they find themselves in. A word like *passeggiata* (walk) will be characterised by a high probability of co-occurring with the word *fare* (to make), which in turn will have a high probability of co-occurring with a high number of other words, gathering its meaning from the nature of the co-occurrence each time. This is what happens in English with combinations such as *take a bus,* where the verb *take* is used with a specialised meaning that will be different in other situations, such as in *take the box.* The phraseological or formulaic nature of language can thus be identified with two main intersecting phenomena: (i) the tendency of certain words to exhibit a probability of co-occurring with certain other words; (ii) the tendency of certain words to gather their meaning from the type of co-occurring pattern they find themselves in.
The theme of formulaicity has permeated a number of fields of inquiry. As Alison Wray shows in her *Research Timeline* (Wray, 2013), at least six fields can be identified: 1. Psycholinguistics, looking at how formulaic language is processed and stored; 2. Clinical studies, looking at formulaic language in contexts of language and communication disorders, such as Aphasia and Alzheimer's Disease, where it shows to be unexpectedly resilient; 3. L1 acquisition studies, focusing on how formulaic language is acquired in the

first instance, whether chunks are learned by putting smaller lexical units together, or whether larger chunks are first learned at the level of form and then broken down and analysed into smaller units; 4. L2 learning studies, related to how formulaic sequences are learned and what their place should be in L2 pedagogy; 5. Cultural studies, where formulaic units are seen as the building blocks of a society's culture, especially in oral traditions; 6. Corpus-based studies, which are able to provide quantitative measures to the definition of formulaic units, both in terms of overall frequency, as well as in terms of saliency (Wray, 2013, p. 318-319).

The earliest indication that language was formulaic has been traced back to 1874, when John Hughlings Jackson, a doctor working with patients affected by brain damage, observed that some language was "automatic" and "non-propositional", and that it was processed by the right hemisphere rather than the left (Wray, 2013, p. 320). Then, Michel Brèal, in 1904, and Hermann Paul, in 1920, noticed the existence of multiword units that are not entirely compositional, that is their overall meaning cannot be derived by the sum of the parts they are made of; as Francesca Masini notes, even Saussure had identified what he called "locutions toutes faites", while the first attempt to classify multiword units comes from Charles Bally (Masini, 2009, p. 191).

In later years, John Rupert Firth proposed his contextual theory of meaning, by introducing the notion of "meaning by collocation". Taking *ass* as an example, he applies a test of collocability in order to observe differences in the meaning of the word within the following set of sentences : (i) An ass like Bagson might easily do that; (ii) He is an ass; (iii) You silly ass!; (iv) Don't be an ass! (Firth, 1957, pp. 194–195).

However, it is not until the development and spread of corpora containing considerable amounts of authentic instances of language use that the phenomenon is investigated in more depth, and supported by empirical evidence in relation to just how much of language usage is formulaic and patterned. According to a study by Altenberg, based on the extraction of "any continuous string of words occurring more than once in identical form" (Altenberg, 1998, p. 101) from the London-Lund Corpus, formulaic units amount to more than 80% of the total utterances contained in the corpus. In Erman and Warren (2000), the amount of combinations "of at least two words favored by native Speakers in preference to an alternative combination which could have been equivalent had there been no conventionalization" is quantified in terms of 52.3% in written texts and 58.6% in

spoken texts. This time, the corpus samples were based on extracts from the Lancaster-Oslo-Bergen Corpus, for the written part, and from the London-Lund Corpus, for the spoken part. Different studies with different definitions of the observational unit being analysed as well as different empirical references will yield slightly different results, though confirming just how pervasive formulaic units in language usage are.

Psycholinguistic evidence has provided a significant contribution in this sense, investigating processing differences between formulaic and non-formulaic units, also with reference to native and non-native speakers. What these studies indicate is that in most cases formulaic units are processed faster than non-formulaic units, because of their prefabricated nature, which leads speakers to process them as a holistic unit, with some degree of conflicting evidence when comparing native and non-native speakers (Conklin & Schmitt, 2008; Jiang & Nekrasova, 2007; A. Siyanova-Chanturia, Conklin, & Schmitt, 2011; Tremblay, Derwing, Libben, & Westbury, 2011).

The fact that language is mostly made of prefabricated co-occurrences inevitably blurs the boundaries between grammar and lexis (Halliday, 1961), and this has lead to a major paradigm shift in theoretical linguistics. The theory of the open choice and idiom principle (Sinclair, 1991), the lexical priming theory (Hoey, 2005), the idea of a mental corpus (Taylor, 2012), of a pattern grammar (Hunston & Francis, 2000), or of a construction grammar (Goldberg, 1995) all rely on this abundance of empirical evidence related to the characteristics of syntagmatic strings of words, analysed at the levels of form, function and meaning.

But how can phraseological units be identified and classified? Much research has gone into answering this question, as we will describe in the following paragraph.

2.2.2 Phraseological units and collocations

Multiword units (another expression used to refer to phraseological or formulaic units) have been defined as "complex lexemes that have idiosyncratic interpretations that cross word boundaries" (Sag, Baldwin, Bond, Copestake, & Flickinger, 2002, p. 2); the title of the paper containing this definition is *Multiword expressions: a Pain in the neck for NLP*. As suggested by both the definition and the title of the paper that contains it, the picture has, in fact, been quite complex when it comes to identifying and classifying "words that

belong together"[12], not only because of the very wide range of criteria that can be adopted for this purpose, but because these criteria can very often overlap. Lexical units such as *a pain in the neck, better late than never, take a train, see you later, heavy rain, turn up, black and white,* all contain groups of words that typically co-occur, but what is it exactly that differentiates them?

Stefan Th. Gries, using yet another term to refer to word combinations (*phraseologisms*), has proposed the following list of criteria to answer this question:

> *"i. the nature of the elements involved in a phraseologism;*
>
> *ii. the number of elements involved in a phraseologism;*
>
> *iii. the number of times an expression must be observed before it counts as a phraseologism;*
>
> *iv. the permissible distance between the elements involved in a phraseologism;*
>
> *v. the degree of lexical and syntactic flexibility of the elements involved;*
>
> *vi. the role that semantic unity and semantic non-compositionality / non-predictability play in the definition."* (Gries, 2008, p. 4).

This list attempts to cover the different criteria belonging to the phraseology-oriented and frequency-oriented traditions in identifying and classifying one phraseological unit in particular: collocations (Bartsch, Evert, & Erlangen-Nürnberg, 2014; Evert, 2005; Mel'čuk, 1998; J. M. Sinclair, 1991).

According to Howarth (1996), the challenge of defining collocations derives from the following three features that characterise them:

> *"1. generally, one element in a collocation has greater freedom of co-occurrence than the other in a given sense (e.g. the sense of the verb adopt in adopt a policy is limited to the context of a definable set of nouns (measure, scheme etc.), while the noun policy can cooccur with an almost indeterminate range of verbs: argue over, discuss, present, vote on etc.);*
>
> *2. the relationship between the elements in a collocation is mostly unidirectional not bidirectional (we perceive the figurative sense of "adopt" from its co-occurrence with "policy", not vice versa); and*

[12] "words do not *go* together, having first been apart, but, rather, *belong* together, and do not necessarily need separating" (Wray, 2002, p. 212) as opposed to "word that go well together" (Gyllstad, 2005).

3. it can be seen to have an internal grammatical structure that contributes to its meaning as a whole (e.g. adopt a policy can be analysed as a sequence of transitive verb + direct object).” (Howarth, 1996, p. 26)

If identifying an element requires defining it, we can then refer to one of the earliest definitions of collocation:

> *“A collocation is a succession of two or more words that must be learnt as an integral whole and not pieced together from its component parts.”* (Harold E. Palmer, 1933, cited in Howarth, 1996, p. 25)

Palmer’s work was considerably focused on learning and teaching, which is evident from the definition he provided. The notion of holism of word combinations is then restated in relation to formulaic sequences in general Wray (2000), which are defined as follows:

> *“A sequence, continuous or discontinous, of words or other meaning elements, which is, or appears to be, prefabricated: that is, stored and retrieved whole from memory at the time of use, rather than being subject to generation or analysis by the language grammar”* (Wray, 2000, p. 465).

Although the emphasis is placed on collocations as a whole, the attempts to classify them according to a set of criteria has adopted both holistic and analytic perspectives, according to the two traditions mentioned earlier.

A number of authors have adopted a method based on classifying collocations according to word class sequences that constitute them, such as ADJ + N (eg. *heavy smoker*), V + (obj-) N (e.g. *stand a chance*) and so on, reaching a total number of 9 word class sequences (Nesselhauf, 2005, p. 21). Another approach, limited to verb-noun collocations, is based on a semantic criterion, based on classifying word combinations according to whether the elements in the collocation express a figurative, delexical or technical meaning (Cowie, 2000). In other studies, word combinations have been classified according to the lexical functions they perform, thus considering the lexical unit they form as a whole (Mel’čuk, 1998; Nattinger & De Carrico, 1992; Wray, 1999).

An alternative perspective to this has been to consider the commutability of the elements forming them, thus considering the lexical unit they form in relation to their internal structure (Howarth, 1996, 1998), in which case different scales of commutability have associated with different degrees of fixity, identifying word combinations belonging to different points on an imaginary continuum. And this idea of continuum is also used when

considering the semantic quality of the elements that are part of a word combination: two key criteria to identify and classify word combinations are in fact considered to be semantic transparency and commutability which can often be observed as interconnected properties, as can be seen in Howarth's summary of identifying properties for different kinds of word combinations in Table 8. Here we see that according to whether or not a series of semantic and fixedness features are present, four different types of word combinations are identified: free collocations, restricted collocations, figurative idioms, and idioms.

TABLE 8. CONTINUUM OF PROPERTIES TO IDENTIFY CATEGORIES OF WORD COMBINATIONS (FROM HOWARTH, 1996, P. 47)

	well-formed	institution-alized	specialized element	collocationally restricted	semantically unitary	unmotivated
free collocations	√	√/x	x	x	x	x
restricted collocations	√	√	√	√	x	x
figurative idioms	√	√	√	√	√	x
idioms	√	√	√	√	√	√

With the increase of corpus-based studies, however, the identification and classification of word combinations has started to rely on a different set of criteria based on frequency. A definition of collocation resting on quantitative studies comes from the work by Stefan Evert, who has defined collocations as follows:

> *"A collocation is a word combination whose semantic and/or syntactic properties cannot be fully predicted from those of its components, and which therefore has to be listed in a lexicon"* (Evert, 2005, p. 17).

Once more, we notice that the emphasis here is on a different property of collocations, namely their predictability, which cannot be fully established on the basis of the single components that constitute it.

And the notion of predictability is closely linked with that of frequency:

> *"If two words occur together a lot, then that is evidence that they have a special function that is not simply explained as the function that results from their combination"* (Manning & Schiitze, 1999, p. 157).

The number of quantitative measures together with sets of linguistic features that have been developed to automatically identify collocations in a corpus have reached a total 87 (Pecina, 2005).

However, as pointed out by in Gablasova, Brezina & McEnery (2017), only very few are systematically used in linguistic research (Gablasova et al., 2017, p. 7). The illustrates how corpus-based statistical measures used to identify collocations reflect two major criteria: absolute frequency, based on counting occurrences, and strength of association, based on the combination of frequency with other collocational properties that can be expressed mathematically, between words that a part of a word combination (Gablasova et al., 2017, p. 6). It then goes on to describe three different dimensions of formulaicity related to frequency: i) dispersion, related to how frequency is distributed in the different parts of a corpus; ii) exclusivity, related to the predictability of the co-occurrence, calculated by comparing the number of times two words are seen together against the number of times two words are seen apart, and usually measured with the MI (Mutual Information) score; iii) directionality, indicating the probability that each single member of a collocation will have of co-occurring with the other one, and this is usually measured with Delta P (Gablasova et al., 2017, p. 6; Gries, 2013).

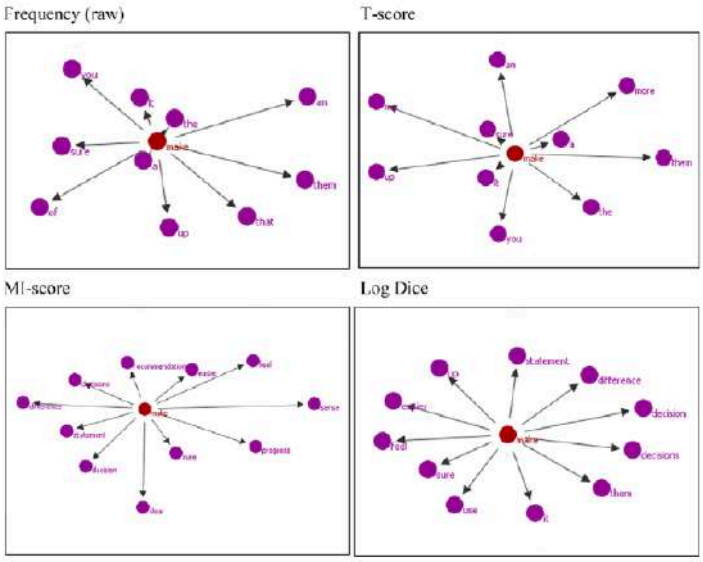
The study then reviews the two most used measures in corpus-based studies, namely t-score and MI score. The former is calculated as the difference between the raw frequency and the random co-occurrence frequency, divided by the square root of the raw frequency, while the latter is based on a "logarithmic scale to express the ratio between the frequency of the collocation and the frequency of random co-occurrence of the two words in the combinations (Gablasova et al., 2017, p. 9). The authors detect major limitations in both measures: the t-score is not based on a standardised scale, so it cannot be used to compare data from different corpora, while the MI score is based on a standardised scale, but does not have a maximum and minimum, so it cannot be scaled to specific ranges of values, and this can produce a number of misleading assumptions (Gablasova et al., 2017, p. 9-10).

The authors introduce the measure of Log Dice, which operates on a standardised scale and a fixed maximum value; they maintain that Log Dice is a more reliable measure to examine the strength of association between two units of a word combination, and provide a visual representation aimed at illustrating this point by comparing the collocates of *make*

measured with raw frequency, t-score, MI-score and Log Dice. The visual representation is obtained with GraphColl (Brezina, McEnery, & Wattam, 2015), which shows the top 10 collocates for the node: the closer the collocate is to the node, the stronger the association is between the two.

As we can see from Figure 10, we have four very different pictures, where the one with Log Dice is balanced, because of all the abovementioned factors that this measure is able to control for, as opposed to the other three measures.

FIGURE 10. VISUAL REPRESENTATION OF TOP 10 COLLOCATIONS OF *MAKE* BASED ON 4 DIFFERENT QUANTITATIVE MEASURES (GABLASOVA ET AL., 2017, P. 12)



It is evident how both the phraseology-oriented and frequency-oriented traditions in identifying and classifying phraseological units in general, and collocations in particular, are vital within an integrated research framework. The two traditions are inevitably convergent in view of the necessity to account for lexical co-occurrence phenomena as a multidimensional whole, especially when considering second language learning related psycholinguistic evidence.

The classification of formulaic units such as collocations remains, however, somewhat problematic especially in the field of psycholinguistics and in relation to native vs. non-native perspectives (Myles & Cordier, 2017).

The following section will shed light on how the described properties of collocations are reflected in second language learning and how they are linked with psycholinguistic evidence.

2.2.3 Collocations in second language learning

The theme of collocations in second language learning intersects a wide number of domains, though only three systematic reviews seem to have been published. The first is Henriksen (2013), covering 21 years of research spanning from 1990 to 2011; the second, Durrant (2014), where a meta-analysis of 19 studies is conducted in order investigate the role of frequency in collocation learning; the third, Boers & Webb (2018), providing a timeline of the field from 1933 to 2017, covering the areas of why collocations are key in language learning, and how collocations are learned in the absence or presence of a pedagogical intervention.

2.2.3.1 Why collocations are key in language learning

A large body of research has established the central role of formulaic units in second language learning as a key component for the development of native-like fluency in production and fluent input processing in comprehension (Columbus, 2010; Ellis, 2002; N. Ellis, Simpson-Vlach, Römer, O'Donnell, & Wulff, 2015; Meunier & Granger, 2008; Römer, Roberson, O'Donnell, & Ellis, 2014; Wray, 2002).

In particular, there is wide consensus that a focus on the development of phraseological competence in second language learning can help to:

1. establish "islands of reliability" so that the learner can build on these learned multiword blocks for other novel and more creative productions (Dechert, 1983; Henriksen, 2013; Raupach, 1984);
2. disambiguate the meaning of polysemous words, which can only be possible by observing them together with the other units they co-occur with (e.g. *commit a crime, commit oneself, commit to memory)* (Henriksen, 2013, p. 34);

3. detect the semantic prosody attached to the use of a word in a given lexical context (e.g. *set in,* mostly used in negatively connotated contexts: *bad weather is setting in*) (Hunston, 2002; Sinclair, 2004; Tognini Bonelli, 2001).

In describing the three different frequency-related dimensions of formulaicity, Gablasova et al. (2017) highlight the key role that each one of them plays in second language learning. Dispersion is important because collocations occurring in a variety of different contexts are more likely to be encountered by learners, who will then be provided with an increased number of learning opportunities; exclusivity is important because words that have a high probability of co-occurring with one another are more likely to be noticed, acquired and stored as units; and finally, directionality is important in the context of studies based on priming or completion tasks carried out by second language learners, to see how primed a word is in the learner's competence (Gablasova et al., 2017, pp. 6-7).

In any case, the body of research on collocations in L2 learning is vast and varied, both for focus on individual collocational properties, and for the methods and data eliciting tools employed. What we know about collocations in L2 learning is thus highly dependent on the kind of domain addressed by a study and on the kind of research method adopted. Evidence indicates that, overall, the processing of collocations in L2 learners is slower in comparison to native speakers (Siyanova & Schmitt, 2008), and this alone highlights the potential challenge that this formulaic unit would constitute for learners.

But what are the likeliest predictors for the development of phraseological competence? What are the features of collocations produced by learners? What sources of empirical evidence are there for what we know about how collocations are acquired, processed and used by learners? The next paragraph will attempt to answer all of these questions.

2.2.3.2 Variables influencing L2 collocation learning

In relation to the first research question, the variables emerging from the literature based on empirical data cover two main domains: on the one hand, some variables are related to the item being learned, with regard to its specific linguistic properties and to the different dimensions of knowledge that a learner might have of the item, while others are

related to the pedagogical domain, with reference to how collocations are treated within a lesson and whether the teaching context identifies with a second or foreign language setting. We will now see each of these aspects in more detail and in reference to the relevant literature.

We start with the item-related variables, considering the variables related to the item type first. The four main linguistic properties that have been considered in studies on learning collocations are: frequency and association measures, semantic transparency, congruency, and motivation in the collocation.

As for the first property, a number of individual corpus-based studies have highlighted the fact that second language learners a more sensitive to collocations with high frequency score values, rather than those with high MI score values (Bestgen & Granger, 2014; Durrant & Schmitt, 2009; Ellis et al., 2015). This finding is confirmed by a major study conducted by Durrant (2014) based on the meta-analysis on 19 phraseological competence tests focused on collocations and controlling for both frequency and MI score values. What the author finds is that frequency correlates moderately with collocation learning, while MI score values do not. Being collocations with high MI score values usually infrequent and highly specialized in their use, the chances for the learners to encounter them in their language input are likely to be scarce, and the contexts in which they may be exposed to them not as varied as highly frequent and highly dispersed collocations.

Furthermore, frequency has been studied also in its systematic relationship with congruency. Wolter & Gyllstad (2013) have found that both congruent and incongruent collocations that are highly frequent are generally processed faster that congruent and incongruent collocations that are infrequent. This may be an indication of frequency being a more dominant variable in comparison to congruency when it comes to L2 collocation learning.

Another collocational property that has been studied in relation to L2 collocation learning is semantic transparency. The findings generally indicate is that collocation which do not exhibit full semantic transparency exhibit a high probability of making errors (Nesselhauf, 2005), which in some cases has been connected with the L1 influence (Wang, 2016). The possible increased difficulty for the learners to learn collocations that are not fully semantically transparent has also been implied in psycholinguistic studies

such as Gyllstad & Wolter (2016), where collocations with an element of opacity determined a processing cost in both natives and non-natives. It is argued, in fact, that collocations that not fully semantically transparent will be more difficult to learn, as a learner will be able to decode a transparent collocation easily through the decoding of the individual elements forming it (e.g. *take the money),* whereas this decoding process is likely to be, at least to some extent, hindered in the case of collocations that exhibit partial (e.g. *take a course*) or full (e.g. *take sides*) semantic opacity (Henriksen, 2013, p. 33; Nesselhauf, 2005; Wang, 2016).

We now move on to the theme of L1 influence in collocation learning, which has been studied at the level of typological distance between languages, and as an explanation for learner errors, and congruency in particular, with special reference to the cases where target language collocations have a possible word-for-word translation in the L1 and this is controlled for in the study.

Here we will cover the variables strictly related to the item being learned, namely whether it belongs to a typologically distant language in comparison to the language being learned, and whether it is congruent or not; we will treat the issue of L1 influence as an explanation of learner errors in the following section on features characterising L2 production of collocations. This distinction is motivated by the fact that within the broader context of L1 influence phenomena, we are in fact dealing with two different dynamics: in the first case, with a linguistic property of the learning aim, and in the second case with a feature that is detected in L2 production. Table 9 shows Scott Jarvis' framework for researching cross-linguistic influence (CLI) phenomena, where we see a clear distinction being made between group-related comparisons and language-related comparisons (Jarvis, 2010, p. 182), which in our case correspond to language usage features on one side, and congruity and typological phenomena on the other. This difference is also one reflected in the design of the studies: when focusing on congruency, the construct is usually controlled for at the onset of study, and all the appropriate comparisons are made in order to see its effects in relation to an outcome variable; when focusing on L1 influence in errors, on the other hand, the analysis is conveyed toward establishing the criteria that need to be necessarily satisfied in order to safely detect L1 influence in any given form of learner production (Jarvis, 2000).

Biskup (1992) is considered a "thread-opener" for the studies on L1 influence in collocation learning (Boers & Webb, 2018, p. 81), which would then progressively develop in subsequent years and in a variety of directions. Biskup examines the typological distance of the learners' L1 as a possible predictor in collocation learning. In this study, learners are asked to write the translated of a list of collocations into the language being learned. Two groups of English learners are considered: Polish learners and German learners. The two different L1s are chosen because they distance themselves very differently from the language being learned: German, in fact, is typologically closer to English than Polish. What the study finds is that Polish learners make fewer errors in

TABLE 9. SUMMARY OF FOUR TYPES OF CLI EVIDENCE AND THEIR IMPLIED COMPARISONS AND PREMISES (JARVIS, 2010, P. 182)

Evidence	Comparison	Premise	Combined premise
intragroup homogeneity	within-group	group-representative behaviour	group-based phenomenon
intergroup heterogeneity	between-group	group-specific behaviour	
cross-language congruity	between-language	source-like behaviour	source-based phenomenon
intralingual contrasts	within-language	source-stratified behaviour	

the task they assigned as opposed to German learners. The author maintains that this might be the case because Polish learners do not assume congruency between their L1 and English as often as German learners would.

A number of other studies have looked more closely at the effect of congruency, especially in the field of psycholinguistics. With their study based on primed lexical decision tasks, Wolter & Gyllstad (2011) found that L1 influence may be an explanatory factor in L2 processing. In Yamashita & Jiang (2010), a phrase-acceptability judgment task was administered to Japanese learners of English in different teaching contexts (foreign language vs. second language). Both groups exhibited lower reaction times and increased error rates in relation to the collocations that were incongruent, returning results largely in line with Wolter & Gyllstad (2011). These findings, however, were not corroborated by a subsequent study conducted by Wolter & Yamashita, where the results

of a lexical decision task did not return any significant signs of L1 activation (Wolter & Yamashita, 2015).

A final item-related variable seen as possibly affecting L2 collocation learning is the distinction between motivated and unmotivated collocation. Collocations that are motivated, either formally or semantically, have been found to be easier to learn, as opposed to arbitrary ones: semantically motivated collocations, such as *weeding out,* are indicated as cases that are founded on etymology, while formally motivated collocations, such as *tell a tale, say a prayer, seek + solace,* are based on alliteration and assonance (Henriksen, 2013, p. 32). Furthermore, arbitrary collocations can be identified solely on the basis on frequency, whereas motivated collocations can be identified on the basis on both frequency and the qualitative criteria mentioned previously. In any case, it is argued that these properties may have a significant impact in the learnability of collocations (Walker, 2011), and a study by Lindstromberg & Boers (2008) has provided some empirical evidence in this respect.

From the description of the literature, we see that in some cases the linguistic properties of the items have been considered in conjunction. This is the case, for example, of Wang (2016), who analyses the L1 influence in collocations that are not fully semantically transparent, combining the properties of congruency and semantic transparency, and finding considerable effects for both variables.

A second level of item-related variables is connected with the dimension of knowledge that the learner will have of a given collocation. Studies that have specifically constructed language tests with the aim to elicit and compare both receptive and productive knowledge of collocations have concluded that receptive knowledge of collocations is likely to develop earlier than productive knowledge of collocations (Jaén, 2009; Koya, 2005), which is in line with more general SLA research findings.

We now move on to the second domain of variables that have been found to affect L2 collocation learning, namely those that are pedagogy-related. Here, we distinguish between the pedagogical treatment of the item and the teaching context where the learning takes place.

In relation to the first aspect, numerous pedagogical treatments of collocations in the classroom have been researched. One aspect that has been at the centre of researchers' interest is the so-called "frequency-of-encounters" effect. Some studies have found

empirical evidence related to how a pedagogical treatment of collocations that is able to increase the frequency with which a learners encounters an item, fostering repeated encounters of the same item, through recycling activities, for example, is likely to increase the likelihood of better retention and recollection (Durrant & Schmitt, 2010; Webb, Newton, & Chang, 2013). Another study, however, has not found the same kind of empirical evidence lending support to this argument, concluding that there must be other variables at play that are more significant in determining better recollection and retention (Pellicer-Sánchez, 2017).

Not much conflicting evidence seems to have emerged yet in relation to the effect of typographically enhancing the item being taught. Three psycholinguistic studies, in fact, converge in indicating that this kind of treatment in pedagogical materials would be beneficial and lead to improved learning (Sonbul & Schmitt, 2013; Choi, 2017; Szudarski & Carter, 2016).

Another kind of pedagogical treatment of collocations that has been seen to have a beneficial effect on learning is creating activities based on groups on concordances sharing the same collocate (e.g. *deep sleep*, *deep sigh*): empirical evidence seems to indicate this procedure as beneficial, in consideration of the fact that each different collocation will only add one new element to learn instead of two, in the cases where collocations with different words forming them are being learned (Webb & Kagimoto, 2011).

Two studies have focused on an extremely popular activity type that is used by teachers aiming to teach collocations, and that can be found in many resource books for teachers and textbooks for learner: the activity type we are referring to is matching split sentences or split collocations (Boers, Dang, & Strong, 2017; Boers, Demecheleer, Coxhead, & Webb, 2014). The two studies in question, the second one of which is a partial replication of the first one, provide empirical evidence in relation to how this activity type can be problematic, since it can lead to learners towards the formation of erroneous collocations, thus affecting learning negatively. The reason for this claim would be that the combination formed erroneously on the basis of the activity would then alter the learners' perception in relation to appropriateness of the combination itself, determining a risk for the learner to transfer to formed collocation to other contexts. The two studies converge in their conclusions.

Conflicting empirical evidence is instead found when examining the effects of teaching collocation adopting a contrastive L1-L2 approach: Eyckmans et al. (2016) has found this approach to be beneficial, while Laufer & Girsai (2008) did not find such an effect. The theme of using contrastive L1-L2 approaches is however debated in the literature on teaching methods, well beyond the teachability and learnability of collocations.

We now move on to the second type of pedagogy-related variable, which is that related to the teaching context where the learning of collocations occurs. This variable seems to have been investigated less than previous. However, we have one study shedding light on the possible differences between a foreign language (FL) and a second language (SL) context, in connection with congruent and incongruent collocations. Yamashita & Jiang (2010), is a study that we cited earlier in relation to the congruency vs. incongruency contrast, that we will cite here once more because of this additional layer that the study incorporates. What the authors find is that the acceptability judgment task they conducted in a FL return scores that are significantly lower when compared to those obtained in a SL context. This leads the authors to conclude that the influence of the L1 is more prominent in an FL context as opposed to a SL one.

The domains that have been outlined so far in relation to the variables affecting L2 collocation learning are summarized in Table 10, together with all the corresponding references. The empirical evidence on which the definition of these variables in L2 collocational learning are possible derives from language testing, psycholinguistic studies and learner corpus studies.

On the other hand, our second broad research question guiding us through the literature on collocations in L2 learning is typically, though not exclusively, based on learner corpus research (LCR), which has set itself apart prominently in the last few years with the founding of an association (Learner Corpus Association), the organization of a biannual conference (Learner Corpus Research conference) and the publishing of a dedicated academic journal (The International Journal of Learner Corpus Research).

The following paragraph will provide an overview on L2 collocation features as observed and analysed on the basis of learner corpora and other studies analysing learner production.

2.2.3.3. Features of L2 collocation production

The range of features in the production of L2 collocations can be broadly divided into those emerging from a contrastive analysis between L1 and L2 productions, and those focused on the analysis of L2 productions alone, highlighting specific aspects in their occurrences. We can define the first perspective as contrastive-based and the second as error/idiosyncrasy-based.

TABLE 10. VARIABLE DOMAINS AFFECTING L2 COLLOCATION LEARNING

Variable domain	Variable type	Variable property	Reference
Item-related	Item type	Semantic transparency	Nesselhauf, 2005; Wang, 2016; Gyllstad & Wolter, 2016.
		Frequency vs. MI	Bestgen & Granger, 2014; Durrant & Schmitt, 2009; Ellis et al., 2015; Durrant, 2014.
		Frequency vs. congruency	Wolter & Gyllstad, 2013
		Typologically distant L1	Biskup, 1992
		Congruency	Wolter & Gyllstad, 2011; Yamashita & Jiang, 2010; Wolter & Yamashita, 2015.
		(semantic/formal) motivation	Lindstromberg & Boers, 2008.
	Dimension of knowledge of the item	Receptive vs. productive	Jaén, 2009; Koya, 2005.
Pedagogy-related	Pedagogical treatment of the item	"Frequency-of-encounters" effect	Durrant & Schmitt, 2010; Webb et al., 2013; Pellicer-Sanchez, 2017.
		Typographically enhanced item	Sonbul & Schmitt, 2013; Choi, 2017; Szudarski & Carter, 2016.
		Collocations with same collocate	Webb & Kagimoto, 2011
		Matching exercises	Boers et al., 2014, 2017.
		L1-L2 contrastive approach	Eyckmans et al., 2016; Laufer & Girsai, 2008.
	Teaching context	FL vs. SL	Yamashita & Jiang, 2010

In the first case, a number of studies have indicated that learners tend to use a more restricted range of collocations in comparison to L1 users (Fan, 2009). This seems to be in line with the tendency of learners to overuse highly frequent collocations as part of what is known as the "lexical teddy bear" effect: learners use the collocations they know best in order to build their production and expand it towards areas of language they feel less confident about (Hasselgren, 1994; Durrant & Schmitt, 2009). And considering that "lexical teddy bears come in many shapes and sizes" (Hasselgren, 1994, p. 237), within the context of collocations Birgit Henriksen has renamed them as "collocation teddy bears" (Henriksen, 2013, p. 36).

There are also cases in which collocations are underused in learners when compared to natives, and these are the cases associated with simplification strategies, such as synonymy, where learners use a synonym or near-synonym for a lexical item in a collocation, and avoidance, where learners choose an expression in place of a target collocation (Farghal & Obiedat, 1995, pp. 320–324) (Henriksen, ibid; Farghal and Obiedat, 1995).

In terms of the error/idiosyncrasy-based features emerging from the literature, persistent collocation errors have been detected even at advanced levels of proficiency (Bestgen & Granger, 2014; Laufer & Waldman, 2011; Nesselhauf, 2005). In particular, a number of studies have reported on the influence of the L1 in the production of collocation errors (Bahns, 1993; Granger, 1998; Nesselhauf, 2003; Wang, 2016), a tendency that, as previously mentioned, seems to be more prominent in foreign language rather than second language contexts (Yamashita & Jiang, 2010).

Finally, the development of phraseological competence is seen as slow and non-linear (Groom, 2009; Larsen-Freeman & Cameron, 2009) when compared to other areas of linguistic competence in advanced learners (Biskup, 1992; Farghal & Obiedat, 1995; Laufer & Waldman, 2011). A number of studies, in fact, highlight how the development of phraseological competence tends to be slower than the development of other competence areas, and may even contribute in having to redefine the very notion of "advanced proficiency level" (Henriksen, 2013, p. 38). Table 11 provides an overview of the feature types described, the phenomena they are associated with and the corresponding references.

2.2.3.4 Overview of research findings and related sources of empirical evidence

The last few paragraphs outlined briefly what we know about the learning, processing and use of collocations and the various domains covered by the research findings that were reviewed. One aspect that was only hinted at is the kind of empirical evidence these studies are based on.

Table 12 provides a structured overview of what is, to the best of our knowledge, the empirical evidence on how collocations are acquired, processed and used in second language learning. According to the surveyed literature, we know 22 things on how collocations in second language learning work.

TABLE 11. OVERVIEW OF FEATURES CHARACTERISING L2 PRODUCTION OF COLLOCATIONS

Feature type	Phenomenon	Reference
Contrastive-based	Learner use a more restricted range of collocations compared to natives	Fan, 2009
	Learners overuse highly frequent collocations ("collocation teddy bear" effect)	Hasselgren, 1994; Durrant & Schmitt, 2009.
	Learners underuse some collocations, and adopt simplification strategies	Farghal and Obiedat, 1995
Error/idiosyncrasy-based	Learner use a restricted range of very high frequency collocations first, and then they stop and develop variation	Groom, 2009
	Errors persist even at advanced levels of proficiency	Bestgen & Granger, 2014; Laufer & Waldman, 2011; Nesselhauf, 2005
	A considerable proportion of collocation errors is ascribable to L1 influence	Bahns, 1993; Granger, 1998; Nesselhauf, 2003; Wang, 2016.
	The tendency to make collocation errors due to L1 influence increases in FL contexts	Yamashita & Jiang, 2010
	Phraseological competence develops slowly compared to other areas of linguistic competence	Groom, 2009; Larsen-Freeman & Cameron, 2009; Biskup, 1992; Farghal & Obiedat, 1995; Laufer & Waldman, 2011.

As we can see, empirical evidence derives from three main sources: language testing, psycholinguistic experiments, and learner corpora. If we go through the column listing of the phenomena that have been unveiled so far, we may notice some phenomena being

supported by empirical evidence coming from two different sources (phenomena 1, 2, 6), while all the others are supported by only one source of empirical knowledge.
Although different research methods will address a board research question from different angles, they all converge on the same aim: finding out how collocations are learned and what can be done to improve their learnability.

TABLE 12. OVERVIEW OF EMPIRICAL EVIDENCE ON COLLOCATIONS IN SECOND LANGUAGE LEARNING

	What we know	**Source of empirical evidence for what we know**		
		Language testing (acquisition evidence)	**Psycholinguistic experiments (processing evidence)**	**Learner corpora (usage evidence)**
1	Semantically transparent collocations are more easily learned than non-semantically transparent ones.	n/a	Gyllstad & Wolter, 2016	Wang, 2016; Nesselhauf, 2005.
2	Learners are sensitive to collocations with high frequency scores, but not to those with high MI scores.	Durrant, 2014 (META-ANALYSIS ON 19 TESTS)	n/a	Bestgen & Granger, 2014; Durrant & Schmitt, 2009; Ellis, 2015
3	Learners use a more restricted range of collocations compared to natives.	n/a	n/a	Fan, 2009
4	Congruent collocations are easier to learner than incongruent ones.	n/a	Yamashita & Jiang, 2010 Wolter & Gyllstad, 2011	n/a
5	Congruent collocations are not necessarily easier to learner than incongruent ones.	n/a	Wolter & Yamashita, 2015	n/a
6	L1 influence is a considerable predictor in L2 collocational errors	Peters, 2016	n/a	Fan, 2009; Bahn, 1993; Granger, 1998; Wang, 2016; Nesselhauf, 2005.
7	Learner overuse high frequency collocations compared to natives (the "lexical teddy bear effect")	n/a	n/a	Hasselgren, 1994; Durrant & Schmitt, 2009.
8	Learners's use of collocations is characterized by simplification strategies.	n/a	n/a	Farghal & Obiedat, 1995
9	Collocation errors are prominent even ad advanced proficiency levels.	n/a	n/a	Bestgen & Granger, 2014; Laufer & Waldman, 2011; Nesselhauf, 2005.

	What we know	Source of empirical evidence for what we know		
		Language testing (acquisition evidence)	**Psycholinguistic experiments (processing evidence)**	**Learner corpora (usage evidence)**
10	The adverse influence of the L1 on L2 production of collocations is more prominent in FL contexts.	n/a	Yamashita & Jiang, 2010	n/a
11	Receptive knowledge of collocations develops more easily than productive knowledge.	Jaén, 2009 Koya, 2005	n/a	n/a
12	Frequency in the use of collocations by learners decreases over time, while variation increases.	n/a	n/a	Groom, 2009
13	Learners with a more distant L1 make fewer collocational errors than those with a closer L1.	n/a	n/a	Biskup, 1992
14	Formally motivated collocations are learned more easily than unmotivated ones	Lindstroberg & Boers, 2008	n/a	n/a
15	Repeated encounters with the same collocation lead to better learning and recollection (the "frequency-of-encounters effect")	Durrant & Schmitt, 2010; Webb et al. 2013.	n/a	n/a
16	There is no specific evidence for the "frequency-of-encounters effect"	Pellicer-Sanchez, 2017	n/a	n/a
17	Learning collocations is easier when some collocations share the same collocate (e.g. *deep sleep*, *deep sigh*)	Webb & Kagimoto, 2011	n/a	n/a
18	Typographically enhanced collocations lead to increased collocational learning	n/a	Sonbul & Schmitt, 2013; Choi, 2017; Szurdarski & Carter, 2016.	n/a
19	Frequent congruent and incongruent collocations are processed faster by learners than infrequent ones	n/a	Wolter & Gyllstad, 2013	n/a
20	Matching collocation exercises can lead to the formation of erroneous collocations thus affecting learning negatively	Boers et al., 2014, 2017	n/a	n/a
21	A contrastive L1-L2 teaching approach for collocations is beneficial	Eyckmans et al, 2016	n/a	n/a
22	A contrastive L1-L2 teaching approach for collocations is not beneficial	Laufer & Girsai, 2008	n/a	n/a

A study indicating processing costs in collocations that are not semantically transparent could be, for instance, corroborated by language testing evidence and learner corpus evidence based on the same items: this kind of empirical triangulation would be likely to provide greater support to the phenomena we think we know about collocation learning, but that in fact are either supported by few studies based on a single source of empirical evidence, or different sources that do not converge in their findings.

Nevertheless, it is clear that some phenomena have gained more empirical support in the literature than others and are thus more reliable reference points in terms of characterising the development of collocational knowledge. These are cases regarding the role of frequency, resting on Durrant's solid meta-analysis, the influence of the L1, which, as we have seen, intersects different variable domains and study designs and still needs to consider the different levels of analysis outlined in Jarvis' work (2000, 2010), the persistence of difficulties in learning collocations even at advanced levels of proficiency, the pedagogical effectiveness of typographically enhanced items, and the ease to develop phraseological competence on a receptive level first, and only after also on a productive level.

2.2.4 Collocations in L1 and L2 studies on Italian

Research on phraseology in Italian has been developed in the last few decades by a number of prominent scholars (Masini, 2009; Simone & Masini, 2007; Vietri, Franchi de Bellis, & Savoia, 1985; Ježek, 2016; De Mauro & Voghera, 1996; Voghera, 1994, 2004; Zaninello & Nissim, 2010; Elia, D'Agostino, & Martinelli, 1985) and research centres in Italy (Istituto di Linguistica Computazione, Pisa; TRIPLE, Università Roma Tre), though it is arguably still not as advanced as for other languages (Spina, 2016; Efrati & Masini, 2011).

The study of Italian phraseology based on corpora, in particular, has mainly been focused on Italian L1. A corpus-based lexicography project aimed at building a dictionary of word combinations is underway at Università Roma Tre[13], and a major study on word combinations in Italian was published in 2012 (Masini, 2012). In this study, a set of

[13] http://www.lingue.unibo.it/it/ricerca/progetto-combinet (last accessed: 23/11/2018)

criteria to identify and classify different types of word combinations is proposed, and can be seen in Table 13 (Masini, 2012, p.120, adapted in Spina, 2016, p. 222). The category of collocations, in particular, is seen as characterised by familiarity, paradigmatic fixity, but not syntagmatic fixity. This is due to the fact that collocations generally allow the insertion of elements between the members that constitute them, thus modifying considerably the syntagmatic structure they find themselves in.

TABLE 13. CLASSIFICATION CRITERIA PROPOSAL FOR WORD COMBINATIONS (MASINI, 2012, P. 120, ADAPTED IN SPINA, 2016, P. 222)

	phrasal lexemes	*collocations*	*usual combinations*
syntagmatic fixity	+	-	-
paradigmatic fixity	+	+	-
familiarity	+	+	+

However, the same is not possible on the paradigmatic level, as can be seen in the following examples found in Spina (2016):

(1) *fare una passeggiata* 'take a walk'
(2) *fare una lunga passeggiata* 'take a long walk'
(3) *la passeggiata è stata fatta nella pausa pranzo* 'the walk was taken during the lunch break
(4) **effettuare*|*operare*|*svolgere una passeggiata* '*carry out|operate|conduct a walk'

(Spina, 2016, p. 223)

As can be seen, sentences (1) - (3) contain perfectly admissable additions within the collocation, which produce a syntagmatic extension of the sentence, while sentence (4) contains a substitution of the verb collocate, which is not admissable as it returns an erroneous collocation.

A growing interest in Italian phraseology and collocations in particular is evident when looking at the dictionaries of collocations or word combinations in general that have been published in the last few years (Tiberii, 2012; Urzì, 2009; Lo Cascio, 2013). This interest however is still limited in relation to Italian L2 research.

In this field, to the best our knowledge, most of the research being conducted on collocations in learner Italian comes from the University for Foreigners of Perugia. The

study conducted in Spina (2015) focuses on academic L2 phraseology in a CMC university context, finding the phenomenon of overuse in relation to high frequency collocations, that is typical of learners and that was described previously (see 2.2.3).

The unpublished PhD dissertation by Leontyna Bratankova compared collocations with high frequency score and collocations with high association scores, finding that the former are more prominent than the latter (Bratankova, 2015). The corpus-based study also finds evidence of a U-shaped learning pattern when comparing the use of collocations across learners belonging to different proficiency levels (Bratankova, 2015). Both of these studies confirm research findings outlined previously that had emerged from studies on English, though based in peculiar contexts that set them apart from studies on English.

In the same year, a study published by Anna Siyanova-Chanturia focused on the acquisition of noun-adjective collocations by 36 Chinese learners of Italian over a time-span of 5 months: the study found significant increases in the use of formulaic units of language, suggesting that more native-like input is possible to attain even in a short timeframe of 5 months (Siyanova-Chanturia, 2015).

Another recent longitudinal study addresses noun-adjective collocations in the newly constructed learner corpus known as the Longitudinal Corpus of Chinese Learners of Italian (LOCCLI) (Spina, 2017). Over a timespan of six months, adjective + noun collocations and noun + adjective collocations were found to exhibit opposite behavours: errors decrease after 6 months for adjective + noun collocations, while they significantly increase for noun + adjective collocations (Spina, tbp). An example of the latter error type, increasing over 6 months can be read in (5):

(5) Ho trovato gli **spagnoli ragazzi** sono non più belli di **italiani ragazzi,**
'I found that Spanish boys are not more handsome than Italian boys'

(Spina, tbp)

The parts marked in bold in sentence (5) are the noun + adjective collocations containing a position error: the correct form, in fact, would be *ragazzi spagnoli* and *ragazzi italiani,* respectively.

In terms of learner-based lexicography, again, to the best our knowledge the only project underway is the DICI – A, the Learner Dictionary of Italian Collocations (Spina, 2010a, 2010b, 2016).

Despite having limited empirical evidence in relation to L2 learning of collocations in Italian, we can see how there are significant threads of innovation, even when compared to the large body of research on English L2 collocations: this is clear especially in relation to the attention devoted to the longitudinal dimension of the analysis.

2.2.5 Main current issues

The issues posing a challenge for the study of phraseology in second language learning research are numerous, especially in the field of studies on Italian.

In terms of what we know about the development of phraseological competence in a second language, a more systematic triangulation of empirical evidence from language testing, psycholinguistic studies and learner corpora is certainly needed. This aspect cannot be disjointed by the analysis of teaching methods applied in the classroom, with respect to the role that phraseology in general and collocation in particular play in them. The data collected from the three main sources of empirical evidence that we have outlined rarely derives from informal contexts of learning: in most cases, researchers conduct their studies in university contexts, because they are more readily available. For this reason, any study aimed at assessing how the development of phraseological competence works in a second language should consider teaching methods and the pedagogical treatment of collocations in the classroom more closely.

This implies a closer collaboration with teachers. The fact that researchers still observe little attention paid on part of the teacher to formulaic language, despite its undisputed central role in language acquisition, processing and use, indicates a need to bridge the gap between researchers and teachers, starting possibly from teacher training courses.

On their part, researchers are faced with the many challenging of studying collocations at the linguistic level. We have seen that only in very rare cases (e.g. Wang, 2016; Yamashita & Jiang, 2010) collocation properties have been studied as a combined whole: Wang 2016 examines collocations that have some degree of semantically opacity and are at the same time influenced by the L1, while Yamashita & Jiang (2010) focus on

collocations that are, at the same time, highly frequent and either congruent or incongruent. Each of the qualitative or quantitative properties that characterise collocations does not occur on its own, and is always present together with other properties. We may thus say that the study of phraseology can be considered not just as the study of words that "belong together" (Wray, 2002), but also as the study of the linguistic properties that belong together within a single phraseological unit: congruent collocations may correlate or not with semantic transparency, which in turn may correlate with frequency or MI score values. These aspects seem to have received little attention so far, even in L1 studies. The combination of a wider range of collocation properties may lead to improved classification criteria, which would be highly beneficial for any kind of study that would choose to base itself on a particular category of collocations.

Another aspect in phraseology studies that certainly deserves more attention is the longitudinal perspective. Despite its restricted range and scope, this is where studies on L2 Italian have shown signs of innovation: the construction of the LOCCLI, in fact, opens up the thread of longitudinal learner corpora for Italian L2, and with the inclusion of texts written by a single and very homogenous language group (i.e. Chinese learners) allows for fine-grained analyses on possible L1 influences as well as inter-group differences over the space of 6 months.

Studies on phraseology employing language testing could be more rigorous. The field of language testing comes with its set of principles, methods and research tools, it is vibrant and fast developing and should be taking into account more systematically in order to ensure the availability of a reliable data collection tool (Paquot, 2018).

Finally, another area for which there is still very limited empirical evidence available is spoken data. This is arguably much more difficult to collect and process compared to written data, though it nevertheless would provide extremely insightful information related to how phraseological competence unfolds over time and how the two dimensions of writing and speaking are related.

2.3 Filling the gaps and combining the challenges: research questions and statement of hypotheses

In this paragraph we will show how the present study aims to fill the gaps identified in the two research domains that were reviewed, DDL and phraseology, and at the same time how it aims to combine the research challenges that they share. On this basis, we will formulate and justify our research questions, and provide our statement of hypotheses in light of the literature review we conducted.

As we have seen (see 2.1.6), some of the main elements underrepresented in DDL research are the adoption of a longitudinal perspective, the focus on lower proficiency learners, the attention to the linguistic properties of the set learning aims, and the combination of emic and etic data, in order to gain a fuller understanding of the effect of DDL. Another major gap that needs filling is the fact that studies on DDL for Italian L2 learning are very limited in number. Not only are they few, but they not seem to have had an empirical, controlled and longitudinal design so far, based on the collection of both emic and etic data, as they have been mainly descriptive and theoretical, and only in one case empirical with sole reference to the emic perspective (see 2.1.5.2).

Furthermore, L2 phraseology research on Italian does not seem to have considered the combination of different linguistic properties characterising collocations, and their relationship with teaching methods and how these may affect their learnability over time (see 2.2.4).

We have also seen that research on DDL and phraseology is characterised by a number of variously intersecting issues, but driven by few key questions, summarised in Table 14. On the one hand, research on phraseology and collocations in particular strives for a better definition of the construct of collocation, which various fields including computational linguistics and electronic lexicography would benefit from. It also requires more empirical evidence related to how collocations are acquired and processed, and certainly begs for more rigorous language testing instruments.

On the other hand, DDL research wishes to provide solid empirical grounding for supporting the widely stated claim that DDL can be highly beneficial for second language learners from numerous perspectives. In order to do this, DDL research needs to reflect on the variables at play in affecting the effectiveness of the approach.

The main current issues emerging from the field of DDL and phraseology research have been outlined in paragraphs 2.1.6 and 2.2.5. Table 15 summarises both, showing the large proportion of overlap between the two: 5 in 7 of the challenges faced by both fields coincide.

TABLE 14. KEY QUESTIONS IN DDL AND PHRASEOLOGY RESEARCH

Research on collocations	**Research on DDL**
How can we identify and define collocations? How are collocations learned and processed in an L2? How can collocations be tested?	Does DDL work? What kind of variables influence its effectiveness?

TABLE 15. CHALLENGES IN DDL AND PHRASEOLOGY RESEARCH

DDL	**Phraseology**
1. Bridging the gap with teachers	1. Bridging the gap with teachers
2. More rigour in designing and reporting studies	2. More rigour in designing and reporting studies
3. Combining different kinds of empirical evidence	3. Combining different kinds of empirical evidence
4. More attention to longitudinal dimension	4. More attention to longitudinal dimension
5. More rigorous data collection tools	5. More rigorous data collection tools
6. Bridging the gap with SLA theories	6. Analysing collocation properties in combination
7. Corpus data for lower proficiency learners	7. Attention to spoken data

On the basis of the reviewed literature and the identification of gaps and challenges, we formulate four research questions. The first three are interrelated, founded on etic data; the forth one is founded on emic data.

RQ1: How do learning patterns differ, in the development of phraseological competence, when comparing a DDL approach to a non-DDL approach over a period of time?

The first research question aims at investigating what kind of learning patterns are produced by DDL over time in the development of phraseological competence, and whether these are significantly different when compared to a non-DDL approach.
According to the main meta-analyses that have been conducted so far (see 2.1.5.1), DDL should, overall, determine improved language gains in comparison to the non-DDL approach, so this is the overall result we would expect. The expectation is supported also by the fact that a concordance-based version of DDL will be adopted, based on the typographical enhancement of the learning aim, which has been indicated as particularly effective in phraseology teaching (see 2.2.3.2).
The variables at play are however numerous. It is indicated how this effectiveness of DDL will be harder to detect in between-groups designs, because the two different approaches will be used to treat two separate groups of learners, and not a single one (Boulton & Cobb, 2017; Lee et al., 2018). Another element that might constitute a challenge is the adaptation of corpus data to lower proficiency learners.
In order to address the outlined challenge and missing area of longitudinality, this study will include 4 data collection point. Differently from the empirical studies included in the meta-analyses, containing generally a maximum of three data collection points, the last data collection point being a delayed post-test, the present study will be able to trace the developmental patterns in both the control and experimental groups, including an analysis of whether any significant differences are observable not only at the level of overall proficiency, but also at the level of retention rates.

RQ2: What is the effect of specific linguistic properties of the learning aims, when comparing a DDL approach to a non-DDL approach over a period of time?

This research question is divided into the following two sub-questions:
2.1. How does semantic transparency influence the development of phraseological competence in the two conditions?

2.2. How does L1 congruency influence the development of phraseological competence in the two conditions?

One aspect that seems to have received little attention in DDL studies is connected with the linguistic properties of the learning aims. We have decided to focus our attention on two of them, namely semantic transparency and L1 congruency. What we want to investigate is how these variables react to the DDL pedagogical treatment. We know from the literature that both semantic opacity, o semi-opacity, and incongruency can lead to difficulties for second language learners: what is the effect of DDL in this situation? The first aspect that this research question will address is whether or not, in both of the conditions, the claims deriving from the literature are confirmed. Second, it will see what role DDL plays in this: does it improve the learning of generally difficult items, thanks to the fact that is it based on the exposure to multiple and authentic instance of language containing a single unit of learning?

RQ3: What is the effect of different dimension of collocational knowledge, when comparing a DDL approach to a non-DDL approach over a period of time?

The third research question deals with another seemingly neglected area in DDL research, namely the dimension of knowledge characterising a given collocations.
It has been seen how receptive knowledge is more easily attained both in the development of phraseological competence and language competence in general (see 2.2.3.2). We can expect this to be substantially similar in our case, with definitional knowledge exhibiting better accuracy levels than transferable knowledge.

RQ4: What are the learners' overall attitudes towards DDL activities?

This question aims to examine the impressions that students have of the DDL approach. As described in previous literature (see 2.1.5.2), these are mostly positive, partly because of the novelty of the approach, and partly because of its collaborative and inductive nature. The negative impressions are often the most precious ones, as they highlight the shortcomings that need to be addressed in order to improve the operationalisation of the

approach in subsequent studies. We can expect a similar variety of findings also for our current study, and possibly some insight we might not expect, especially from the open questions of the questionnaire that is used to collect the data.

3 Method

This chapter describes the research methods adopted in the study. It opens with an outline of the study design and is then divided into three main parts.

The first part addresses the criteria that were followed in selecting the samples of participants and presents their characteristics in terms of age, gender, number of months spend studying Italian before coming to Italy, and other second languages known.

The procedure followed in developing the materials is explained in the second part, in relation to the corpus data used, the selection of learning aims, how experimental and control lessons were designed and how they fitted into the general lesson planning.

The third part focuses on the research instruments used for the data collection, namely the phraseological competence test and the end-of-course student questionnaire, and on the kind of analysis performed on the collected data.

3.1 Study design

The study is based on a controlled between-groups pseudo-experimental longitudinal design. Eight intact classes of approximately 15 pre-intermediate Chinese learners of Italian each were randomly assigned to one of two conditions: experimental and control. Both groups of classes received a one-hour lesson per week for eight weeks. The experimental classes were exposed to DDL activities, while the control classes engaged in traditional communicative activities (see Appendixes A and B). Phraseological competence data was collected at four points in time and at four-week intervals: before the beginning of the lessons, after four lessons, after eight lessons, and four weeks after the last lesson. An end-of-course questionnaire was administered to all classes in order to elicit learner attitudes towards both the control and experimental lesson series. The duration of the data collection lasted 13 weeks in total (see Table 16).

TABLE 16. STUDY DESIGN

Data collection point	Week	Collocation set	Experimental groups	Control groups
	0	n/a	Getting to know each other activities Background questionnaire	
1			Phraseological competence test 1	
	1	1	DDL activities	Traditional activities
	2	2	DDL activities	Traditional activities
	3	3	DDL activities	Traditional activities
	4	4	DDL activities	Traditional activities
2	5	n/a	Phraseological competence test 2	
		5	DDL activities	Traditional activities
	6	6	DDL activities	Traditional activities
	7	7	DDL activities	Traditional activities
	8	8	DDL activities	Traditional activities
3		n/a	Phraseological competence test 3	
	9-12		No lessons	
4	12	n/a	Phraseological competence test 4	
			End-of-course questionnaire for experimental groups	End-of-course questionnaire for control groups

The study was controlled with respect to participants, treatment data, and data collection tools (see Table 17). Participants were all Chinese L1 native speakers, of a similar age group and belonging to the same language learning program. The two samples were tested in order to establish the initial lack of significant differences between them. As for the treatment, each week's learning aims corresponded to a single set of eight verb-noun collocations that were the same for both groups (see Table 18) and were identified according to the procedure outlined in Table 28. All the lessons were taught by the same teacher (i.e. the researcher), they all had the same beginning and ending, and the same homework sheet was given (see Table 19). Finally, phraseological competence data was collected at four-week intervals via a phraseological competence test. The order of the items in the test was randomised at each administration.

TABLE 17. STUDY CONTROLS

Study component	Variable being held constant
Participants	L1
	Age group
	Language learning program
Treatment	Teacher
	Learning aims
	Lesson planning principles
	Duration of the lesson
	Homework
Data collection	Collocational competence test
	Administration of the collocational competence test

TABLE 18. COLLOCATION SETS

Collocation set	Items	Theme
1	fare amicizia; fare un sorriso; avere [numero] anni; studiare [materia]; amare [attività]; organizzare una festa; fare gli auguri; fare un regalo.	A una festa
2	fare una passeggiata; prendere il sole; fare una gita; prendere aria; avere fretta; pulire casa; spendere soldi; fare la spesa.	Il fine settimana
3	prendere l'autobus; fare colazione; mettersi la giacca; avere lezione; rifare il letto; mettere la musica; fare la doccia; mandare un messaggio.	La mia giornata tipica
4	avere fame; preparare la cena; sbagliare strada; trovare la strada; trovare casa; affittare una casa; dividere un appartamento; dividere una spesa.	La mia casa
5	suonare la chitarra; fare sport; fare shopping; ascoltare musica; dipingere quadri; fare una foto; leggere un romanzo; vedere un film.	I miei hobby
6	gustare i cibi; visitare la città; ampliare le conoscenze; ricordare un'esperienza; organizzare un viaggio; prendere un treno; fare la fila; fare la valigia.	Le mie ultime vacanze
7	raccontare una storia; diventare amico; avere un dubbio; chiedere un consiglio; dare un consiglio; ascoltare un consiglio; trovare una soluzione; cambiare opinione.	Un'amicizia
8	fare l'artista; fare un viaggio; risparmiare soldi; fare esperienze; fare un esame; avere un'idea; cambiare casa; avere successo.	Progetti per il futuro

TABLE 19. EXPERIMENTAL VS. CONTROL LESSONS

Minute	Stage	
5’	Gamified introduction to weekly collocations	
25’	EXPERIMENTAL GROUPS: DDL activities	CONTROL GROUPS: traditional activities
	• Multiple sentence matching; • Multiple sentence gap-fill; • Concordance based pattern-hunting; • Concordance-based matching.	• Matching single split sentences; • Single sentence gap-fill; • Single sentence error correction; Single sentence transformation exercise.
15’	Practice and production activities	
1’	Homework assignment	
4’	End-of-lesson game	

The one-hour lessons were integrated within the students’ usual lesson time. Their 10-month course involved Italian language lessons from Monday to Friday, from 9:00 to 13:00. Over the 8 weeks of the experiment, a specific timetable was agreed upon with the teachers, so as to allow the insertion of the a one-hour weekly lesson in each class.

3.2 Population

The population of the study consisted of Chinese students learning Italian as a second language within the Marco Polo and Turandot government program. The Marco Polo is an Italian language learning program tailored for Chinese students, founded in 2006 by the CRUI, Conferenza dei Rettori delle Università Italiane (The Conference of Italian University Rectors) on the basis of a joint agreement between the governments of Italy and China and later integrated with the Turandot component. The Marco Polo strand includes those aiming to enroll in science, business or technology-oriented academic courses, while the Turandot component includes at those wishing to pursue studies in fine arts or music. The aim of the program is to provide Chinese students with the opportunity to reach a B1/B2 competence level of Italian in order to enroll in Italian academic degrees.

In collaboration with the four Italian universities that are mostly involved in the pedagogy of Italian language for International students[14], and with the support of numerous other Italian universities, CRUI has elaborated a manifesto of principles guiding the creation of a foundation year of studies for foreign students with little or no knowledge of Italian language and culture[15]. According to the manifesto, Italian universities should adhere to the most recent advances made internationally in the field of Second language learning theory and practices, in relation to foreign language teaching and assessment.

Uni-Italia[16] reports on data published by UNESCO in 2017, showing that Chinese students represent 13.91% of the total of International students coming to Italy. The Marco Polo and Turandot program has seen a steady increase in terms of pre-enrolment numbers, starting at 1.099 in the academic year 2009/2010 and arriving at 2.178 for the academic year 2018/2019, doubling in size. At present, the University for Foreigners of Perugia has 293 pre-enrolments for the academic year 2018/2019, being second in the list of the top universities in Italy where Chinese students decide to go for the foundation year in Italian language studies[17].

The main sources of updated information on the population and the unfolding of the Marco Polo and Turandot program are thus Uni-Italia and the conferences organised by the leading Italian universities for foreigners[18].

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[14] Università degli Studi di Pavia, Università per Stranieri di Siena, Università degli Studi Roma Tre, Università per Stranieri di Perugia.

[15] https://italianostudenticinesi.files.wordpress.com/2017/07/manifesto-programmatico-definitivo-versione-da-proiettare.pdf (last accessed: 20/03/2018).

[16] Uni-Italia is an association founded in 2010 by three Italian ministeries: Ministero degli Affari Esteri e della Cooperazione Internazionale, Ministero dell'Istruzione, dell'Università e della Ricerca (MIUR), Ministero dell'Interno. In 2011, the association was appointed by MIUR to officially manage the Marco Polo and Turandot program, and to publish regular updates in terms of data and issues requiring attention.

[17] The data was gathered from the following document published by Uni-Italy: http://uni-italia.it/archivio/Resoconto_III_Convegno_MpT.pdf.

[18] Two major conferences have been organized so far: XV seminario dell'AICLU (Associazione Italiana Centri Linguistici Universitari), «La didattica dell'italiano per studenti cinesi: il programma Marco Polo e altre esperienze», Roma 19/02/2010, Università degli Studi di "Roma Tre" (Conference proceedings: http://archivio.paviauniversitypress.it/pdf-oa/rastelli-didattica-2011.pdf); Dieci anni di didattica dell'italiano a studenti cinesi: risultati, esperimenti, proposte, Siena 6-7/10/2017, Università per Stranieri di Siena (Conference website: https://italianostudenticinesi.wordpress.com).

3.3 Sample

The sample for the present study was drawn from the population of Chinese students enrolled in an Italian as a second language course at the University for Foreigners of Perugia for the academic year 2016/2017[19].

3.3.1 Procedure

In order to identify the sample, a purposive sampling method was followed, where three main aspects were kept in mind:

1. Size;
2. Balance;
3. Homogeneity.

An attempt was made to find a sample that would be as large as possible, while having an internal balance in terms of at least one key variable, on the basis of an overall homogeneity with respect to other variables.

After consulting with a number of teachers involved in the courses, and with the coordinator of the Marco Polo and Turandot Italian language courses, the lower intermediate and upper beginner competence courses were deemed to be quite close in terms of competence. As a result, in order to get a high number of classes, six classes from the lower intermediate and two from the upper beginner competence levels were selected. Half of these belonged to the Marco Polo program, while the other half to the Turandot program. As a result, the three guiding aspects for the identification of the sample materialised as follows:

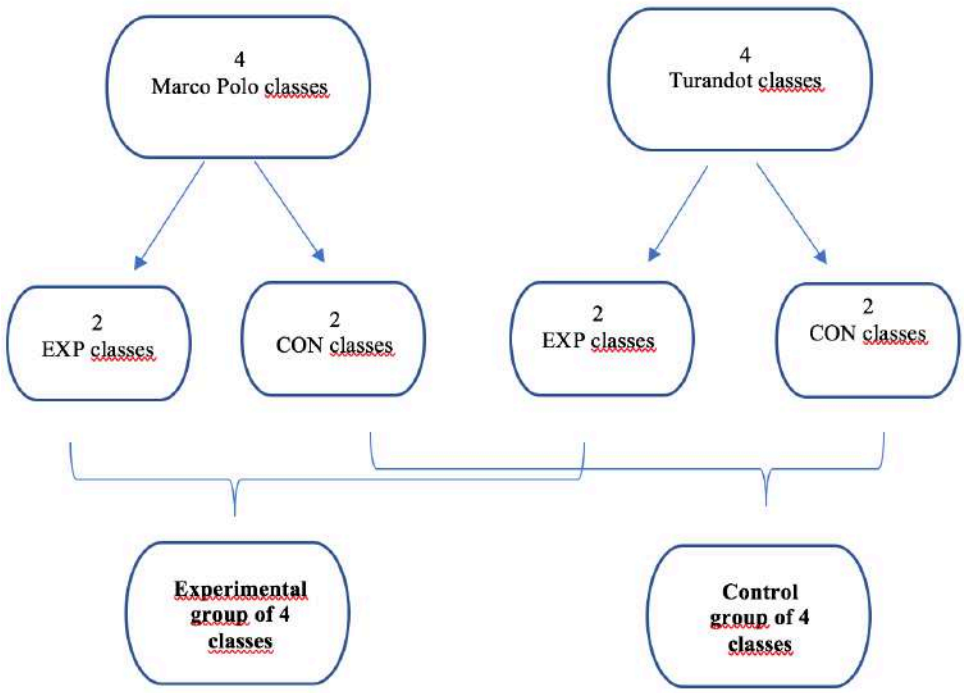
[19] Dedicated page on Unistrapg website: https://www.unistrapg.it/it/area-internazionale/studenti-internazionali/studenti-marco-polo-e-turandot (last accessed: 20/03/2018).

TABLE 20. SAMPLING CRITERIA

Property	Aim	Achievement
Size	To be as large as possible, considering the need of an even number to be divided into the two experimental conditions	• 8 classes of ca. 15 students each
Balance	To be equally divided between language programs and experimental conditions	• 4 classes from the Marco Polo program; • 4 classes from the Turandot program
Homogeneity	To have similar variables across classes	• Same L1 (Chinese) • Same competence level (pre-intermediate)

In order to achieve a balance in the sample in relation to both the program and the experimental condition, the following purposive sampling method was used:

FIGURE 11. PURPOSIVE SAMPLING METHOD



Each intact class was treated as a single sample and identified through the University course code, which is made up of the following information: language program (M= Marco Polo; T= Turandot); competence level (I= Intermediate; B= Beginner); progressive number of equal groups (01= first group in the category; 02 = second group in the category; etc.).

Each single sample was numbered and separated into two different sets, in order to obtain balanced samples in terms of language program, when performing the random assignment of the samples to the conditions with Excel (see Table 21).

TABLE 21. SETS OF SAMPLES

Marco Polo classes	Turandot classes
1. MI01	5. TI01
2. MI03	6. TI04
3. MI04	7. TI05
4. MB01	8. TB04

The following table shows the result of this process of random assignment:

TABLE 22. RANDOM ASSIGNMENT OF SAMPLES

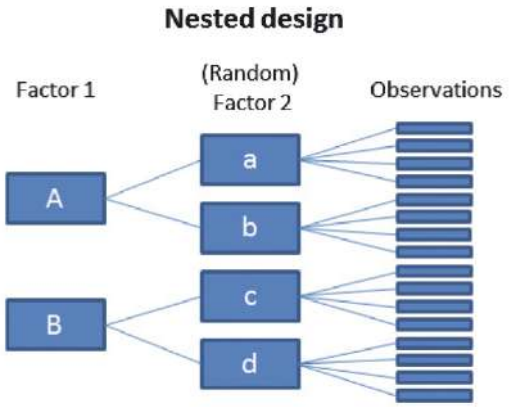
	Experimental group of classes	Control group of classes
Marco Polo program	MI03 MB01	MI01 MI04
Turandot program	TI04 TI05	TI01 TB04

The sampling led to the nested design that is represented in Figure 12 which informed the inferential analysis of the data (see 3.6).

As explained by Schielzeth & Nakagawa (2013, pp. 16–17), within the nested design, Factor 1 is a group-level predictor relative to Factor 2, which then produced the set of observation units that are analysed. In our study, A and B correspond to the condition,

either experimental or control, while a, b, c, d are the classes from which the data was collected.

FIGURE 12. VISUAL REPRESENTATION OF NESTED DESIGN SAMPLING (SCHIELZETH & NAKAGAWA, 2013, P. 16)



A first phraseological competence test (see 3.5.1 and Appendix E) was administered to all of the 8 classes in week 0 of the study (see Table 16). A total of 84 tests were collected in this week: 42 from the experimental classes and 42 from the control classes. In consideration of the fact that the present study aims to compare two learning approaches in two different samples, a series of measures were taken in order to establish a preliminary absence of significant differences in the two sample.

If we take Test 1 as a baseline, which we may consider as a pre-test, in Figure 13 we can see that the scores from the control group are distributed more symmetrically around the median, compared to those from the experimental group. However, there are no outliers. The median is higher in the case of the experimental group. Figure 14 shows the sample distributions by means of a strip chart, confirming that the distribution of values in the control group is denser that the one in the experimental group.

In order to assess whether the data is normally distributed, the Shapiro-Wilk normality test was performed, reporting a p-value of 0.40 for the control group, and a p-value of 0.41 for the experimental group. As a result, the null-hypothesis of the samples coming from a normally distributed population can be accepted.

FIGURE 13. BOX PLOT OF AVERAGE NUMBER OF CORRECT ANSWERS IN TEST 1

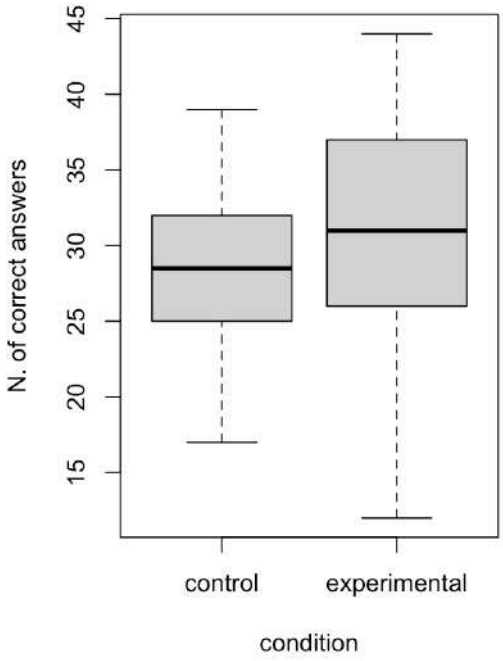
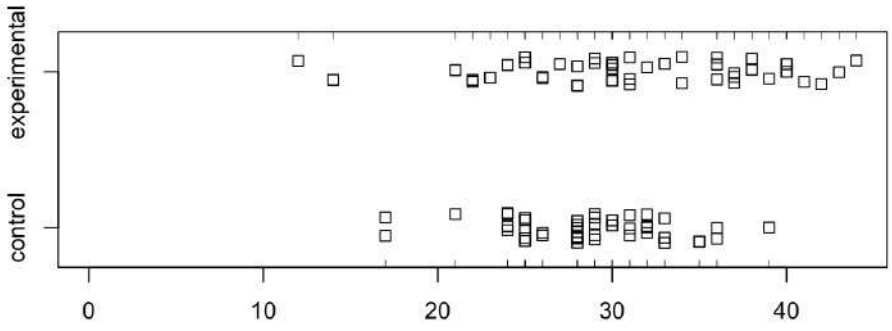


FIGURE 14. DISTRIBUTION OF ACCURACY SCORES



However, as recommended in Levshina (2015, p. 56), a visual inspection of the data distributions was performed via Q-Q (quantile-quantile) plots, in order to observe the extent of possible deviations from the normality.

Figures 15 and 16 show that the distributions of data from the two samples are both normal: the closer the points are to the line, the more similar the distribution is to a normal distribution (Levshina, 2015, p. 53) and the deviations appear to be slightly more present in the experimental sample, though not to a large extent.

FIGURE 15. NORMAL Q-Q PLOT FOR CONTROL GROUP

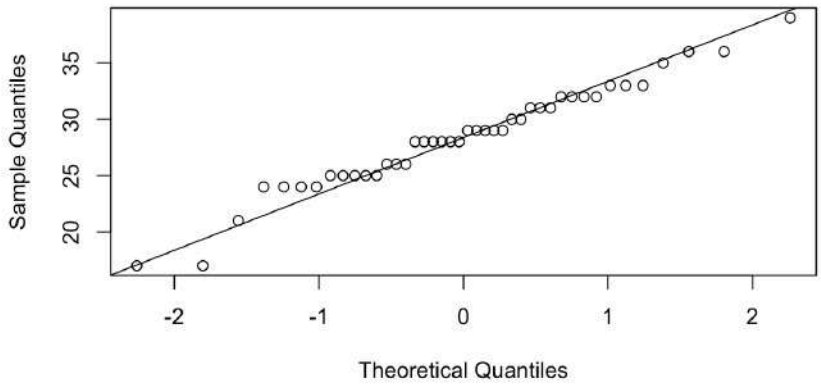
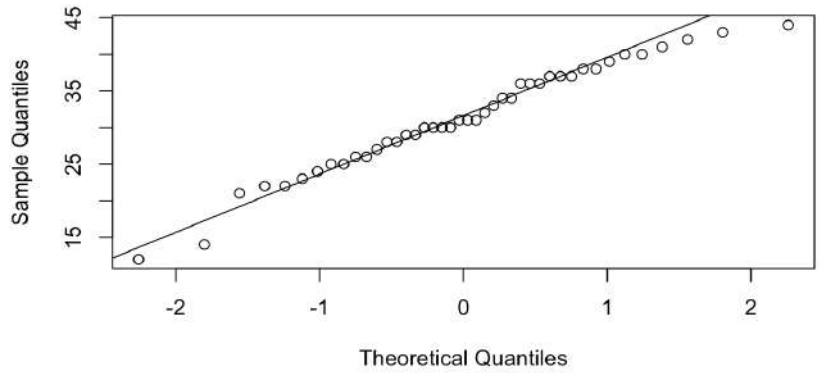


FIGURE 16. NORMAL Q-Q PLOT FOR EXPERIMENTAL GROUP



In order to establish the absence of any statistically meaningful difference between the two groups, an independent two-sample t-test assuming equal variances was performed. At this time, we were not interested in whether the experimental or control group had higher or lower scores, but only whether there was an initial difference between the two samples. For this reason, a two-tailed t-test was conducted, which returned a p-value of 0.04, indicating the presence of statistically significant differences between the two samples. As shown in Figure 13, the highest number of correct answers comes from the experimental group, which also has a more widespread distribution compared to the control group. Since the aim of the study was to conduct an analysis which considers two

samples with no statistically significant differences characterising them, a second t-test was performed after eliminating the highest score from the experimental group. The second t-test reported a p value of 0.06, thus allowing us to accept the null hypothesis of there being no significant differences in mean scores between the two samples.

Figures 17, 18 and 19 show the new box plot, strip chart and q-q plots related to the new sample. In each case, we observe a more homogeneous distribution of the data for the experimental group.

FIGURE 17. BOX PLOT OF AVERAGE NUMBER OF CORRECT ANSWERS IN TEST 1 - FINAL SAMPLES

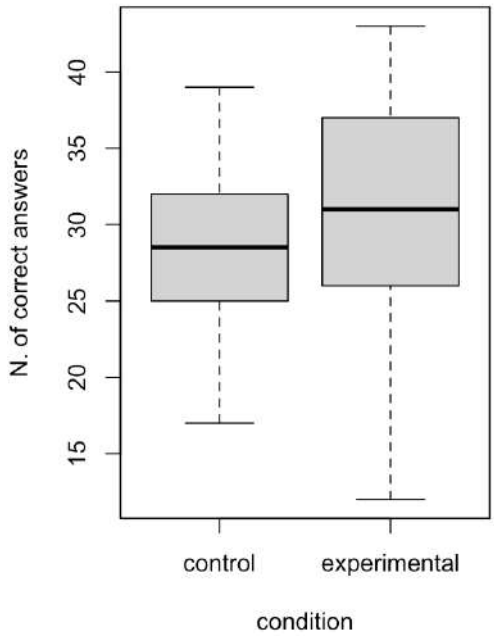


FIGURE 18. DISTRIBUTION OF ACCURACY SCORES - FINAL SAMPLES

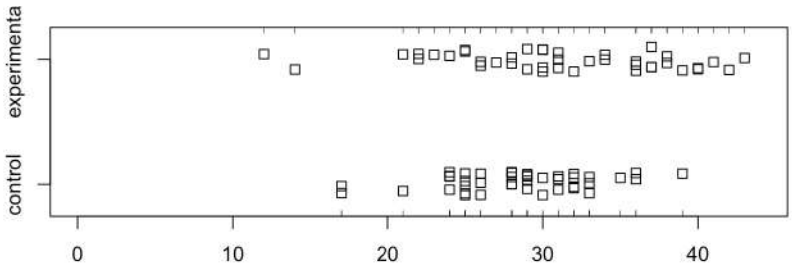
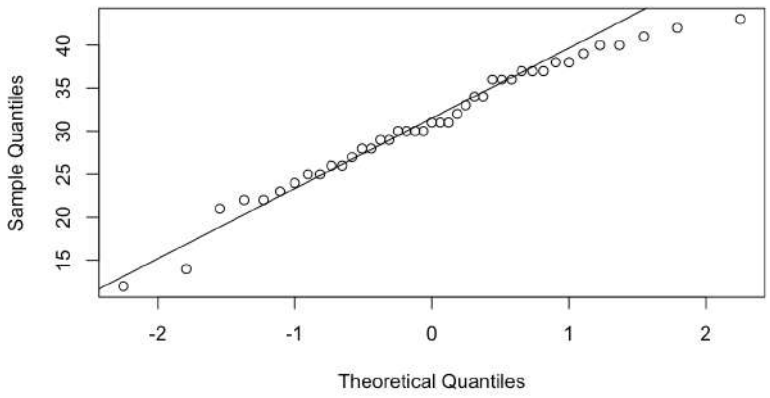


FIGURE 19. NORMAL Q-Q PLOT FOR EXPERIMENTAL GROUP - FINAL SAMPLE



The next paragraph outlines the characteristics of the dataset collected.

3.3.2 Dataset

As typically occurs in longitudinal designs, the dataset resulting from the collected data contains missing values. Table 23 shows the proportion of missing values for each test, which ranges from a maximum of 39,34% to a minimum of 9,84%, after eliminating one series of data as reported in the previous paragraph.

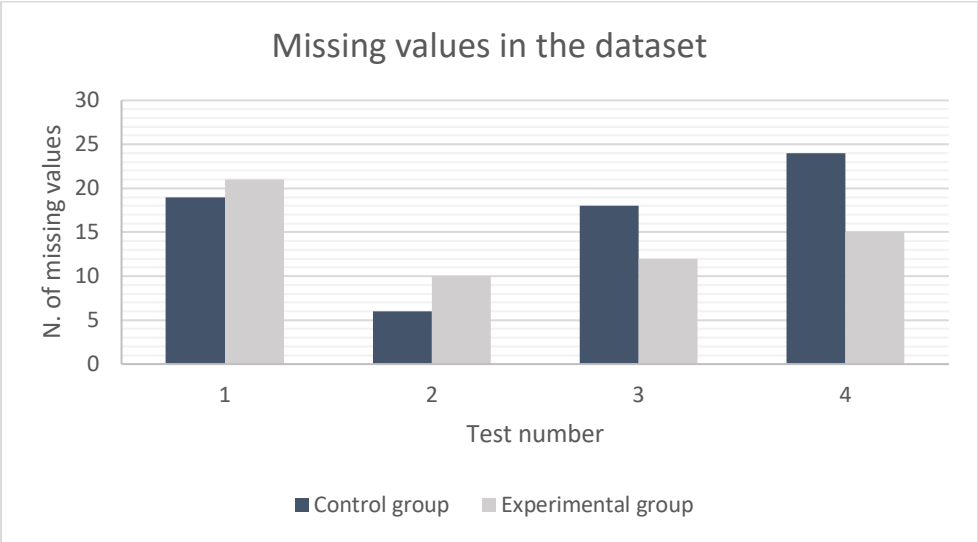
Figure 20 shows how the missing values are distributed across the four tests in both the experimental and control conditions. We see a higher proportion of missing data for the experimental group in Test 1 and Test 2, and on the other hand a higher proportion of missing data in the control group for Tests 3 and 4. In both cases, we notice a similar U-shaped pattern, with missing values decreasing in Test 2, which was administered in May, when the highest rate of attendance to lessons in usually registered because of the first series of language exams being held in mid-June.

The next paragraph describes the characteristics of the participants that make up the identified samples.

TABLE 23. QUANTITY OF MISSING VALUES IN THE FINAL DATASET

Test 1			
Experimental		Control	
OVERALL TOTAL	62	OVERALL TOTAL	61
MISSING VALUES	21 (33,87%)	MISSING VALUES	19 (31,15%)
SUBTOTAL	41	SUBTOTAL	42
Test 2			
Experimental		Control	
OVERALL TOTAL	62	OVERALL TOTAL	61
MISSING VALUES	10 (16,13%)	MISSING VALUES	6 (9,84%)
SUBTOTAL	52	SUBTOTAL	55
Test 3			
Experimental		Control	
OVERALL TOTAL	62	OVERALL TOTAL	61
MISSING VALUES	12 (19,35%)	MISSING VALUES	18 (29,50%)
SUBTOTAL	50	SUBTOTAL	43
Test 4			
Experimental		Control	
OVERALL TOTAL	62	OVERALL TOTAL	61
MISSING VALUES	15 (24,20%)	MISSING VALUES	24 (39,34%)
SUBTOTAL	47	SUBTOTAL	37

FIGURE 20. DISTRIBUTION OF MISSING VALUES IN THE FINAL DATASET



3.3.3 Participants

This paragraph provides the descriptive statistics of the participant samples identified for the study. As can be seen in Table 24, all variables are comparable with no major differences distinguishing the two groups in relation to age, gender, months spent learning Italian before coming to Italy and knowledge of English as a foreign language.

TABLE 24. SUMMARY STATISTICS OF PARTICIPANT SAMPLES

	Control	**Experimental**
N.	61	62
Gender		
(F / M)	38 / 23	47 / 15
Age		
(range / mean / median / SD)	18-26 / 21,01 / 2,33	18-27 / 21,43 / 2,50
Months learning Italian before coming to Italy		
(range / mean / median / SD)	0-12 / 3,72 / 3 / 2,75	0-24 / 4,29 / 3 / 3,93
English as an FL		
(0 / B / I / A)	0 / 34 / 24 / 3	0 / 35 / 23 / 4

Note: 0 = no English; B = beginner; I = intermediate; A = advanced

3.4 Materials

How can native and non-native corpus data be incorporated into second language learning syllabus? The following paragraphs describe the method adopted within the present study in relation to the identification of learning aims and the development of learning materials for both the experimental and control groups.

3.4.1 Corpus data

This study is based on data derived from the Longitudinal Corpus of Chinese Learners of Italian (LOCCLI), an Italian learner corpus of Chinese L1 native speakers (Spina, 2017),

and the Perugia Corpus (PEC), a native reference corpus for Italian (Spina, 2014) (see Table 25).

The PEC is used both directly and indirectly. In the first case, through the extraction of the concordances related to the identified learning aims in order to create learning activities for the classroom. In the second case, through the DICI-A, a dictionary of collocations built for learners of Italian as a foreign language and based on the PEC (Spina, 2010b). The DICI-A was used to identify the list of verb-noun collocations that are most frequently used and most dispersed in Italian.

The LOCCLI (see Table 26) is used directly to analyse the errors made in verb-noun collocations, and to serve as a basis for the creation of classroom activities based on error correction, as well as for the selection of distractors in the multiple-choice section of the collocational competence test.

The data of the two corpora were used in various amounts and ways in the different components of the study. This can be seen in the Table 27, and is described in subsequent paragraphs.

TABLE 25. PEC – PERUGIA CORPUS (ADAPTED FROM SPINA, 2014)

Text type	**n. texts**	**tokens**	**Mean tokens**	**%**	**types**
Literature	60	3 545 459	59 091	13.38	103 141
Non-fiction	79	2 354 996	29 810	8.89	97 795
Press	8 232	5 772 040	701	21.78	147 707
Academic	240	1 113 590	4 640	4.20	54 658
School	4 054	1 257 842	310	4.75	46 981
Bureaucratic	119	1 160 334	9 751	4.38	28 562
Web	27 383	7 359 460	269	27.78	225 190
TOT. WRITTEN	40 167	22 563 721		85.16	704 034
tv	127	1 147 151	9 033	4.33	50.643
film	66	626 487	9 492	2.36	31.967
conversation	1 041	2 158 522	2 074	8.15	67.987
TOT. SPOKEN	1 234	3 932 160		14.84	150.597
TOTAL	41 401	26 495 881	12 517		854.631

TABLE 26. LOCCLI – LONGITUDINAL CORPUS OF CHINESE LEARNERS OF ITALIAN

Text type	**n. texts**	**tokens**	**Mean tokens**	**types**	**levels**	**Data collection point 1**	**Data collection point 2**
Generically themed written essays	350	96 675	276 214	6 150	A1, A2, B1	February-March 2016	July-August 2016

TABLE 27. CORPUS DATA INTEGRATION INTO SYLLABUS

	Identification of learning aims	***Development of learning materials***	***Development of collocational competence test***
LOCCLI	50%	about 10%	50%
PEC	50%	about 90%	50%

3.4.2 Rationale for the focus on verb-noun collocations

Collocations where chosen as the formulaic unit to focus on in this study because of their peculiar linguistic nature and their centrality in language learning supported by research based on various sources of empirical evidence (see 2.2.3). Verb-nouns, in particular, were chosen for a number of reasons.

First, they are the most frequent kind of collocation in Italian L1: a corpus-based analysis of eight types of collocations, categorised according to a part-of-speech criterion on the reference corpus PEC, revealed that verb-noun collocations are the ones that are mostly used, closely followed by noun+pre+noun collocations (Spina, 2016).

Second, they are generally more structurally flexible than other types of collocations: their syntagmatic degree of fixity is, in fact, quite low compared to other types of collocations, since they can be complemented by a number of different lexical units (e.g. English: *take a picture*, *take a quick picture*, *take the most unusual picture you can think of*; Italian: *prendere una decisione*, *prendere rapidamente una decisione, prendere la più*

importante decisione dell'anno) (Masini, 2012), and this may determine an effect on their holistic processing (see 2.2.2) and an additional challenge in learning processes at the level of structural use, and insertion/omission/choice of determiners, for instance.

Third, many high frequency verb-noun collocations are characterised by the presence of a delexical verb, that is a verb that is not used in its literal sense, but that gathers its meaning from the noun it co-occurs with (Wang, 2016). A number of studies have seen this property as a major factor in the learners' misuse of verb-noun collocations (Nesselhauf, 2003; Chan & Liou, 2005; Wang, 2016).

In sum, verb-noun collocations represent one of the key formulaic units set as learning aims for second language learners because of their high frequency in the target language, and yet they are deemed, at the same time, as some of the most problematic ones to learn because the formal and semantic properties that characterise them. These are the aspects that lead to choose this specific type of collocations as the focus for the present study.

3.4.3 Identification of learning aims

The identification of the verb-noun collocations to focus on in the present study followed a procedure based on the following three phases:

1. learner corpus-based error analysis of verb-noun collocations;
2. grouping of most challenging verb-noun collocations in themes;
3. insertion of highly frequent and dispersed verb-noun collocations found in native reference corpus.

In the first phase, all the verb-noun combinations were extracted from the *Longitudinal Corpus of Chinese Learners of Italian* (LOCCLI). The query returned 5651 hits. The combinations were identified as collocations on the basis of Howarth's definition (Howarth, 1996, 1998; see 3.6.1.2) and were analysed in relation to the errors they contained. The verb-noun error analysis categorisation took into consideration the taxonomy of errors found in Nesselhauf (2005) and Wang (2016), and was based on the following categories of collocational errors:

1. errors involving the verb;
2. errors involving the determiner;
3. errors involving the noun;
4. errors involving the whole combination.

The number of collocations containing errors found for each category were respectively 68, 53, 14 and 14, totaling 149 collocations containing errors; errors in the selection of the verb and the determiner were by far the most prominent. Within each error category, various subcategories of errors were identified (omission, insertion, choice, etc.).

At this point, a number of decisions needed to be made. How many collocations should be set as weekly learning aims? How many items should the phraseological competence test contain and how can this be reflected in the weekly learning aims?

In order to have a feasible amount of collocations to be addressed each week in the classroom, a set of 8 collocations was deemed as a possibly good starting point. As a result, considering that the lessons would take place for 8 weeks, the collocational competence test would be formed by 64 items. In order to create a balanced selection of learning aims and a balanced test, half of the items were selected on the basis of the error analysis based on LOCCLI, while the other half were selected on the basis of DICI-A.

A list of 32 collocations more frequently used with errors in LOCCLI was made.

In the second phase, the initial list produced in the first phase was grouped into eight topics, corresponding to the general weekly topics that each lesson would be based on: a una festa ("at a party"), il fine settimana ("at the weekend"), la mia giornata tipica ("my typical day"), la mia casa ("my house"), i miei hobby (my hobbies), le mie ultime vacanze ("my last holidays"), un'amicizia ("a friendship"), progetti per il futuro ("plans for the future"). The themes reflect the most common ones found in most communicatively oriented second language learning coursebooks.

In the third phase, the missing spots for each weekly set identified in the second phase were filled by selecting collocations from DICI-A, and following three main criteria:

1. Highest frequency and dispersion values;
2. Thematic relevance to the identified topics;
3. Presence of a delexicalised verb.

All verb-noun collocations derived from PEC (Spina, 2010b) were selected according to the thematic suitability of the previously identified topics, so as to complete the list. Each set of collocations was used to create experimental and traditional activities, as well devise an appropriate take-home assignment. This three-phase procedure is described visually in

Table 28.

3.4.4 Learning materials design

The following paragraphs describe how the experimental and control activities were developed on the basis on the identified learning aims.

3.4.4.1 Experimental

Because of the nature of the study design, based on a one 1-hour a week lesson in each class, it was impossible to use a computer-based DDL approach; another reason for not choosing this option was that Italian still lacks reference corpora that are suitable for competence levels that are lower than advanced. Since working with pre-intermediate learners, two choices were made:

1. all the activities were going to be paper-based;
2. all the data had to be carefully filtered in order for it to be suitable for the required competence level.

At the time of the study, no computer-based resources had been built with the aim to adapt corpus data to lower competence learners[20]. At the same time, at the University where the study took place, the pre-intermediate group of students was by far the most numerous. As a result, the paper-based version of DDL was used in order to adapt to the scarcity of computer-based corpus resources for learners of Italian, to create a more logistically viable study, considering the high number of classes involved, and finally allowing the researcher / teacher to manually adapt the corpus data according to the specific level of the students. The general procedure that was followed to develop the concordance paper-based materials was the following.

First, all occurrences related to each collocation were extracted from PEC, though only the first 100 were considered. This choice was motivated by the recommendations found in Sinclair (2003). Then, a pattern analysis was conducted in order to identify regularities linking form, structure, meaning and use. Once the pattern was identified, a group of representative concordance lines for that pattern was selected. Finally, the learning activity was developed.

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[20] In the first half of 2018, however, the Italian version of SkELL was released: https://www.sketchengine.eu/itskell-italian-corpus/#toggle-id-2 (last accessed: 27/08/2018).

TABLE 28. LEARNING AIMS IDENTIFICATION PROCEDURE

<table>
<tr><td colspan="4">Phase 1</td></tr>
<tr><td colspan="4">Most problematic collocations for learners as observed in LOCCLI (needs-driven selection)</td></tr>
<tr><td>amare [attività]
ampliare le conoscenze
ascoltare musica
avere [numero] anni
avere fame
avere lezione
dipingere quadri
fare amicizia</td><td>fare colazione
fare esperienze
fare l’artista
fare shopping
fare sport
fare un sorriso
fare un viaggio
fare una foto</td><td>fare una gita
fare una passeggiata
gustare i cibi
leggere un romanzo
mettersi la giacca
prendere aria
prendere il sole
prendere l’autobus</td><td>preparare la cena
raccontare una storia
ricordare un’esperienza
risparmiare soldi
studiare [materia]
suonare la chitarra
vedere un film
visitare la città</td></tr>
<tr><td colspan="2">Phase 2</td><td colspan="2">Phase 3</td></tr>
<tr><td colspan="2">Separation of identified collocations into viable lesson themes</td><td colspan="2">Insertion of collocations derived from PEC (target-driven selection)</td></tr>
<tr><td>Themes</td><td>Collocations</td><td colspan="2">Collocations</td></tr>
<tr><td>a una festa
(“at a party”)</td><td>1. fare amicizia
2. fare un sorriso
3. avere [numero] anni
4. studiare [materia]
5. amare [attività]</td><td colspan="2">6. organizzare una festa
7. fare gli auguri
8. fare un regalo</td></tr>
<tr><td>il fine settimana
(“at the weekend”)</td><td>1. fare una passeggiata
2. prendere il sole
3. fare una gita
4. prendere aria</td><td colspan="2">5. avere fretta
6. pulire casa
7. spendere soldi
8. fare la spesa</td></tr>
<tr><td>la mia giornata tipica
(“my typical day”)</td><td>1. prendere l’autobus
2. fare colazione
3. mettersi la giacca
4. avere lezione</td><td colspan="2">5. rifare il letto
6. mettere la musica
7. fare la doccia
8. mandare un messaggio</td></tr>
<tr><td>la mia casa
(“my house”),</td><td>1. avere fame
2. preparare la cena</td><td colspan="2">3. sbagliare strada
4. trovare la strada
5. trovare casa
6. affittare una casa
7. dividere un appartamento
8. dividere una spesa</td></tr>
<tr><td>I miei hobby
(“my hobbies”)</td><td>1. suonare la chitarra
2. fare sport
3. fare shopping
4. ascoltare musica
5. dipingere quadri
6. fare una foto
7. leggere un romanzo
8. vedere un film</td><td colspan="2"></td></tr>
<tr><td>le mie ultime vacanze
(“my last holidays”)</td><td>1. gustare i cibi
2. visitare la città
3. ampliare le conoscenze
4. ricordare un’esperienza.</td><td colspan="2">5. organizzare un viaggio
6. prendere un treno
7. fare la fila
8. fare la valigia</td></tr>
<tr><td>un’amicizia
(“a friendship”)</td><td>1. raccontare una storia</td><td colspan="2">2. diventare amico
3. avere un dubbio
4. chiedere un consiglio
5. dare un consiglio
6. ascoltare un consiglio
7. trovare una soluzione
8. cambiare opinione</td></tr>
<tr><td>progetti per il futuro
(“plans for the future”).</td><td>1. fare l’artista
2. fare un viaggio
3. risparmiare soldi
4. fare esperienze</td><td colspan="2">5. fare un esame
6. avere un’idea
7. cambiare casa
8. avere successo</td></tr>
</table>

A group of 20, 15 or 10 sentences was selected in order to build the activity in a way that those regularities could be observed in a representative way. For example, both forms *vedere un film* ("to see a film") and *guardare un film* ("to watch a film") can be equally used in Italian, although the first form seems to be largely more frequent. The choice of a concordance-based activity type to be created depended on what was observed in the concordances. At the same time, activities needed to vary both within the lesson (from easiest to more challenging), as well as between lessons or weeks.

However, a number of operations were needed to transfer the results of a corpus query to the activity. The following list describes them:

1. Select sentences that are not too difficult for an A2 level, and from which it is possible to infer the overall context of occurrence and meaning.
2. Select sentences so that the observation of a pattern is possible.
3. Cut/copy into a two column Word table.
4. Separate the two halves so that the verb and noun combination is centred.
5. Eliminate spaces between a word and a punctuation mark or an apostrophe/quotation marks, etc.
6. Transform chunks into sentences.
7. Eliminate long subordinate clauses.
8. Substitute long expressions with single, simpler words so as to make the sentences fit into the table.
9. Modify verb tenses according to A2 level.
10. Correct errors and typos, which would not work well to model the language to the learners, or even typos (e.g.: artcioli instead of articoli; cosi instead of così; etc…)
11. If not enough occurrences of a word combination are found, integrate with combinations that have a similar meaning and formal patterns, and can be integrated into the activity.
12. Ensure that left and right cotexts and logically linked (sometimes they are not, and devoid of a larger context become difficult to understand).
13. Align the text, put the combination in bold, number each sentence.

The paper-based DDL activities that were planned for the experimental groups of classes reflected the results of the error analysis performed on the LOCCLI, as well as being varied so as to allow an interaction with the data through different tasks. They ranged from activities aimed at observing patterns related to the use of determiners, which represented by far the largest category of errors made by learners, to other tasks dealing with the differences between metaphorical and literal uses of collocations, and included also gap-fills and guessing activities. All the DDL activities were sequenced to fit

meaningfully within the lesson and in order to attain the specified learning aims for the week.

The list of DDL activity types is provided in Table 29 while the full list of activities can be found in Appendix D.

TABLE 29. LIST OF WEEKLY DDL ACTIVITY TYPES

Week 1	**Week 5**
Activity 1 – Warmer Activity 2 – Guess the missing cotext Activity 3 – Match the concordance halves Activity 4 – Identify combinations and focus on article use	Activity 1 – Concordance matching Activity 2 – Guided observation of patterns through options Activity 3 - Guided observation of patterns through questions
Week 2	**Week 6**
Activity 1 – Noun anagrams in concordance groups Activity 2 – Focus on article use (presence/absence frequency). Activity 3 – Focus on article use (effect of number of the noun) Activity 4 – Concordance gap-fill (verb)	Activity 1 - Guided observation of patterns through questions Activity 2 – Noun and verb anagrams in concordance groups
Week 3	**Week 7**
Activity 1 – Focus on article use (presence/absence frequency) Activity 2 – Focus on definite article use Activity 3 – Focus on definite article use (number of the noun variable) Activity 4 – Match combination to usage description	Activity 1 – Rewriting underlined words with word combinations Activity 2 – Guided observation of literal vs. metaphorical meaning Activity 3 - Gap fill with options
Week 4	**Week 8**
Activity 1 - Focus on indefinite article use Activity 2 – Literal vs. metaphorical meaning + article pattern Activity 3 - Concordance gap-fill (verb and noun)	Activity 1 – Guided observation of patterns through questions Activity 2 – Concordance gap-fill (verb and noun)

3.4.4.2 Control

The control activities for the sets of collocational learning aims were inspired by some of the most recent publications on learning and teaching collocations (Lewis, 2000; McCarthy, 2005; O'Dell & McCarthy, 2008). They included single line gap-fills, matching exercise with collocations or entire sentences split into half, or transformation exercises. The format of the tasks reflected what the students were already familiar with on the basis on the communicatively oriented textbooks they were already using.

3.4.4.3 Key differences between experimental and control learning materials

The key differences driving the development of the experimental and control learning materials were two:

1. frequency of input of the given collocation;
2. presence of a co-text for the given collocation.

In the case of experimental activities, each collocation was presented in the context of a concordance, thus the learners were exposed to multiple instances of each collocation. On the other hand, the control activities exhibited either only one sentence example for each collocation, thus showing it with its co-text, or devoid of a context and cotext. Examples of comparable lesson plans and lesson activities for week 4 of the study can be seen in Appendixes A and B.

3.4.5 Lesson planning

The series of lessons was named "Combinazioni di parole – Lezioni con Luciana" (Combinations of words – Lessons with Luciana), in order to avoid the technical term of *collocations* and favouring the expression *word combination,* considering that its meaning would probably be more immediately transparent for pre-intermediate Chinese learners. Both experimental and control lessons followed the same structure (see Table 19). After the first two weeks of using single sheet handouts, stapled groups of sheets turned out to be much easier to manage. All the lessons were planned according to specific teaching and learning sequences, reflecting the most used principles in TESOL, as can be found in CELTA training courses. An effort was made to produce learner-centred activities, based on collaborative group work. Sometimes the groups were randomly formed by the teacher, while at other times they reflected the students' seating arrangements.

The class would be normally divided into teams, with a winning team being declared at the end of each lesson. The lesson started by creating small groups of three or four students, by assigning a colour or a word to each student, say blue, green, and red, and then inviting all the blue students to gather in one corner, all the green students to gather in another corner, and so on. Each team would then engage in the exercises. They would share opinions about right and wrong answers, and then turn the page to find the solution.

This way, the teacher's input was minimised and they had the chance to reflect on the use of an article in a certain combination, or the use of a certain verb collocate in a given combination. And they would collaborate.

Gamification and setting tight time constraints, though never too tight, stimulated the students' attention and often resulted in an applause for the winning team at the end of the lesson. Before and after the focus-on-form activities, whether concordance-based or not, freer practice activities were planned, so as to have a balanced sequence of activities in order to avoid the students getting bored or tired.

Also, an introductory lesson 0 was taught in order to get to know the students, so that an environment of trust could be established.

Both the experimental and control lessons attempted to implement the following principles:

- Guided discovery;
- Inductive learning;
- Collaborative learning;
- Teacher as guide and facilitator, constantly monitoring and moving among the students in the classroom;
- Regular recycling of word combinations through recap games and homework.

An initial warm-up phase was planned for both groups. This usually consisted in a quick game or brain teaser aimed at introducing the learning aims for the week. Only in week 1, the game was aimed at introducing the notion of concordance. This was done by showing the classroom a large printed sheet of concordance lines with a missing right cotext and eliciting from them what the sheet of paper showed. Once the learners had said what it was, the second phase started, namely the matching of eight groups of concordance lines. The lesson then continued from there. As shown in Table 19, the beginning and ending of the lesson were the same. The sample lesson plan with activities provided in Appendixes A and B show the typical differences that would be put into place in order to differentiate the two groups of classes.

3.5 Research instruments

The following paragraphs describe the two main data collection tools used in this study, namely the collocational competence test and the end-of-course questionnaire. The choices made in terms of how the two tools were developed are presented with reference to the relevant literature.

3.5.1 Phraseological competence test

Various assessment methods have been implemented to test phraseological competence at different levels of knowledge (Ebrahimi-Bazzaz, Samad, bin Ismail, Noordin, & Educational Studies, 2012; El-Dakhs, 2015; Gyllstad, 2005, 2007; Hosseini & Akbarian, 2007; Jaén, 2009; Supatranont, 2005). In order to try to capture both definitional and transferable knowledge of collocations in a balanced manner, the present study opted for a format divided into three parts:

a. 32 multiple choice items, using the language and the errors found in LOCCLI as distractors;
b. 32 gap-fill items, with sentences adapted from the native corpus PEC;
c. a collocational table like the one designed by Gyllstad (2005).

As a result, the total number of items forming the test was 82. Similarly to Supatranont's work, the first set of 32 items was aimed at eliciting definitional knowledge, while the second set of 32 items was aimed at eliciting transferable knowledge of collocations. The remaining 18 items in the collocational table were aimed as assessing decontextualised transferable knowledge.

The 32 multiple choice items contained four options that the students could choose from. One option corresponded to the correct answer. Another option contained an error found from LOCCLI, such as the choice of a verb collocate, or the omission/insertion/choice of a determiner and so on. A third option contained an error that was not found in LOCCLI but that was deemed to be likely, such as the ones containing high frequency verbs. The fourth option provided was always "none of these", which as indicated in Jaén (2009), may help to reduce guessing. Jaén's recommendation is to make this option true in at least 10% of the items in total, which in our case corresponded to 3.2 items, and this was turned into 4 items.

Each of the four tests were the same though with some differences. In Test 2, a typo was eliminated and two sentences in the gap-fill part simplified. The order of the items was randomised for each test.

The gap-fill items, on the other hand, were all created by omitting the verb collocate. The students were asked to write the missing verb, and no options to choose from were provided.

The collocational table was formed by the highest frequency verbs in the first column and the highest frequency nouns in the top row. The students were asked to write "yes" or "no" according to whether the combination resulting from combining rows and columns was possible or not in Italian.

The elicitation of phraseological competence from the collocational table was however problematic: the lack of context made it difficult for learners to assess the various combinations, so the data collected from this part of the test was not included in the analysis.

No corrective feedback was provided to the students after each administration of the test. The phraseological competence test can be seen in Appendix E.

3.5.2 End-of-course student questionnaire

The aim of the questionnaire was to elicit the attitudes of students from both groups, in relation to the work done on collocations with or without the DDL materials. The questionnaire was divided into a first part containing closed items and a second part containing open questions. The first part was formed by 4 likert scale items aiming to elicit impressions regarding collocations and other general aspects related to the lesson planning and material design. This first group of items was the same for both groups. A second group of 4 likert scale items was specifically designed to elicit impressions about the DDL activities, and these were present only the version of questionnaire given to the experimental classes.

All likert scale items were based on a 6-point scale, ranging from "totally disagree" being valued at 1 to "totally agree" being valued at 6. As recommended in Dörnyei (2010), having an even-numbered scale prevents respondents from choosing a neutral middle option, thus forcing them to choose. Furthermore, all of the likert scale items were worded

either positively or negatively. Again, as recommended by Dörnyei (2010), this should help prevent respondents from marking only one side of the scale, thus forcing them to reflect carefully on the meaning of the item.

This first set of closed, likert scale items was followed by four open questions, which were the same for all the groups. These were aimed at giving the students more freedom to express their thoughts about the lessons, while providing them with the chance to make suggestions of any kind, in terms of ideas for future improvements.

The likert-scale item part of the questionnaire was designed according to the principles outlined in Dörnyei (2010). A six-point scale was adopted in order to avoid a neutral middle choice, thus guiding the respondents to make a choice in one of the two directions of the scale. Moreover, the items were formulated in order to alternate positively and negatively worded options, so as to avoid the respondents choosing responses from only one end of the scale. The analysis included here refers to the data collected from questionnaires administered in the experimental classes.

In order to avoid possible difficulties in understanding the items, and considering that it was not aimed to assess their reading comprehension of Italian, the whole questionnaire was given to the participants in a bilingual Italian – Chinese version, and can be found in Appendix F.

3.6 Data analysis

In this paragraph, we describe how each data collection tool was used to address each of the four research questions formulated, and how the variables involved were operationalised and coded.

3.6.1 Data collection tools and coding of variables

The following table lists the range of data collection tools adopted to address each of the four research questions that drive the present study, along with the respective data analysis performed. Each single phase is described in the next paragraphs.

TABLE 30. RESEARCH QUESTIONS, DATA COLLECTION AND DATA ANALYSIS

Research Question	Data collection tool	Data analysis
1	Collocational competence test	MEM
2	Collocational competence test	MEM
3	Collocational competence test	MEM
4	End-of-course questionnaire	Descriptive analysis

3.6.1.1 Research Question 1

The first research question is related to the overall effects of DDL compared to traditional teaching materials and activities.

The data collected from the phraseological competence test was analysed by means of mixed-effects modelling. The independent variable was the teaching approach, with two levels: DDL vs. traditional. The dependent variables were the scores obtained in the two parts of the test (definitional and transferable) along the four test that were administered. The order of the items was randomized at each administration of the test. The scores were measured in terms of accuracy, with two values: correct and incorrect. In the gap-fill part, responses that differed from the target collocation but that were deemed acceptable within the context of the test item were marked as correct. These items were 7 out of the total of 32.

3.6.1.2 Research Question 2

The second research question looks into the role that two different properties of the identified collocations, semantic transparency and L1 congruency, relate to the effects of DDL. The two linguistic variables were both coded through expert native judgments.

Semantic transparency was established by calculating the inter-reliability coefficients among 13 raters. The annotators were all native Italian speakers, having passed at least one Linguistics exam at Masters' level. They were asked to assign one of three categories to each collocation according to a set of criteria defined by Howarth (1998: 47) and

minimally adapted for Italian.[21] Alongside the free combination and collocation options, a third option was provided for the cases in which the rater was not sure about which category a word combination fell into. This way, the chances of assigning a category randomly were lowered, and the resulting annotation stronger. Also, patterns of uncertainty in the annotation could be observed. The cells indicating uncertainty were treated as missing values.

The order of the items to be annotated was randomised for each rater: as a result, each rater worked on an individual list of items so as to avoid any kind of bias deriving from the order of presentation of the items. The 13 raters did not engage in any consensus-building discussion prior to the annotation (Plonsky & Derrick, 2016, p. 13).

The chosen inter-rater reliability coefficient was Krippendorff's alpha. This coefficient is widely used for nominal data, with any number of raters and any number of categories, on datasets including missing values (Krippendorff, 2004).

Although there seems to be no universally accepted standard for interpreting reliability coefficients, a number of studies have tried to establish degrees of acceptability on the basis of empirical evidence rather than arbitrary criteria.

Plonsky & Derrick (2016) conducted a meta-analysis of reliability coefficients in L2 studies and proposed a 0.83 threshold as the minimally acceptable estimate for inter-rater reliability. They stated that "estimates near to or below this level should prompt researchers and consumers of research to interpret results with caution and consideration of the error likely to be present" (Plonsky & Derrick, 2016, pp. 10–11). However, in consideration of the fact that the median found in their study and related to Cohen's kappa was quite high (0.87), the authors recognised that in most cases the annotation performed by the raters is likely to have taken place after consensus-building discussions between the researchers and the raters. Even though this practice is rarely reported in the literature,

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[21] The instructions provided were the following: *Per ciascuna combinazione di parole presenti nella colonna A, si decida a quale delle seguenti categorie appartiene: 1 - combinazione libera, in cui le due parole della combinazione sono usate nella loro accezione letterale e ciascuna di esse può esse sostituita senza influenzare il significato dell'altra (es. firmare una lettera / firmare un foglio / spedire una lettera). 2 - collocazione, in cui una delle parole presenti nella combinazione è usata nella sua accezione letterale, mentre l'altra in un significato specifico (figurato o metaforico), e la sostituzione della parola in accezione letterale modificherebbe il significato della parola usata in accezione non letterale (es. prendere l'aereo / prendere una penna). X - classificazione incerta, per i casi cui non si riesce a classificare la combinazione né nella categoria 1, né nella categoria 2. Si prega di inserire 1, 2 o X nelle caselle nella colonna "tipo". Grazie mille per l'aiuto!*

the fact that this median is high leads the authors to suggest that this practice is in fact frequent, thus producing an upward bias in the results of their meta-analysis, which inevitably influences their recommendations for the acceptable threshold of reliability estimates. In any case, the meta-analysis by Plonsky & Derrick did not include studies containing Krippendorrf's alpha. It constitutes, nonetheless, a step forward in clarifying the issue: before their study, in fact, other thresholds of acceptability found in literature were arbitrary and were not empirically based: the recommended values were 0.61 for moderate and 0.81 for substantial agreement in psychiatry studies, and 0.71 for moderate and 0.90 for substantial agreement in L2 studies (Plonsky & Derrick, 2016, p. 3).

But there are also other, non meta-analytic studies tackling the issue. In their comparative study of Fleiss' K and Krippendorff's alpha, Zapf et al. refer to an older, widely used though arbitrary threshold indicated in Landis & Koch (1977), which corresponds to 0.61 (Zapf, Castell, Morawietz, & Karch, 2016, p. 2). In their coding of semantic transparency, Gyllstad & Wolter (2016) used both Krippendorff's alpha and Fleiss' K, relying on the coding performed by three raters who were linguists specialising in phraseology. It is not stated whether the raters engaged in preliminary consensus-building discussion, though the high inter-rater reliability coefficients reported (.804 and .802) indicate that they may have.

We can ultimately look at the work and recommendations provided by the author of the coefficient we have chosen. In order to determine whether the data has been coded to a degree better than chance, Krippendorff (2004, p. 241) recommends the following acceptability thresholds:

> alpha < 0.667: unacceptable thresholds;
> 0.677 < alpha < 0.800: acceptable threshold only for drawing tentative conclusions;
> alpha > 0.800: acceptable threshold.

It is not clear whether these thresholds are entirely arbitrary or empirically-based. They partially overlap with the previous ones we have discussed, and since they derive from the author of the coefficient that was used in the present study, they were taken as the main guide to interpret the resulting inter-rater reliability coefficients.

Bearing all this in mind, Krippendorff's alpha was computed for the annotations made by the 13 raters, returning a coefficient of 0.484. This value is clearly well below the

minimally acceptable threshold indicated by Krippendorff (2004) of 0.667. For cases such as these, where the reliability coefficient is lower than the acceptable threshold, Loewen & Plonsky (2015, pp. 90–91) provide three possible ways to go: one may negotiate the most problematic cases with the other raters, thus engaging in the previously mentioned consensus-building process by asking the raters to reconsider their coding; alternatively, one may remove the disputed data from the dataset; or, one may include the coding of an additional another rater to the dataset. Since it was not possible to engage in a post-annotation consensus-building process, nor to add an additional rater, we opted for the second option, removing the mostly disputed data from the dataset with the aim to obtain a dataset where semantic transparency was coded with a minimally acceptable degree of reliability (alpha > 0.667).

To this end, only the data annotated with the same category by more than 80% of the raters, so as to mirror the alpha > 0.800 acceptability threshold, was included. This meant selecting annotations that were conducted in the same way by at least 11 of the 13 annotators, and excluding all the others. This selection reduced the initial set of 64 word combinations to a sample of 32. At this point, the resulting alpha coefficient was 0.742. If we consider that the minimally acceptable threshold for reliability coefficients is 0.667, and that anything above 0.800 is considered a solid level of agreement, we are in a position to accept the value of 0.742 as a good indication for considering the coding of our variable of interest sufficiently reliable.

The lists of semantically transparent and opaque word combinations were then compiled. In the cases in which the annotators disagreed, the annotation followed by the majority was the one that was chosen in defining the final coding of the item according to semantic transparency. The final list of word combinations coded on the basis of semantic transparency includes 18 semantically transparent and 14 opaque combinations (Table 31).

Table 32 lists the collocations that were removed from the dataset in order obtain a viable reliability coefficient value for our study.

TABLE 31. SEMANTICALLY TRANSPARENT AND OPAQUE COLLOCATIONS

	Free combinations (semantically transparent)	**Collocations (at least partially opaque)**
1	affittare una stanza	avere un'idea
2	ascoltare la musica	dividere un appartamento
3	chiedere consigli	fare colazione
4	comprare un regalo	fare gli auguri
5	dipingere quadri	fare la fila
6	gustare i cibi	fare la spesa
7	leggere un romanzo	fare shopping
8	mandare un messaggio	fare una doccia
9	organizzare un viaggio	mettere la musica
10	organizzare una festa	prendere aria
11	preparare la cena	prendere il sole
12	pulire la casa	prendere il treno
13	raccontare una storia	prendere l'autobus
14	ricordare un'esperienza	rifare il letto
15	risparmiare soldi	
16	sbagliare strada	
17	suonare la chitarra	
18	visitare la città	

TABLE 32. LIST OF COLLOCATIONS REMOVED AFTER K.ALPHA

List of collocations that were not satisfactorily annotated for semantic transparency and were thus excluded from the dataset	
amare lo sport	fare l'artista
ampliare le conoscenze	fare le valigie
ascoltare un consiglio	fare sport
avere fame	fare un esame
avere fretta	fare un sorriso
avere lezione	fare un viaggio
avere successo	fare una foto
avere un dubbio	fare una gita
avere x anni	fare una passeggiata
cambiare casa	mettersi la giacca
cambiare opinione	spendere soldi
dare consigli	studiare musica
diventare amico	trovare casa
dividere le spese	trovare la strada
fare amicizia	trovare una soluzione
fare esperienze	vedere film

The second linguistic property to be taken in consideration and coded was L1 congruency. An Italian word combination was considered congruent with Chinese if it is characterised the same lexical selections in both languages. L1 congruency was established by asking two expert native Chinese speakers to annotate the list of 64 learning aims for congruency with Italian. The annotation coincided, with the annotators feeling unsure about the same cases, but ultimately deciding in the same way as to whether they were in the presence of L1 congruency or not.

Although the coding of this linguistic property was not as challenging as the previous one, the coding did not take into consideration whether the congruency was present also at the level of determiner: there was a certain degree of variability in this respect, so the presence of this property was established solely on the basis of the kind of lexical selections made in the languages. Table 33 lists the 64 word combinations in two groups according to whether there is congruence between Italian and Chinese: as can be seen, 35 combinations are deemed congruent, and 29 incongruent.

3.6.1.3 Research Question 3

The third research question deals with the different dimensions of collocational knowledge and aims to investigate their role in the development of collocational competence, in both experimental and control groups. The two chosen dimensions are definitional and transferable knowledge. The first is elicited via the multiple-choice section of the test and is connected to an initial, more superficial knowledge of collocations. The second is elicited via the gap-fill part of the test and is connected to a more in-depth knowledge of collocations.

3.6.1.4 Research Question 4

This final research question looks into learner attitudes with respect to how the DDL learning approach was perceived. The data collected through the two-part questionnaire was analysed in terms of mean and standard deviation values for the likert scale items,

while a descriptive analysis was performed for the open-ended questions, aimed to assessing student attitudes emerging more freely from their own words.

TABLE 33. CONGRUENT AND INCONGRUENT COLLOCATIONS

	Congruent	**Incongruent**
1	Affittare una stanza	Avere x anni
2	Amare lo sport	Avere fame
3	Ampliare le conoscenze	Avere fretta
4	Ascoltare musica	Dare consigli
5	Ascoltare un consiglio	Fare amicizia
6	Avere lezione	Fare colazione
7	Avere successo	Fare esperienze
8	Avere un dubbio	Fare una foto
9	Avere un'idea	Fare gli auguri
10	Cambiare casa	Fare la doccia
11	Cambiare opinione	Fare la fila
12	Chiedere consigli	Fare la spesa
13	Dipingere un quadro	Fare shopping
14	Diventare amico	Comprare un regalo
15	Dividere un appartamento	Fare un sorriso
16	Dividere una spesa	Fare un viaggio
17	Fare l'artista	Fare una gita
18	Fare sport	Fare un esame
19	Gustare il cibo	Fare una passeggiata
20	Leggere un romanzo	Fare le valigie
21	Mandare un messaggio	Mettere la musica
22	Organizzare un viaggio	Mettere la giacca
23	Organizzare una festa	Prendere aria
24	Preparare la cena	Prendere il sole
25	Pulire la casa	Prendere il treno
26	Raccontare una storia	Prendere l'autobus
27	Ricordare un'esperienza	Rifare il letto
28	Risparmiare soldi	Sbagliare strada
29	Spendere soldi	Trovare casa
30	Studiare musica	
31	Suonare la chitarra	
32	Trovare la strada	
33	Trovare una soluzione	
34	Vedere un film	
35	Visitare la città	

3.6.2 Statistical procedures

The following two paragraphs describe the statistical procedures adopted to analysis both etic and emic data. References to the relevant literature are made in order to motivate the choices that informed the analysis.

3.6.2.1 Etic data

In order to evaluate the overall effects of DDL in comparison to a non-DDL learning approach, over the administration of 4 tests at 4 week intervals, we used generalised mixed-effects modeling (Cunnings, 2012; Cunnings & Finlayson, 2015; Linck & Cunnings, 2015; Winter, 2013a, 2013b), with successive differences contrast coding (Venables & Ripley, 2002). This method allows to model data collected at different points in time, treating time bins as categorical variables that are part of a series, while taking into account the fact that the outcome variable is binary (in our case, "incorrect", coded as "0", and "correct", coded as "1").

Mixed-effects modeling has been recommended for use in second language research for a number of reasons. First, it allows to incorporate fixed effects and random effects in a single regression model. Fixed effects are predictors or explanatory variables that coincide with our hypotheses and research questions; there are usually controllable and replicable. Random effects, on the other hand, consist of all those factors that cannot be controlled for but that "could hypothetically vary across individual observational units" (Mirman, 2014, p. 62). As explained in Winter (2013a, 2013b), we cannot account for the randomness of a student sitting a test that we use to collect the data for our research who, on that particular day, was nervous for some reason, causing distraction while reading the test items (Winter, 2013a, p. 2).

Random effects can account for by-subject and by-item variation, for instance. In the first case, the model integrates multiple responses for each subject, which are analysed according to each subject's baseline level, and in relation to the previously mentioned uncontrollable factors. In the second case, the model integrates multiple responses for each item, taking into account the fact that these might be influences by idiosyncrasies of the items that are not able to be controlled for.

Second, mixed-effects modeling allows to account for missing values, that are particularly common in longitudinal designs: it does not require any prior averaging or imputation and the analysis is conducted on the raw data, assuming that the data is missing completely at random (Cunnings & Finlayson, 2015, p. 162).

Another interesting characteristic of mixed-effects models is that they are able to incorporate random slopes. Other statistical techniques assume that the effect of a given predictor will be the same on all subjects and items. Adding random slopes, on subjects and/or on items, allows to observe the variability in the effects produced by a predictor, and ultimately provide a much more fine-grained picture of a phenomenon.

Finally, when analysing data that naturally occurs in grouped situations, a nesting factor can be included in the model. This is the case, for example, of a dataset like ours which was collected in 8 classes of students, using the same data elicitation tool. It is a way to look at the data in a more ecological way, considering that every class is unique in some ways and that students within a certain class are likely to be influenced by certain overall group dynamics.

In order for a mixed model to be meaningful, a number of assumptions need to be met. These are:

1. linearity, measured through the residuals, i.e. the deviations of the observed from the predicted values in the model;
2. homoskedasticity, again measured through residuals and indicating that "the variance of your data should be approximately equal across the range of your predicted values" (Winter, 2013, p. 16);
3. normality of residuals, indicating that residuals need to be normally distributed.

Each of these assumptions is tested via diagnostic plots.

In terms of explanatory power of the model, marginal and conditional R^2 (R^2m and R^2c respectively) were. Marginal R^2 refers to the variance explained by the fixed effects, whereas conditional R^2 refers to the variance explained by the model as a whole, and includes both fixed and random effects. The terms "theoretical" and "delta" refer to two different methods used to calculate these values (Nakagawa, Johnson, & Schielzeth, 2017).

The analysis was based on a total of 31,488 data points, including 23,490 observations and 7,998 missing values. The missing values represent approximately 25% of the entire dataset. The participants were 61 for the control group and 62 for the experimental group. A backward selection approach, starting from a maximal model with full interactivity structures, and dropping predictors if non-significant, either alone or in an interaction with other factors was used: predictors that were significant only in interaction with other predictors were kept in the model (Gries, 2013, p. 260). In order to compare the goodness of fit among different models, we used pairwise likelihood ratio test comparisons (Baayen, Davidson, & Bates, 2008). Model selection was performed adopting a significance-based approach in the first instance, and a criterion-based approach for the cases in which two models did not differ significantly (Gries, 2013, p. 260). All analyses were carried out in R (R Core Team, 2016) using the glmer function in the lme4 package, version 1.1-17 (Bates, Mächler, Bolker, & Walker, 2015), the contr.sdif function in the MASS package, version 7.3-50 (Venables & Ripley, 2002), and the MuMIn package for calculating R^2, version 1.42.1 (Burnham & Anderson, 2002).

Whether participants should be treated as a fixed or random effect in mixed effects modeling is an issue that is generally discussed in relation to the specific characteristics of the samples included in a study. As explained in Mirman (2014: 72), "if a factor is interesting in itself and its levels are fixed in the world and reproducible, then they should be considered fixed effects; if the levels correspond to randomly sampled observational units, then they should be considered random effects". However, this is usually interpreted differently according to the sample specifications. Participants belonging to samples with a high internal variability should be treated as fixed effects, in order to better analyse the individual differences characterising them in relation to one another, thanks to the model being able to provide separate estimates for each participant's parameters (Mirman, 2014: 73). On the other hand, participants can be treated as a random effect, if the samples can be said to have been drawn from a homogeneous population, which allows to generalise the findings of the analysis (Mirman, 2014: 75). In our case, being the participants all from a native Chinese language background and all belonging to the same language learning program and to a similar age group, we decided to treat them as a random effect. The same rationale was applied to treatment of "class", that is the variable taking into account the eight classes the participants were divided into.

The dataset used to analyse semantic transparency in DDL effects was a reduced one compared to the one used so far, as it reflected the outcome of the intercoder reliability tests (see paragraph 3.6.1.2). In this case, the total number of observations is 15744, including 4000 missing values, that is 25.40% of the total.

3.6.2.2 Emic data

The analysis was performed treating the collected data as interval data. Whether data collected by means of a likert scale should be treated as interval or ordinal data is debated. Some researchers would agree that a likert scale such as the one we constructed, ranging from "strongly agree" to "strongly disagree", should be treated as ordinal-scaled: we are dealing with a scale of values which we cannot separate according to equally sized intervals. However, one may argue that whether a likert scale can be representative of a scale made of points that are equidistant from each other is a matter of how these points are operationalised. In our case, each point corresponded to one of the following responses: "totally disagree", "disagree", "partially disagree", "partially agree", "agree", "totally agree", which can be seen as an approximation to an interval scale, hence allowing us to treat the collected data with this scale as interval data.

Furthermore, a large number of scholars in the social sciences in general, and applied linguistics in particular, tend to treat likert data as interval data, which the research community has deemed as generally acceptable (Hatch & Lazaraton, 1991). This practice is sustained by studies that have compared methods for ordinal and interval data, resting on the observation that likert scales tend to exhibit both ordinal and interval properties, which had led to obtain similar results whether methods for ordinal data or methods for interval data were applied (Kenny, 1986).

As we saw in 2.1.5.2, a very thorough questionnaire tailored for exploring learner attitudes towards DDL activities was developed and validated by Atsushi Mizumoto, Kiyomi Chujo and Kenji Yokota (2016). However, in the context of the present study we were not able to use this questionnaire because of the specific nature of the treatment contained in this study: many aspects contained in Mizumoto et al.'s questionnaire were not part of the treatment in the present study, and inevitably many of the specific aspects characterising the way in the which we developed the DDL lessons and activities in the

present study were not included in Mizumoto et al's questionnaire. Also, we wanted to experiment with the suggestions provided in Dönyei (2010) concerning the writing of the items, and in consideration of the fact that very little DDL intervention for Italian L2 has been developed so far, we wanted to give the students the possibility to share their opinions, by means of open-ended questions, besides the closed options of the likert scale items. For all of these reasons, we developed an ad hoc questionnaire to cater for the specific characteristics of the present study.

4 Results

This chapter presents the results in relation to the fours research questions of study.

RQ1: How do learning patterns differ, in the development of phraseological competence, when comparing a DDL approach to a non-DDL approach over a period of time?

RQ2: What is the effect of specific linguistic properties of the learning aims, when comparing a DDL approach to a non-DDL approach over a period of time?

RQ3: What is the effect of different dimension of collocational knowledge, when comparing a DDL approach to a non-DDL approach over a period of time?

RQ4: What are the learners' overall attitudes towards DDL activities?

To this end, the chapter is divided in two parts reflecting the two perspectives combined in the study: the etic perspective and the emic perspective. The first one will present the results in relation to overall learning patterns, to the specific linguistic properties of the learning aims and to the different dimensions of knowledge of the learning aims. The second one will present a descriptive analysis related to learners' attitudes toward the DDL approach.

4.1 The etic perspective

4.1.1 Descriptive statistics

This paragraph contains some descriptive statistics of how accuracy changes in terms of mean values and distribution in the two groups across the four tests. Table 34 shows the values for the mean and the standard deviation in the two groups and across the four tests. Starting from identical values in Test 1 (M = 30.90, SD = 7.22), we can see how the mean accuracy values differ the most in Test 3 (41.19 in control group, 37.66 in experimental group), while the standard deviation is highest in Test 3 (8.84/8.50) and Test 4 (8.52/9.02), compared to Test 1 (7.22/7.22) and Test 2 (6.87/7.25).

TABLE 34. MEAN VALUES OF ACCURACY RATES OVER TIME

	Test 1		Test 2		Test 3		Test 4	
	M	***SD***	***M***	***SD***	***M***	***SD***	***M***	***SD***
Control	30.90	7.22	34.33	6.87	41.19	8.84	38.62	8.52
Experimental	30.90	7.22	34.46	7.25	37.66	8.50	35.85	9.02

Figure 21 shows the measures of central tendency and the distribution values, in the form of boxplots, for both the control and experimental groups. The data displayed relates to the total number of correct answers provided in the four tests administered in the groups. After starting at Test 1 with no statistically significant differences (we can observe that in both groups the medians follow a U-shaped trajectory, with the number of correct answers increasing up to Test 3, and then slightly decreasing between Test 3 and Test 4, without getting below the Test 2 values.

However, if we look at Table 35 we see that the medians for Tests 3 and 4 in the control group are both higher than the upper quartile of the distribution in Test 1, suggesting that a significant improvement in number of correct answers may have taken place. This is not the case in the experimental group, though, where the medians in Tests 2, 3 and 4 are never above the upper quartile of Test 1. If we consider in the interquartile range as the difference between the lower (1st Qu. in the figure) and upper (3rd Qu. in the figure) quartiles, we can see this value remains similar in the two groups, with the exception of Test 4 in the control group.

Table 36 provides a summary of the IQR values for the four tests in the two conditions, and we see that Test 4 in the control condition has an IQR of 6, differing markedly from all the other values, and indicating that 50% of the values are concentrated in a narrower span in comparison to the other situations.

FIGURE 21. CORRECT ANSWERS IN CONTROL AND EXPERIMENTAL GROUPS IN THE 4 TESTS

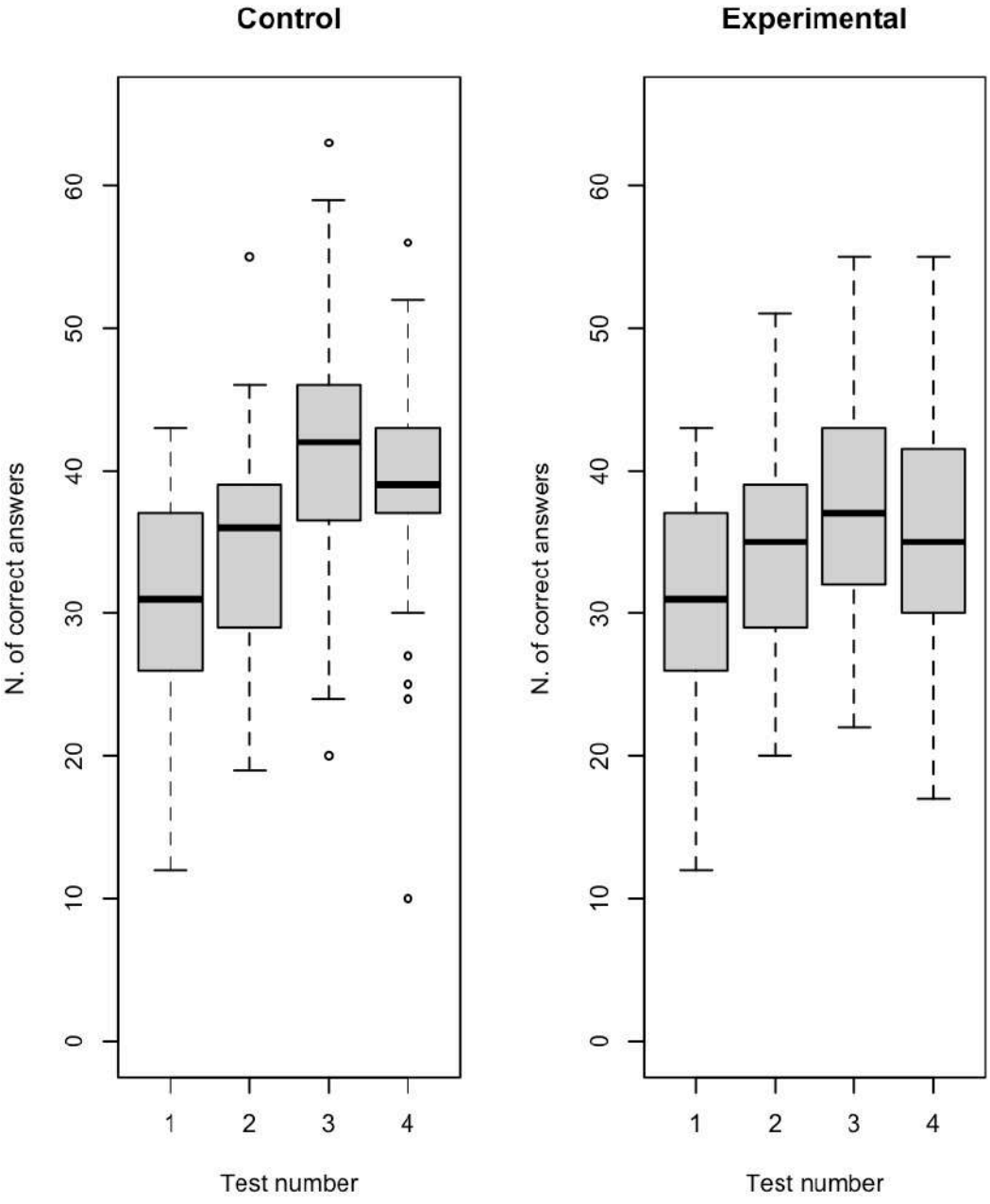


TABLE 35. SIX-POINT SUMMARIES OF DISTRIBUTIONS IN THE TWO GROUPS

Control

test 1	test 2	test 3	test 4
Min. :12.0	Min. :19.00	Min. :20.00	Min. :10.00
1st Qu.:26.0	1st Qu.:29.00	1st Qu.:36.50	1st Qu.:37.00
Median :31.0	Median :36.00	Median :42.00	Median :39.00
Mean :30.9	Mean :34.33	Mean :41.19	Mean :38.62
3rd Qu.:37.0	3rd Qu.:39.00	3rd Qu.:46.00	3rd Qu.:43.00
Max. :43.0	Max. :55.00	Max. :63.00	Max. :56.00
NA's :14		NA's :12	NA's :18

Experimental

test 1	test 2	test 3	test 4
Min. :12.0	Min. :20.00	Min. :22.00	Min. :17.00
1st Qu.:26.0	1st Qu.:29.00	1st Qu.:32.00	1st Qu.:30.00
Median :31.0	Median :35.00	Median :37.00	Median :35.00
Mean :30.9	Mean :34.46	Mean :37.66	Mean :35.85
3rd Qu.:37.0	3rd Qu.:39.00	3rd Qu.:42.75	3rd Qu.:41.50
Max. :43.0	Max. :51.00	Max. :55.00	Max. :55.00
NA's :11		NA's :2	NA's :5

TABLE 36. INTER-QUARTER RANGE VALUES IN THE TWO GROUPS

Control			
Test 1	Test 2	Test 3	Test 4
11	10	9,50	6
Experimental			
Test 1	Test 2	Test 3	Test 4
11	10	10,75	11,50

In terms of missing values, Table 35 provides us with data indicating that the control groups have generally more missing values than the experimental groups. The ratio related to missing values between the control and experimental groups is 14:11 in Test 1, 0:0 in Test 2, 12:2 in Test 3, and 18:2 in Test 4, so the sample sizes are slightly different in the two conditions.

However, we also observe a number of outliers in the control condition, which seem to increase as we proceed from Test 1 to Test 4: none in Test 1, one in Test 2, two in Test

3, and five in Test 4. In the experimental groups, on the other hand, there seems to be no indication of the presence of outliers.

Outliers are defined as “extreme observations”, which “may exert very strong influence upon the results of ensuing analyses” (Raykov & Marcoulides, 2008, p. 69). In other words, there are data points indicating a very different behaviour compared to the majority of all the other data points in the dataset. Boxplots represent them visually by means of points that are 1.5 times outside the IQR above the upper quartile or below the lower quartile.

Common procedures found in the literature as to how to treat outliers are based on two main principles: a) it is necessary to ensure that the data points are valid and not a consequence of errors in manual entry of the data; b) it is necessary to inspect the nature of the data points that constitute outliers. In case b), the analysis can inform the decision as to whether one might keep the outliers in the dataset, or decide to remove them. The latter case would be acceptable in case the inspection reveals the possible presence of a process that is not deemed to be relevant in the analysis being conducted at the time.

In Figure 22 we find the 8 outliers in the dataset labeled with letters of the Latin alphabet. Our goal is to see how these outliers are distributed across the students. Table 37 matches the outliers with the students. We notice that outliers b and d that are found above the upper quartile in tests 3 and 4 respectively, correspond to the same student (138656) who is clearly outperforming the rest of his/her classmates. In all of the other cases, the outliers represent different students each time. As 8 outliers represent the competence data of 7 different students, thus the majority of the total, we are not in a position to remove them from the dataset. In a situation where the number of outliers were evenly distributed across the same students across, we could have possibly considered the option of running a separate analysis on these cases, in order to investigate what processes were taking place and how these were diverging from the processes represented in the rest of the dataset.

FIGURE 22. OUTLIERS IN CONTROL GROUP

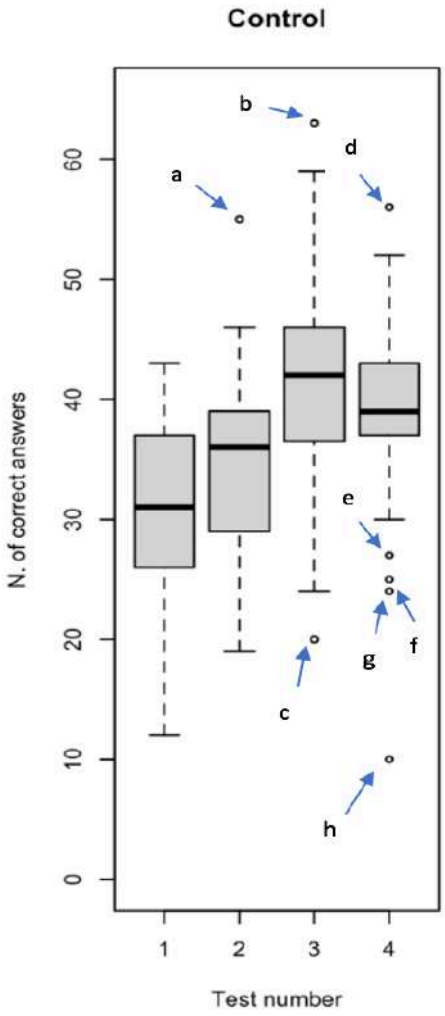


TABLE 37. OUTLIERS ACROSS STUDENTS

OUTLIER	TEST	SCORE	SUBJECT ID
a	2	55	138758
b	3	63	138656
c	3	19	139009
d	4	56	138656
e	4	27	139007
f	4	25	138776
g	4	24	139004
h	4	10	138769

In most cases, in fact, the outliers do not seem to indicate the presence of a process taking place that can be considered inherently different from what is taking place in the rest of the dataset. The fact that missing values increase as we proceed towards test 4, reaching their highest value in test 4 (see Table 35), may be part of the reason why a higher number of outliers are observed. This is another reason why we decide to maintain the outliers in the dataset, including them in the subsequent analysis.

Nevertheless, the picture provided by a descriptive analysis of the collected data is very limited for a number of reasons.

First of all, it considers only the number of correct answers in each Test, disregarding the type of item elicited, in relation to its linguistic properties, and the way in which it was elicited, whether via multiple choice or gap fill items. Second, it provides data that simply describes the information that is present in the dataset, without being able to tell us whether the variables at play can constitute a model with predictive power, that is, whether we can be in a position to make inferences as to what may take place given the conditions that are present in the collected data. The collected data has, in fact, a multilevel structure: having based the study on a repeated measures design, we have multiple responses for each participant and multiple responses for each item type.

To this end, we proceed with an analysis based on generalised linear mixed-effect modeling, which is able to use our collected data to build statistical models of predicted probabilities of accuracy.

4.1.2 Overall DDL effects

The model included condition (control and experimental) and time (a, b, c, d) as fixed effects, where “a”, “b”, “c” and “d” stand for “test number 1”, “test number 2”, “test number 3”, “test number 4” respectively. Random effects of participants and items were included on all time terms. Random slopes to account for varying effects of the predictors on the participants and on the items were also included (Baayen et al., 2008); this allows us to estimate the fixed effects accurately in relation to by-subject and by-item variability, thus minimizing the chance of Type I errors (Matuschek, Kliegl, Vasishth, Baayen, & Bates, 2017). Time “a” was considered as the baseline. As mentioned in 3.6.2.1, model selection was based on a backward selection approach, eliminating non-significant

predictors starting from the maximal level of interactivity, keeping the factors that are significant only in interaction, but not as individual predictors (Gries, 2013, p. 260).

A summary of the likelihood ratio test comparisons will now be provided, but only the estimates of the final model will be reported.

We started with a model (model 1) containing condition and time fixed effects, and a maximal random effects structure was fitted, as recommended by Barr, Levy, Scheepers, & Tily (2013). The random effects included participants, classes and test items, that is all the factors that could vary in the model but that cannot be controlled for.

We then added an interaction term between the fixed effects to see whether this improved the model fit (model 2). The likelihood ratio test indicated that the addition of an interaction term provided a significantly better fit for the data in comparison to model 1, $\chi^2(3) = 25.31$, $p < .001$. In comparing the models, we also considered the Akaike information criterion (AIC), which provides an indication of the amount of variance that is left unexplained by the model (Cunnings, 2012, p. 374). When comparing the two models, the AIC score for model 2 (23974) was lower than for both model 1 (23993), indicating the model 2 provided a better explanation of the variance in the dataset. What this means is that there in an inter-dependence between time and condition producing an effect that is not predictable by the predictors alone.

We then moved on to model the random effects structure.

In order to model the structure of the random effects, we started by adding the random slopes of condition on participants, class, and items, modeling the various possible combinations.

In model 3, the slope was added only on participants; in model 4, on participants and class; in model 5, on participants, class and items; in model 6, on class and items; in model 7, on items only; in model 8, on class only.

All models converged. A likelihood ratio test comparison was conducted among models 3, 4, 5, 6, 7 and 8, indicating models 6 and 7 as significantly better than other ones, $\chi^2(0) = 17.2746$, $p < .001$ and $\chi^2(0) = 17.2748$, $p < .001$ respectively. While the two models did not exhibit significant differences between them, model 7 reported the lowest AIC value (23960), and was thus the one we selected.

We then added a nesting term to class in model 7, in order to account for possible variance in the effect of condition on class, but this did not improve model fit, $\chi^2(0) = 0$, $p < 1$.

As a result, model 7 is our final model. The formula is:

ACCURACY ~ CONDITION * TIME + (1 | STUDENT_ID) + (1 | CLASS) + (1 + CONDITION | ITEM_ID)

The coefficients are shown in Table 38. The values indicate that there was no significant effect of condition on the intercept (*Estimate* = 0.23963, *SE* = 0.27444, *p* = 0.382588), meaning that the overall development of phraseological competence in the two groups was not influenced by the difference in treatment.

Overall, all time contrasts between test 2 and test 1, test 3 and test 2, and test 4 and test 3 are highly significant, in terms of differences in the development of phraseological competence over time.

With regard to interactions, the only significant positive estimate is related to the interaction between condition and the contrast between test 4 and test 3 (*Estimate* = 0.22534, *SE* = 0.09917, *p* = 0.023069). This contrast is connected to the timeframe of four weeks, where no lessons were held, which was used to analyse retention rates.

TABLE 38. OVERALL DDL EFFECTS: FIXED EFFECTS AND INTERACTIONS OF FINAL MODEL

	Estimate	Std. Error	z value	Pr(>|z|)	
(Intercept)	0.23963	0.27444	0.873	0.382588	
CONDITIONEXP	0.05129	0.27487	0.187	0.851973	
TIME2-1	0.53413	0.06658	8.022	1.04e-15	***
TIME3-2	0.66896	0.06770	9.881	< 2e-16	***
TIME4-3	-0.35048	0.07446	-4.707	2.51e-06	***
CONDITIONEXP:TIME2-1	-0.18781	0.09429	-1.992	0.046395	*
CONDITIONEXP:TIME3-2	-0.33348	0.09198	-3.626	0.000288	***
CONDITIONEXP:TIME4-3	0.22534	0.09917	2.272	0.023069	*

Figure 23 contains a visual representation of the predictors in the model. As can be seen, both conditions follow a U-shaped pattern, where predicted probabilities of accuracy

steadily increase up to point c, and then decrease in point d, without however getting lower than point b.

The differences between the two conditions is largest at point a, it then decreases in point b, increases again in point c, and is almost non-existent in point d.

FIGURE 23. OVERALL DDL EFFECTS: PLOT OF FIXED EFFECTS ACROSS CONDITIONS

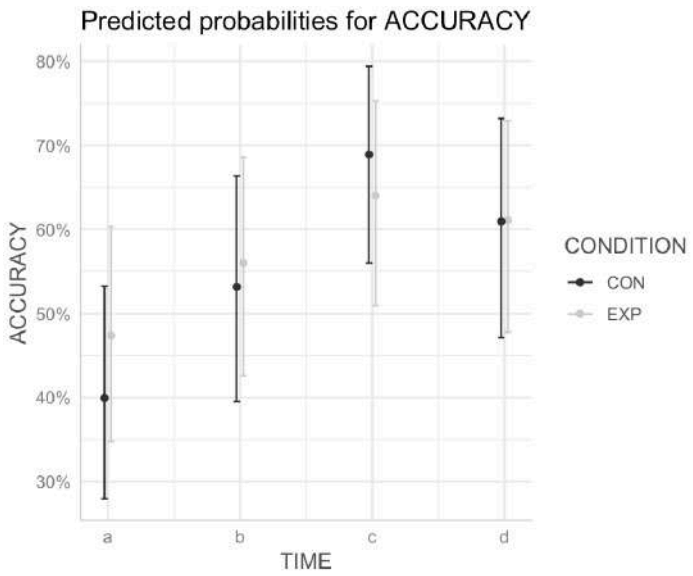


Figure 24 provides a slightly different picture, where we can see that the variation in the control group seems to be much larger when compared to the experimental group. The predicted values, in fact, are much closer, especially in relation to the difference between points c and d, which correspond to the differences between tests 3 and 4, which are our reference to investigate retention rates.

Table 39 shows the values related to the variance in the random effects. We can see that the largest variance value is connected with ITEM_ID, which also includes a slope of condition. The variance in participants (STUDENT_ID) and class are considerably lower, in comparison to items.

FIGURE 24. OVERALL DDL EFFECTS: PLOT OF FIXED EFFECTS IN EACH CONDITION

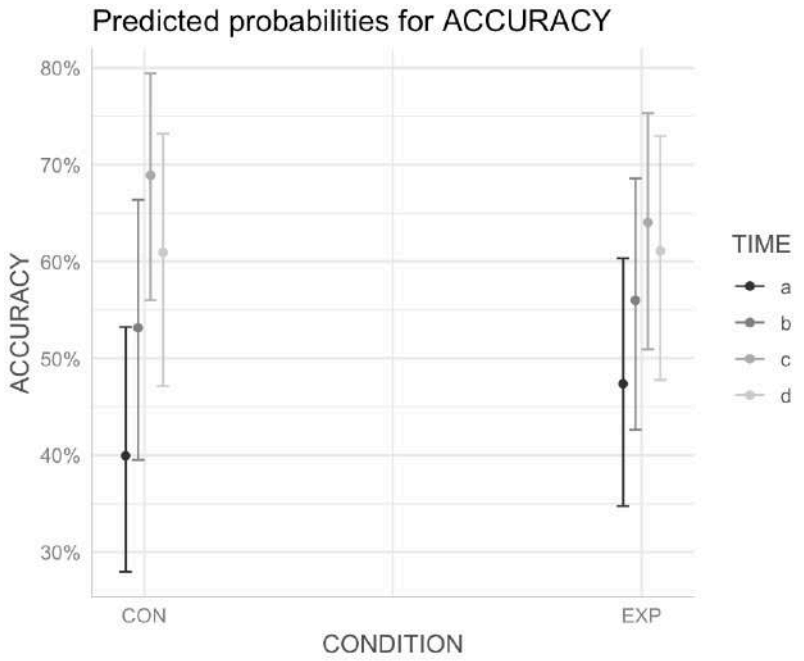


TABLE 39. OVERALL DDL EFFECTS: RANDOM EFFECTS VALUES OF FINAL MODEL

Groups	Name	Variance	Std.Dev	Corr
STUDENT_ID	(Intercept)	0.26497	0.5148	
ITEM_ID	(Intercept)	2.44067	1.5623	
	CONDITIONEXP	0.06282	0.2506	-0.45
CLASS	(Intercept)	0.13164	0.3628	

Figure 25 provides a visual representation of the random effects, where we can observe the variation with respect to class, students and items.

In order to be meaningful, a mixed model needs to meet a number of assumptions. To this end, a series of diagnostic plots were analysed and are shown in Figure 26. In terms of linearity, the graph in Figure 26a shows two lines because the analysis in based on categorical data with two levels. As previously mentioned, linearity can be assessed via a visual inspection of a residuals plot. In 26a., we see that the lines are mostly linear, although they display some elements of non-linearity. This may be due to the fact that an

important fixed effect is missing and might be added in interaction with the fixed effects that are already included in the model (Winter, 2013a, p. 14). Homoskedasticity is displayed in 26b. and indicates that the variance in the data is similar across the predicted values in the model: in order for this to be the case, the residual plot needs to have a uniform distribution, which is what we can see in more or less in b. Finally, normality of residuals (26c.) is checked through a histogram (i) and a q-q plot (ii). In both graphs, the predicted values do not seem to fit a normal distribution perfectly.

FIGURE 25. OVERALL DDL EFFECTS: PLOTS OF RANDOM EFFECTS

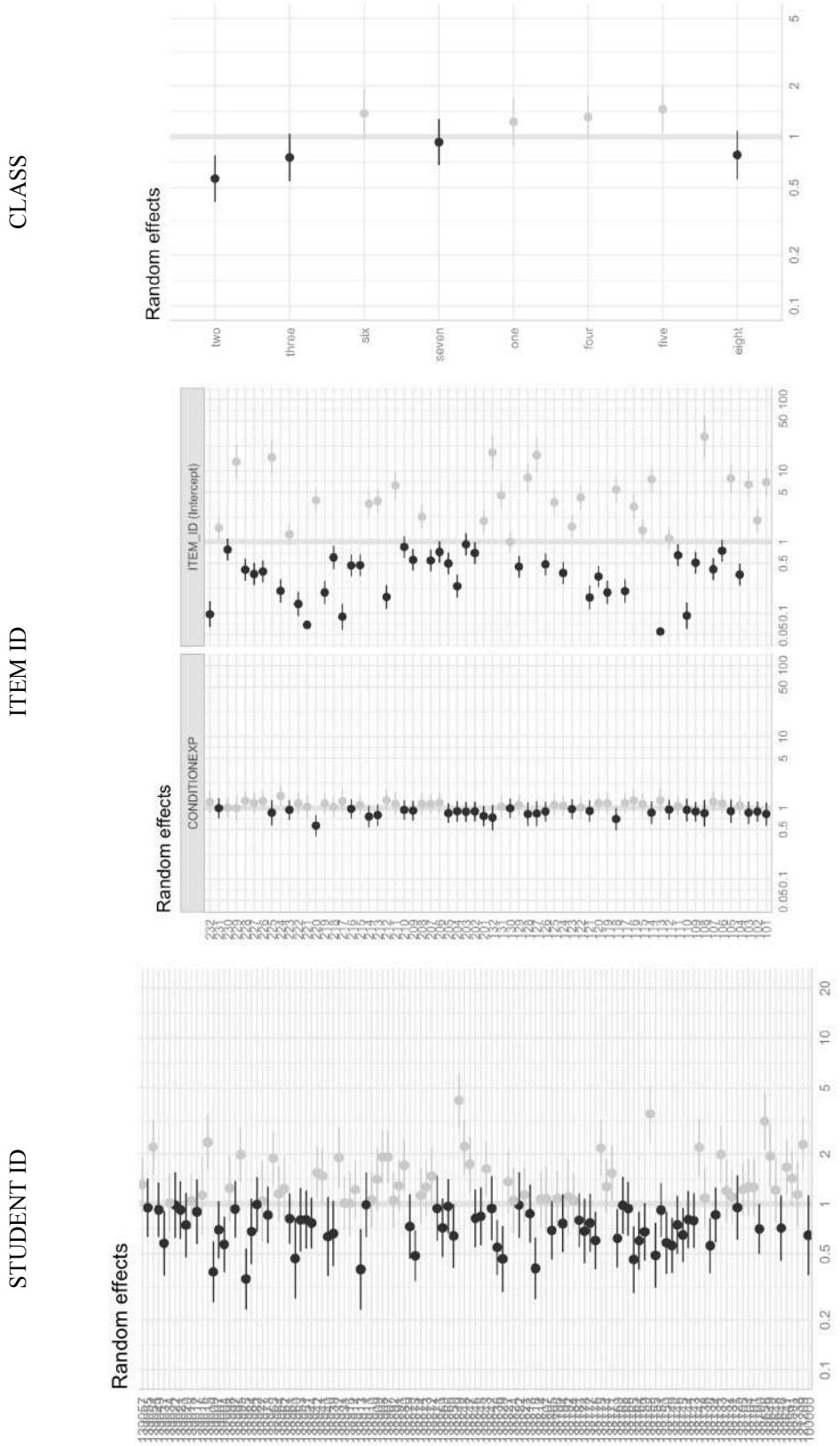
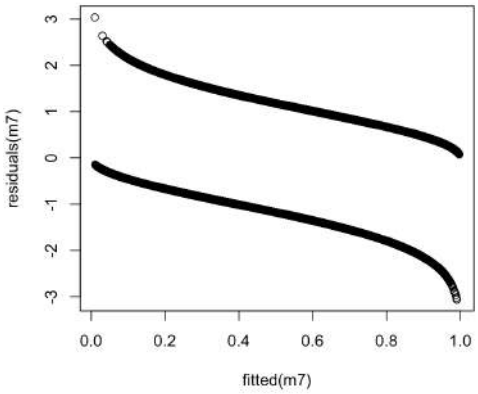
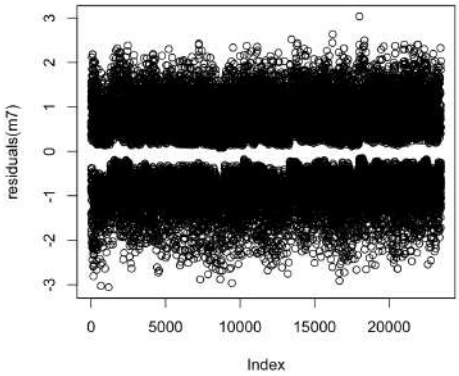


FIGURE 26. OVERALL DDL EFFECTS: DIAGNOSTIC PLOTS FOR CHECKING MODEL ASSUMPTIONS

a. Linearity

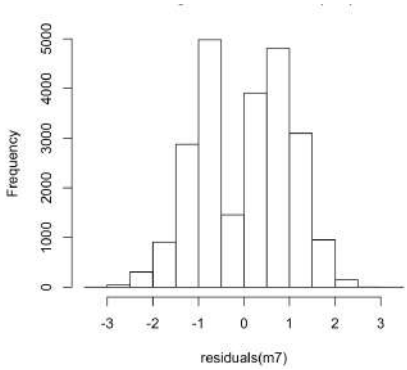


b. Homoskedasticity

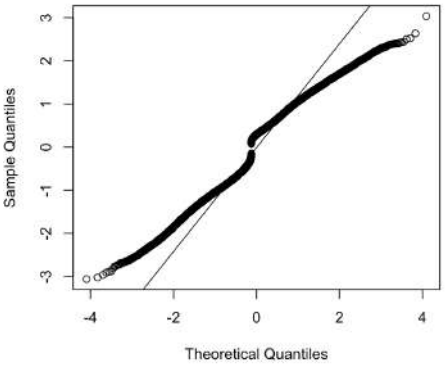


c. Normality of residuals

i. Histogram of residuals



ii. Normal Q-Q plot



Finally, R^2 values for the overall model were computed in order to determine the proportion of variance explained. The values obtained are shown in Table 40. The issue of how R^2 values should be interpreted, as well as the extent to which they can be informative in regards to the quality of a model has been debated (Hair, Black, Babin, & Anderson, 2013). However, what we notice is that R^2m, indicating the variance explained by the fixed effects alone is considerably lower that R^2c, indicating the variance explained by the whole model, including the random effects. The variance explained by the whole model is in fact 41/46%, while the variance explained by the fixed effects alone is 0.2 %. This may indicate that the fixed effects included in the model are unable to adequately

capture the variation in the model without considering the random effects. As shown also by the assumption of linearity not being fully fulfilled, this may indicate the need to consider other fixed effects to integrate within the model.

TABLE 40. OVERALL DDL EFFECTS: R^2 VALUES OF FINAL MODEL

	R^2m	**R^2c**
theoretical	0.02032565	0.4606379
delta	0.01812351	0.4107311

4.1.3 DDL effects related to linguistic properties of the learning aims

This section contains the results related to models that take into account two different properties of the verb-noun collocations set as learning aims: semantic transparency and L1 congruency. Generalised mixed-effect modeling was conducted for each of the two properties. The aim of this part of the analysis was to investigate the role that these properties have in the development of phraseological competence overall, and in relation to DDL effects in particular.

4.1.3.1 Semantic transparency

In order to evaluate the role of semantic transparency, the variable of item type, that is whether the item was opaque or transparent, was included in the model as a fixed effect. We started with model 1 containing time, condition and item type as fixed effects, and a maximal random effects structure containing participants, class and items ID. We then added interactions term all factors (model 2). None of them were significant so we removed them and went back to model 1 and moved on to modeling the random effects structure.

We started by adding a random slope of condition on all terms. In model 3, the slope was added on participants only; in model 4, on participants and class; in model 5, on participants, class and items; in model 6, on class and items; in model 7, on items only;

in model 8, on class only. The likelihood ratio test indicated that model 6 and model 7 as significantly better fits compared to the other models, $\chi^2(0) = 12.4852$, $p < .001$ and $\chi^2(0) = 12.4993$, $p < .001$ respectively. The AIC values indicated that of the two models, model 7 had the least amount of variance unexplained (12019 compared to 12022). As before, the best model fit in this phase is the model with a slope of condition on the random effect of items.

A nesting term on class was added in model 9, but this did not improve model fit. As a result, our final model is model 7, which has the following formula:

ACCURACY ~ CONDITION + TIME + ITEM_TYPE + (1 | STUDENT_ID) + (1 | CLASS) + (1 + CONDITION | ITEM_ID)

Table 41 contains the regression coefficients of the model. As we can see, condition has a negative estimate in relation to the intercept, but this is not significant. Time contrasts are all significant, with only the 3-4 time contrast showing a negative estimate, meaning it affects accuracy negatively. Item type shows a significant negative estimate in relation to transparent items, indicating that opaque collocations are significantly learned better, (*Estimate* = -1.14938, *SE* = 0.48503, $p = 0.01780$). In this model, CONDITION is non-significant.

A visual inspection of the model predictors can be done through Figure 27. Here we notice very similar U-shaped patterns in both conditions and both item types. No major differences are observable in the two conditions in relation to retention rates, and if we look at overall language gains, the values are much more similar between the two conditions compared to when considering overall DDL effects.

TABLE 41. DDL EFFECTS RELATED TO SEMANTIC TRANSPARENCY: FIXED EFFECTS AND INTERACTIONS OF FINAL MODEL

	Estimate	Std. Error	z value	Pr(>|z|)	
(Intercept)	1.28430	0.41170	3.119	0.00181	**
CONDITIONEXP	-0.03635	0.25635	-0.142	0.88723	
TIME2-1	0.38730	0.06599	5.180	2.22e-07	***
TIME3-2	0.33418	0.06452	5.270	1.36e-07	***
TIME4-3	-0.10655	0.06941	-1.535	0.12474	
ITEM_TYPEtransparent	-1.14938	0.48503	-2.370	0.01780	*

FIGURE 27. DDL EFFECTS RELATED TO SEMANTIC TRANSPARENCY: PLOT OF FIXED EFFECTS

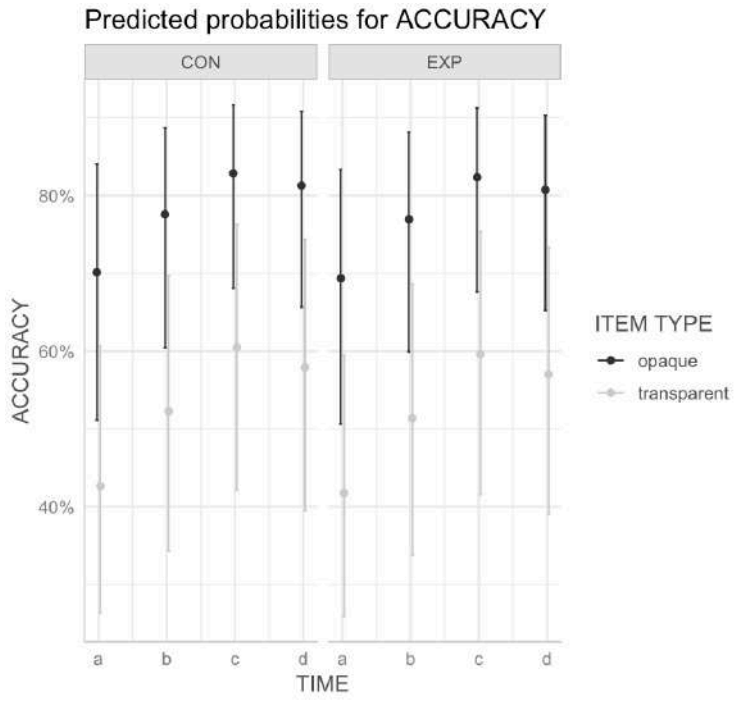


Table 42 provides the values related to random effects in the model. Again, we see that the largest variance is connected to item ID. The random effects structure of the final model contains also a random slope on class: Figure 28 shows this variation graphically.

TABLE 42. DDL EFFECTS RELATED TO SEMANTIC TRANSPARENCY: RANDOM EFFECTS OF FINAL MODEL

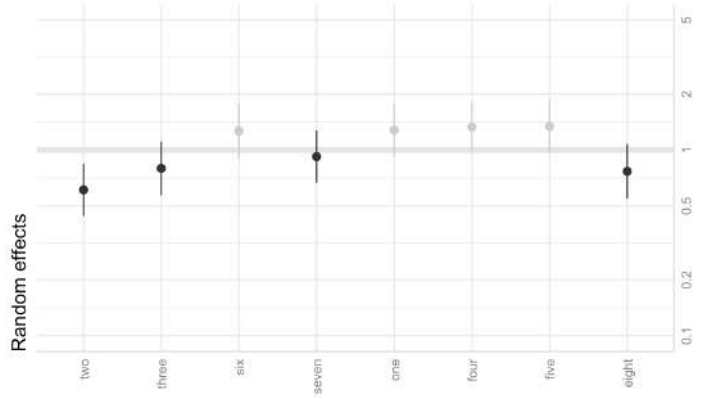
Groups	Name	Variance	Std.Dev	Corr
STUDENT_ID	(Intercept)	0.26518	0.5150	
ITEM_ID	(Intercept)	1.98905	1.4103	
	CONDITIONEXP	0.08444	0.2906	-0.35
CLASS	(Intercept)	0.11232	0.3351	

Model assumptions were checked visually via diagnostic plots. In the case of linearity and normality, we observe pattern that are similar to the analysis related to the overall DDL effects. For homoskedasticity, on the other hand, we notice a different picture: the data is more sparse (Figure 29).

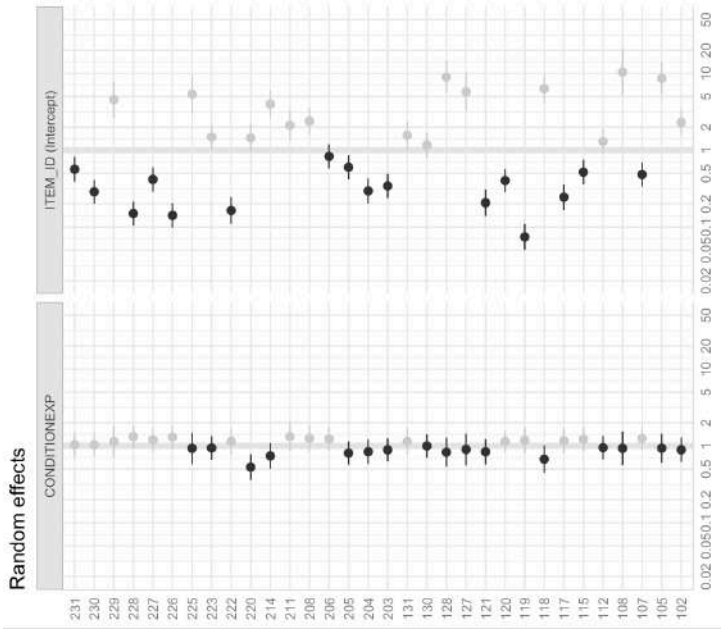
Finally, the R^2 values for the model (Table 43) are slightly higher that the overall model in relation to marginal R^2: the variance explained by the fixed effects alone is now slightly higher (0.7/0.6%).

FIGURE 28. DDL EFFECTS RELATED TO SEMANTIC TRANSPARENCY: PLOTS OF RANDOM EFFECTS

CLASS



ITEM ID



STUDENT ID

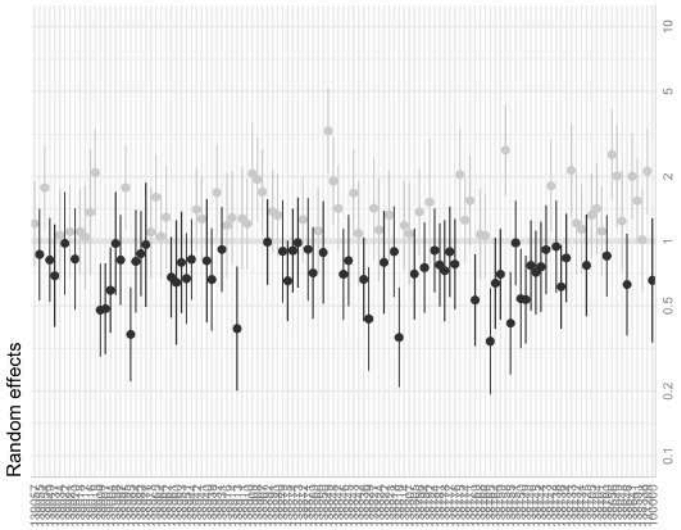
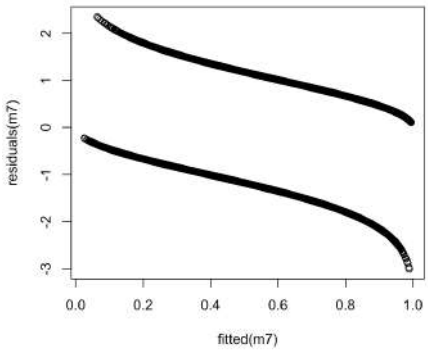
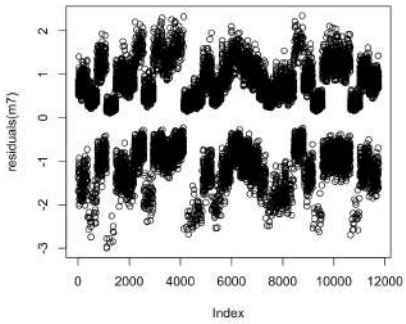


FIGURE 29. DDL EFFECTS RELATED TO SEMANTIC TRANSPARENCY: DIAGNOSTIC PLOTS FOR CHECKING MODEL ASSUMPTIONS

a. Linearity

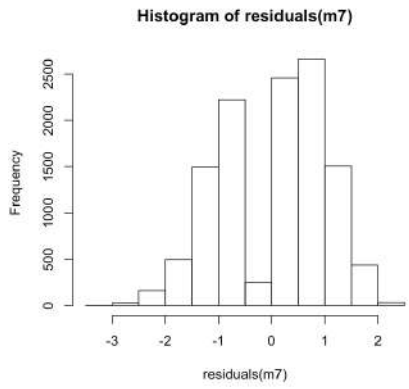


b. Homoskedasticity



c. Normality of residuals

i. Histogram of residuals



ii. Normal Q-Q plot

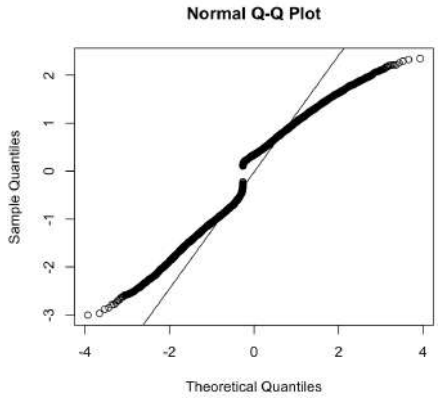


TABLE 43. DDL EFFECTS RELATED TO SEMANTIC TRANSPARENCY: R^2 VALUES OF FINAL MODEL

	R^2m	**R^2c**
theoretical	0.06670448	0.4468217
delta	0.05803966	0.3887802

4.1.3.2 L1 congruency

In order to factor in also L1 congruency into our modeling, we returned to the original dataset, containing the full set of 64 items.

We started fitting model 1 with time, condition and item type 2 as fixed effects, where item type 2 referred to the classification of our verb-noun collocation into congruent and incongruent items. We then added interactions on all terms, creating a maximal level of interactivity, to see whether these would improve model fit (model 2). The only interaction that was not significant was the three-way interaction between all terms (TIME2-1 contrasts: *Estimate* = 0.23101, *SE* = 0.18179, $p = 0.2038$; TIME3-2 contrasts: *Estimate* = -0.09916, *SE* = 0.17905, $p = 0.5797$; TIME4-3 contrasts: *Estimate* = -0.01579, *SE* = 0.19147, $p = 0.9343$). For this reason, only the two significant interactions were kept in the model (model 3), which proved to be a significantly better fit than model 1, $\chi^2(6) = 39.906$, $p < .001$.

We then moved on to random effects structure, adding slopes of condition of each of the random effects. In model 4, the slope was added only on participants; in model 5, on participants and class; in model 6, on participants, class and items; in model 7, on class and items; in model 8, on items only; in model 9, on class only. Model 5 had convergence problems, so the likelihood ratio test was conducted among models 4, 6, 7, 8 and 9. The model comparison indicated models 7 and 8 as the models fitting significantly better than the others, $\chi^2(2) = 16.680$, $p < .001$ and $\chi^2(0) = 16.073$, $p < .001$ respectively. In order to select one of the two, we looked at the AIC value, which indicated model 8 and the one to be preferred, as having a lower AIC value (23939 compared to 23943).

Then we went on to add a nesting term of condition on class to see whether this would improve model fit (model 10). The likelihood ratio test indicated that this did not significantly improve model fit. As a result, model 8 is selected as our final model, and has the following formula:

ACCURACY ~ (CONDITION * TIME) + (TIME * ITEM_TYPE2) + (1 | STUDENT_ID) + (1 | CLASS) + (1 + CONDITION | ITEM_ID)

Table 44 contains the regression coefficients for fixed effects and interactions. In the first case, we see that incongruent collocations have a significant positive estimate on the intercept, larger than opaque collocations seen in the previous paragraph, (*Estimate* = 1.02829, *SE* = 0.24697, *p* = 3.13e-05). This indicates that incongruent collocations are generally learned better in both conditions, and the result is highly significant. In terms of interactions, the most highly significant ones are between the time3-2 contrast and condition, (*Estimate* = -0.32482, *SE* = 0.09189, *p* = 0.000408), and between the time3-2 contrast and item type 2, (*Estimate* = -0.34282, *SE* = 0.09002, *p* = 0.000140): this indicates that the strongest interactions on our outcome variable are present when comparing test 2 to test 3, and in both cases the estimate is negative. The second largest interaction values are detected in time 4-3 contrast, with respect to the interaction with condition, (Estimate = 0.21721, SE = 0.09894, p = 0.028138) and item type 2, (Estimate = 0.20817, SE = 0.09554, p = 0.09554). In both cases, the estimates are positive.

Figure 30 shows the fixed effects graphically. We notice once more the presence of a pattern which is not U-shaped, and it is the one relates to incongruent collocations in the experimental condition. This indicates better retention rates and little loss during the 4 weeks of no lessons. If we observe the difference between points c and d in congruent collocations, although we see a U-shaped pattern in both groups, we notice a smaller difference in the experimental groups compared to the control group.

We now turn to the random effects values, which are contained in Table 45. Once more, we can see that the largest proportion of variance is related to Item ID, which contains a random slope and can see visually in Figure 31.

TABLE 44. DDL EFFECTS RELATED TO L1 CONGRUENCY: FIXED EFFECTS AND INTERACTIONS OF FINAL MODEL

	Estimate	Std. Error	z value	Pr(>|z|)	
(Intercept)	-0.22460	0.27913	-0.805	0.421025	
CONDITIONEXP	0.04964	0.27199	0.183	0.855179	
TIME2-1	0.47042	0.07755	6.066	1.31e-09	***
TIME3-2	0.80595	0.07616	10.582	< 2e-16	***
TIME4-3	-0.43255	0.08236	-5.252	1.50e-07	***
ITEM_TYPE2non-congruent	1.02829	0.24697	4.164	3.13e-05	***
CONDITIONEXP:TIME2-1	-0.18528	0.09457	-1.957	0.050089	.
CONDITIONEXP:TIME3-2	-0.32482	0.09189	-3.535	0.000408	***
CONDITIONEXP:TIME4-3	0.21721	0.09894	2.195	0.028138	*
TIME2-1:ITEM_TYPE2non-congruent	0.15445	0.09131	1.692	0.090725	.
TIME3-2:ITEM_TYPE2non-congruent	-0.34282	0.09002	-3.807	0.000140	***
TIME4-3:ITEM_TYPE2non-congruent	0.20817	0.09554	0.09554	0.09554	*

FIGURE 30. DDL EFFECTS RELATED TO L1 CONGRUENCY: PLOT OF FIXED EFFECTS

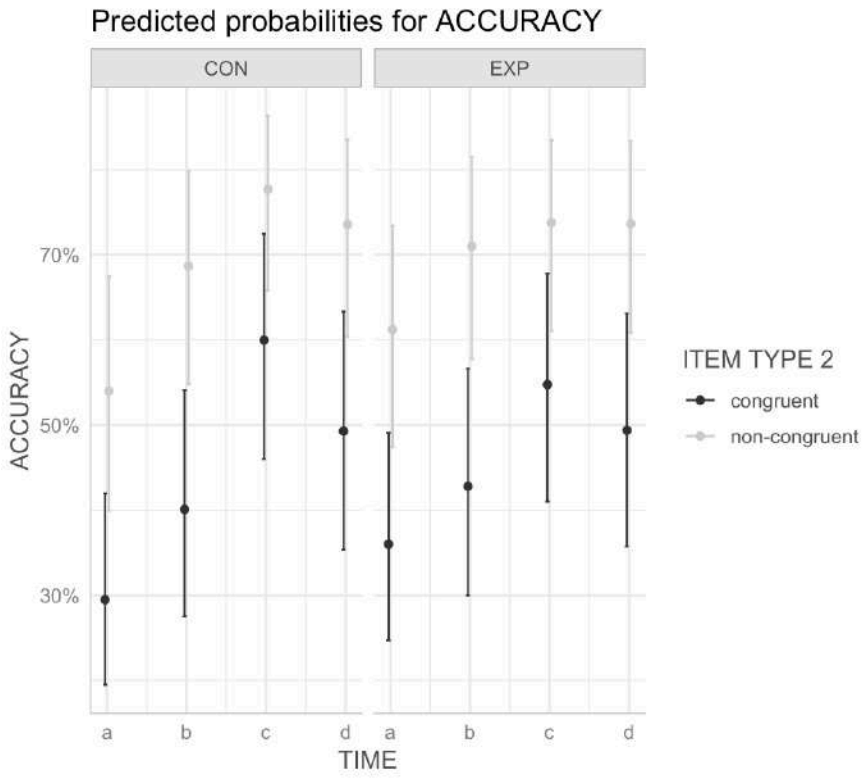
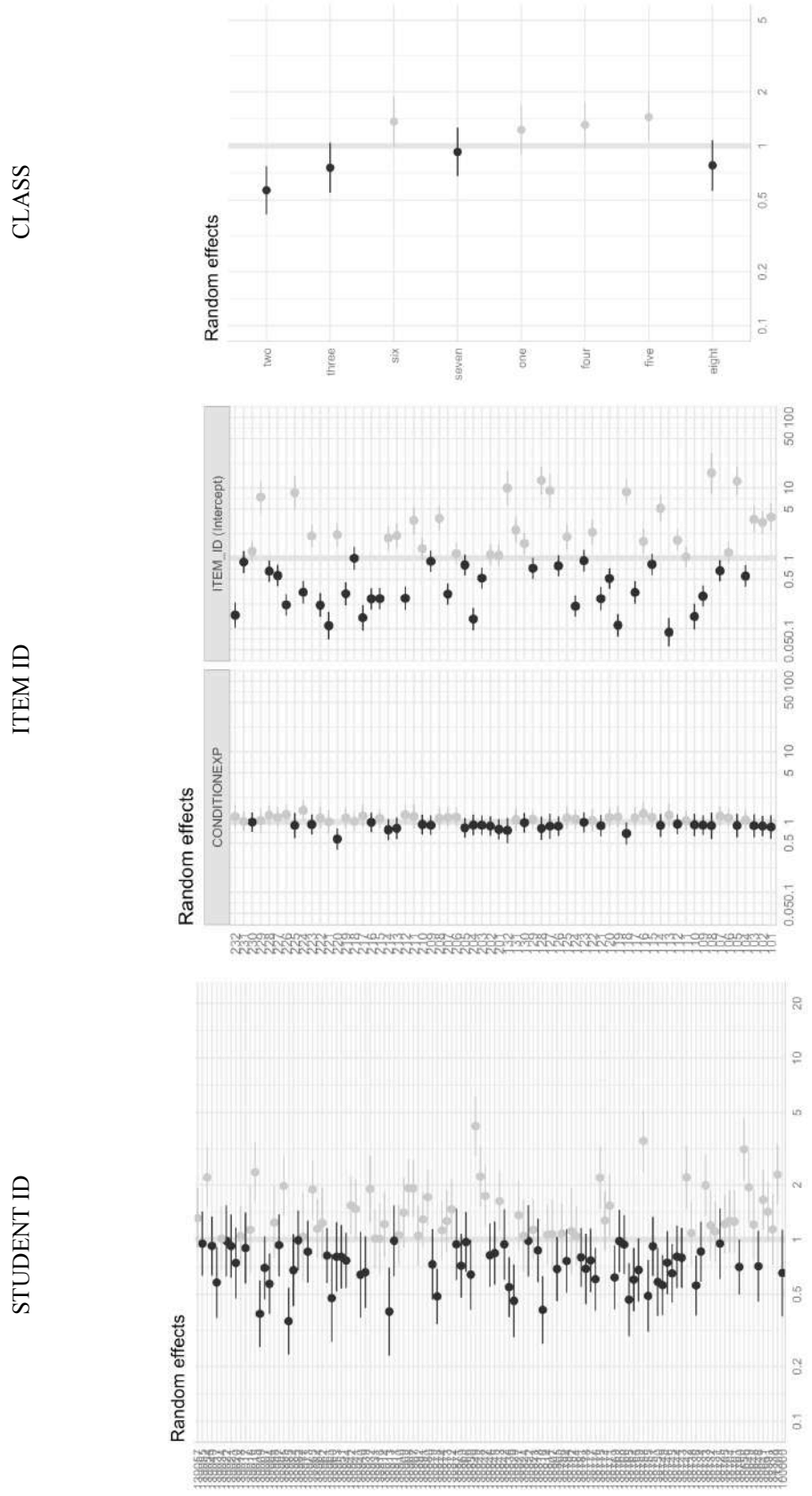


TABLE 45. DDL EFFECTS RELATED TO L1 CONGRUENCY: RANDOM EFFECTS VALUES OF FINAL MODEL

Groups	Name	Variance	Std.Dev	Corr
STUDENT_ID	(Intercept)	0.26491	0.5147	
ITEM_ID	(Intercept)	1.85952	1.3636	
	CONDITIONEXP	0.06187	0.2487	-0.40
CLASS	(Intercept)	0.12971	0.3602	

FIGURE 31. DDL EFFECTS RELATED TO L1 CONGRUENCY: PLOTS OF RANDOM EFFECTS



In order to check the assumptions of the model, we looked once more at linearity, homoskedasticity and normality. In each of these cases, we observe very similar patterns to the ones seen previously for the overall model.

In terms of explanatory power of the model, the R^2 values remained very similar to what observed in the semantic transparency model. The values can be seen in Table 46.

TABLE 46. DDL EFFECTS RELATED TO L1 CONGRUENCY: R^2 VALUES OF FINAL MODEL

	R^2m	**R^2c**
theoretical	0.06707142	0.4354240
delta	0.05950334	0.3862925

4.1.4 DDL effects related to dimensions of collocational knowledge

In order to see whether the dimension of collocational knowledge played a role in the effects of DDL on accuracy in the two groups of participants, the variable of test part was added as a fixed effect in the modeling. Test part was related to whether the data was elicited from the multiple choice items, related to definitional knowledge, or from the gap fill items, related to transferable knowledge.

We started by constructing a model with time, condition and test part as fixed effects, and a maximal random effects structure with participants, items and class (model 1). In model 2, we added all the interaction terms to see whether this would improve model fit. The three-way interaction was non-significant (TIME2-1 contrasts: Estimate = -0.25756, SE = 0.17971, p = 0.151799; TIME3-2 contrasts: Estimate = -0.20961, SE = 0.17536, p = 0.231954; TIME4-3 contrasts: Estimate = -0.04051, SE = 0.18736, p = 0.828830). For this reason, only the two significant interactions were kept in the model (model 3), which was then compared to the first model in order to see whether it was a significantly better model fit, and it was, $\chi^2(6) = 32.554$, $p < .001$.

We then moved to random effects structure. First, slopes of condition were added on each of the random effects terms. As a result, model 4 included a slope on participants only;

model 5, on participants and class; model 6, on participants, class and items; model 7, on class and items; model 8, on items only; model 9, on class only.

According to the likelihood ratio test that was conducted among all the models, the two models showing significantly better fits than the others were models 7 and 8, $\chi^2(0) = 17.4284$, $p < .001$ and $\chi^2(0) = 17.4288$, $p < .001$ respectively.

As the two models did not display any significant differences between them, a comparison between the respective AIC values indicated model 8 as the model leaving the least amount of variance unexplained (23960 compared to 23964).

We then added a nesting term of condition on class (model 10), to see whether this improved model fit, however the likelihood ratio test still indicated model 8 as the best model fit, $\chi^2(0) = 0.4424$, $p < .001$.

Our final model is then model 8, which has the following formula:

ACCURACY ~ (CONDITION * TIME) + (TIME * TEST_PART) + (1 | STUDENT_ID) + (1 | CLASS) + (1 + CONDITION | ITEM_ID)

Table 47 shows the coefficients for fixed effects and interactions. We immediately notice that the dimension of collocational knowledge is not a significant predictor in the model (*Estimate* = -0.19948, *SE* = 0.18730, *p* = 0.286871). All time effects are again highly significant. With regards to interactions, the one between condition and time3-2 contrast is the one exhibiting the strongest interaction (*Estimate* = -0.33305, *SE* = 0.09192, *p* = 0.000291), followed interactions between condition and time2-1 contrasts, (*Estimate* = -0.18945, *SE* = 0.09438, *p* = 0.044721), condition and time4-3 contrasts (*Estimate* = 0.22489, *SE* = 0.09919, *p* = 2.267) and time2-1 contrasts and test part (*Estimate* = 0.22882, *SE* = 0.09017, *p* = 0.011162). Time4-3 contrasts exhibit different patterns of behaviour compared to other contrasts in all cases, with exception of the item part interactions.

Figure 32 shows how the patterns related to definitional and transferable dimensions of collocation knowledge mostly overlap when comparing the two conditions. This indicates that the differences between the two are quite small. However, definitional knowledge seems to attract slightly better accuracy rates compared to transferable knowledge, though, as we saw, this difference is not significant.

TABLE 47. DDL EFFECTS RELATED TO DIMENSIONS OF COLLOCATIONAL KNOWLEDGE: FIXED EFFECTS AND INTERACTIONS OF FINAL MODEL

	Estimate	Std. Error	z value	Pr(>|z|)	
(Intercept)	0.33993	0.28912	1.176	0.239693	
CONDITIONEXP	0.05122	0.27497	0.186	0.852235	
TIME2-1	0.41471	0.08148	5.090	3.59e-07	***
TIME3-2	0.69539	0.08260	8.419	< 2e-16	***
TIME4-3	-0.30541	0.09018	-3.387	0.000707	***
TEST_PARTTRA	-0.19948	0.18730	-1.065	0.286871	
CONDITIONEXP:TIME2-1	-0.18945	0.09438	-2.007	0.044721	*
CONDITIONEXP:TIME3-2	-0.33305	0.09192	-3.623	0.000291	***
CONDITIONEXP:TIME4-3	0.22489	0.09919	2.267	0.023377	*
TIME2-1:TEST_PARTTRA	0.22882	0.09017	2.538	0.011162	*
TIME3-2:TEST_PARTTRA	-0.04171	0.08858	-0.471	0.637713	
TIME4-3:TEST_PARTTRA	-0.09114	0.09392	-0.970	0.331814	

FIGURE 32. DDL EFFECTS RELATED TO DIMENSIONS OF COLLOCATIONAL KNOWLEDGE: PLOT OF FIXED EFFECTS

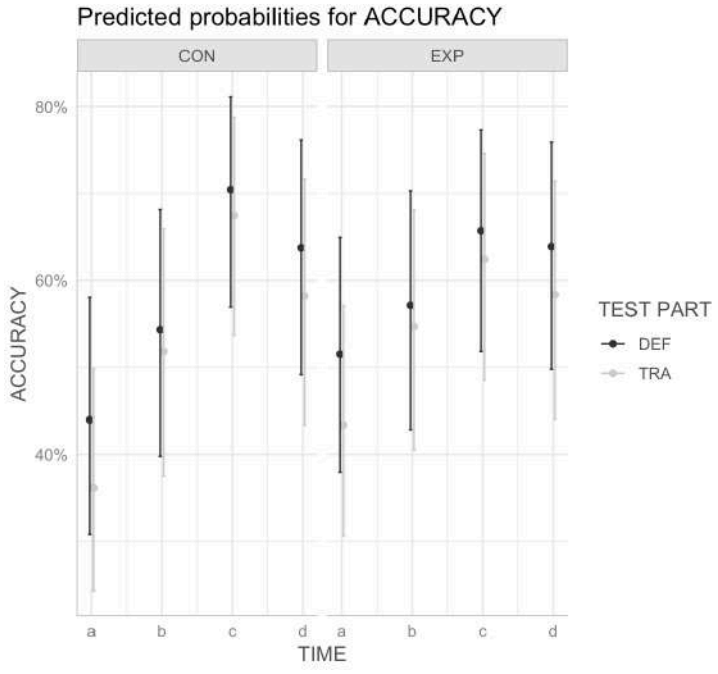


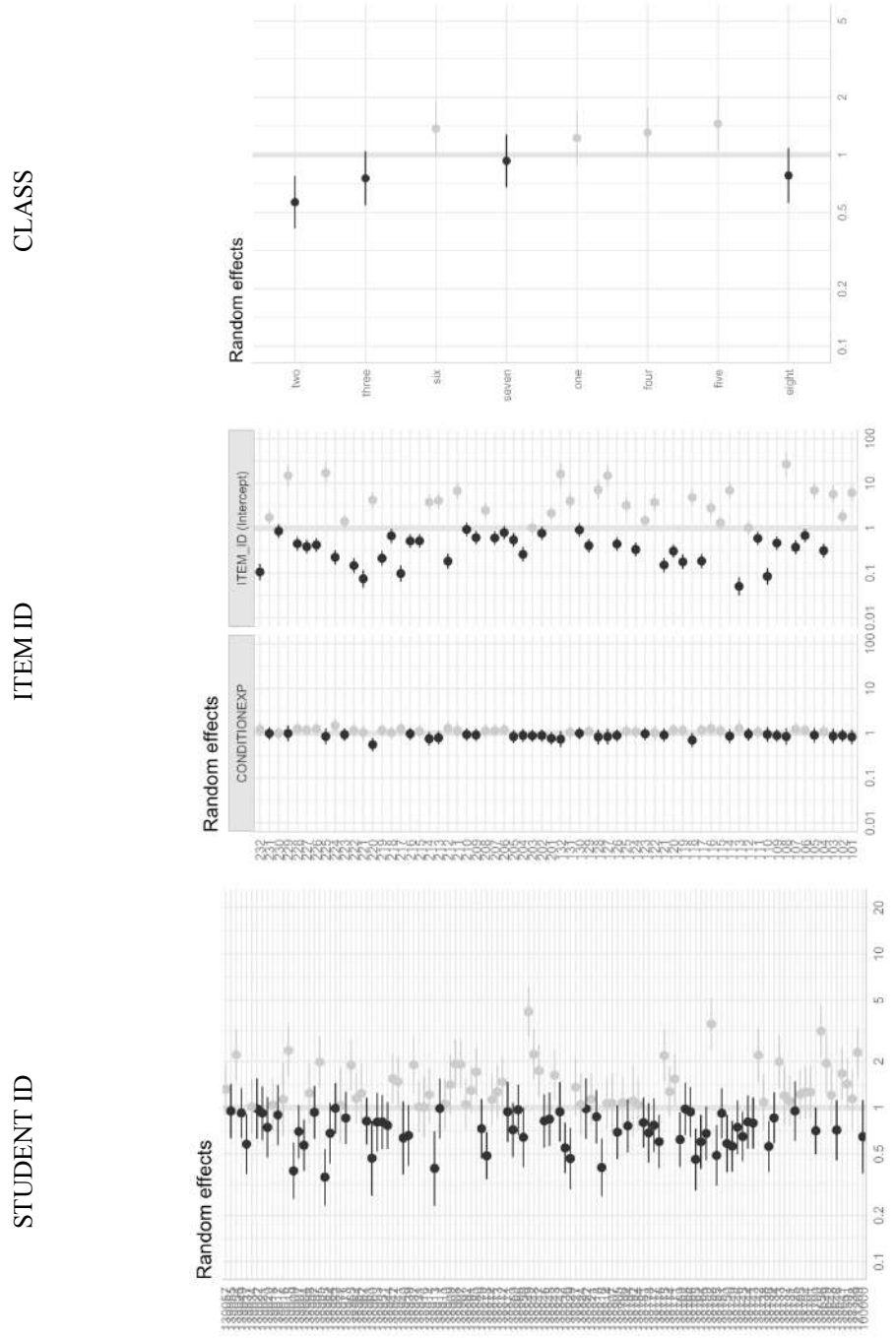
Table 48 shows the values related to the random effects structure. Similarly to the previous analyses, we have a random slope of condition on item ID, which displays very large variance values.

This variability is also confirmed by the random effects plots shown in Figure 33.

TABLE 48. DDL EFFECTS RELATED TO DIMENSIONS OF COLLOCATIONAL KNOWLEDGE: RANDOM EFFECT VALUES OF FINAL MODEL

Groups	Name	Variance	Std.Dev	Corr
STUDENT_ID	(Intercept)	0.26526	0.5150	
ITEM_ID	(Intercept)	2.38512	1.5444	
	CONDITIONEXP	0.06303	0.2511	-0.46
CLASS	(Intercept)	0.13154	0.3627	

FIGURE 33. DDL EFFECTS RELATED TO DIMENSIONS OF COLLOCATIONAL KNOWLEDGE: PLOTS OF RANDOM EFFECTS



Once more, we checked for the assumptions being met, and obtained a similar picture to most of cases seen previously for the overall effects model.

Table 49 contains the R^2 values. As can be seen, these now decrease in comparison to the analysis conducted with the linguistic properties of semantic transparency and L1 congruency as predictors, getting closer to the model obtained in the general analysis on overall DDL effects. Now, once more, the variance explained by the whole model is 49/45%.

TABLE 49. DDL EFFECTS RELATED TO DIMENSIONS OF COLLOCATIONAL KNOWLEDGE: R^2 VALUES OF FINAL MODEL

	R^2m	**R^2c**
theoretical	0.02234182	0.4568210
delta	0.01990430	0.4069812

4.2 The emic perspective

4.2.1 DDL effects on learner attitudes

The following paragraphs contain the results related to the emic perspective of the evaluation of DDL effects, namely how learners reacted to the proposed concordance-based activities.

The results will be reported first with regard to the likert scale items, second with regard to the open-ended questions. They are based on the 50 questionnaires collected from the experimental classes at the end of the pedagogical intervention.

4.2.1.1 Likert scale items

The purpose of the likert scale items was to have a quantifiable measure of the learners' attitudues toward working with DDL activities. They were contained in a questionnaire that was administered at the end of the pedagogical intervention (Appendix F). Following Dörnyei's recommendations (Dörnyei, 2010), the items were formulated either negatively or positively, in order to avoid the students marking only one end of the scale, and an even-numbered scale by chosen in order to avoid a middle, neutral option in order to guide the students to choose a value that would be closer to one of the two ends of the scale.

The first group of four likert scale items (1 to 4) was related to the overall planning of each lesson and the classroom practice in general. The second group of four likert scale items (5 to 8) was specifically focused on the characteristics of DDL activities based on concordances. We will now provide a description of the results related to each individual item.

The first item aimed to investigate whether students felt it was useful to have a focus on learning word combinations in the lessons (Table 50). As we can see, a total of 94% of the respondents agreed about the usefulness of learning word combinations, with most of them (60%) stating that they totally agreed on this. The mean value obtained from the scores was, in fact, 5.42, resting between "agree" and "totally agree", with a standard

deviation of 0.94, which is quite low, indicating a rather even distribution of the values with respect to the mean.

TABLE 50. LIKERT SCALE ITEM 1

Item 1: Learning word combinations was useful				
ANSWER	LIKERT SCALE	%	MEAN	SD
Totally disagree	1	0 %		
Disagree	2	4 %		
Partially disagree	3	2 %	5.42	0.94
Partially agree	4	2 %		
Agree	5	32 %		
Totally agree	6	60 %		

In likert scale item 2 (Table 51), we wanted to look into the learners' attitudes related to working in groups. This took place in every lesson, whether in the form of pair-work, working in small groups if 3-4 students, or working in large groups, which usually coincided with half or one third of the class, depending the size of the class, in order to never exceed five members for each group.

Although the vast majority of students generally disagree that group work slowed down their learning (68%), in comparison to the previous question we notice that the responses are not as polarised: we have a mean value of 2.86, indicating an averaging response sitting between "disagree" and "partially disagree", and a standard deviation of 1.30, indicating a less even distribution of the values with respect to the mean.

TABLE 51. LIKERT SCALE ITEM 2

Item 2: Working in groups with my peers slowed down my learning				
ANSWER	LIKERT SCALE	%	MEAN	SD
Totally disagree	1	10 %		
Disagree	2	42 %		
Partially disagree	3	16 %	2.86	1.30
Partially agree	4	20 %		
Agree	5	8 %		
Totally agree	6	4 %		

Likert scale item 3 (Table 52) looked at whether the comments provided on the homework helped the students feel more confident about their writing. This question returned the

starkest responses, with a mean value of 5.48, and a standard deviation of 0.88, which is the lowest out the 8 items. In fact, a total of 96% of the respondents agreed to the statement contained in the item, and 62% of these agreed "totally".

TABLE 52. LIKERT SCALE ITEM 3

Item 3: The comments on my homework helped me to improve my writing				
ANSWER	LIKERT SCALE	%	MEAN	SD
Totally disagree	1	0 %		
Disagree	2	4 %		
Partially disagree	3	0 %	5.48	0.88
Partially agree	4	2 %		
Agree	5	32 %		
Totally agree	6	62 %		

Next, we looked at likert scale item 4 (Table 53), where the aim was to elicit attitudes concerning the number of collocations that were fitted into the one-hour lesson. Here we have a mean value of 2.12, sitting between "disagree" and "partially disagree", and a standard deviation of 1.05. We can see that the largest proportion of respondents selected "disagree" (46%), followed by those who more confidently selected "totally agree" (28%).

TABLE 53. LIKERT SCALE ITEM 4

Item 4: Engaging in activities on 8 word combinations in one hour was too challenging				
ANSWER	LIKERT SCALE	%	MEAN	SD
Totally disagree	1	28 %		
Disagree	2	46 %		
Partially disagree	3	16 %	2.12	1.05
Partially agree	4	6 %		
Agree	5	4 %		
Totally agree	6	0 %		

In Table 54, we see the values for likert scale item 5, which was aimed to establish whether the students found it confusing to read multiple sentences containing the same

combination. The mean value obtained here is of 3.60, with a standard deviation of 1.56: for almost 60% of the respondents, reading through concordance lines was somewhat challenging, though the largest proportion selected "partially agree", so the answers are not that polarised and exhibit a certain degree of variation in terms of stand deviation (1.56).

TABLE 54. LIKERT SCALE ITEM 5

Item 5: Reading groups of sentences containing the same combination confused me				
ANSWER	LIKERT SCALE	%	MEAN	SD
Totally disagree	1	10%		
Disagree	2	22%		
Partially disagree	3	10%	3.60	1.56
Partially agree	4	26%		
Agree	5	20%		
Totally agree	6	12%		

In likert scale item 6 (Table 55) we wanted to see whether the students felt that the groups of sentences presented in the concordance-based activities helped them to understand how to use the combinations being learned in the future. Here, we notice a definite polarisation of the responses, with a mean of 5.20 and 92% of the respondents generally agreeing, and 50% of these selecting "totally agree". Also, the standard deviation is lower than for the previous item (1.14 compared to 1.56), indicating a more compact distribution of the responses.

TABLE 55. LIKERT SCALE ITEM 6

Item 6: The observation of groups of sentences containing the same combination has helped me to understand how to use that combination in the future				
ANSWER	LIKERT SCALE	%	MEAN	SD
Totally disagree	1	2%		
Disagree	2	4%		
Partially disagree	3	2%	5.20	1.14
Partially agree	4	6%		
Agree	5	36%		
Totally agree	6	50%		

In likert scale item 7 (Table 56) we tried to see whether the perceived usefulness of concordance-based activities in understanding how a combination should be used in

context would extend to the perception of being able to make fewer errors when using it. Here we see that the mean is 5.08, and an even larger proportion of respondents than before thought that this would be the case: a total of 94% of the respondents, in fact, think that thanks to the concordance-based work they are likely to make fewer errors in the future, although, if we compare the distribution of the percentages, we see that in this case a slightly lower proportion responded "totally agree" (40% as opposed to 50%), indicating a greater caution with respect to being to make fewer errors as opposed to understanding how to use the combination, which was investigated in the previous item. The standard deviation here is 0.92, indicating a more homogenous distribution of the answers in comparison to previous items.

TABLE 56. LIKERT SCALE ITEM 7

Item 7: The groups of sentences will help me make less errors in the future				
ANSWER	LIKERT SCALE	%	MEAN	SD
Totally disagree	1	0%		
Disagree	2	2%		
Partially disagree	3	4%	5.08	0.92
Partially agree	4	12%		
Agree	5	42%		
Totally agree	6	40%		

In likert scale item 8 (Table 57) we wanted to go further, and see whether the students could see themselves looking up the meaning of a word or word combination on their mobile phones by means of a smartphone application, provided such a resource for the Italian language were available. The work done in the classroom was based on finding patterns in the list of sentences provided, so this item aimed to see whether the students could imagine an evolution of this. This time, the item was worded negatively, and the item says that a mobile application with groups of sentences for word combinations would be useless.

As we can see, we have a mean score of 2.64, indicating a position between "partially disagree" and "totally disagree"; in fact, 72% of the respondents disagree to some extent that an application of this kind would be useless. However, we notice a standard deviation of 1.55 that is quite higher if compared to the other items.

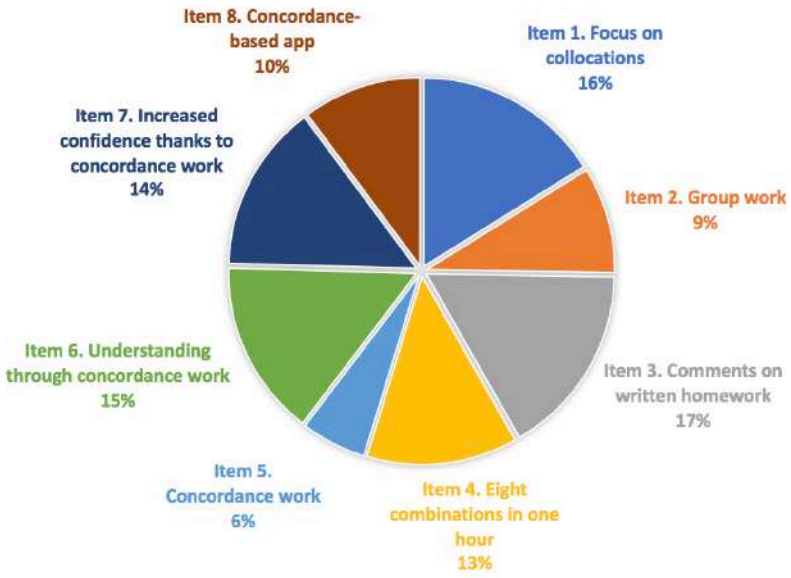
TABLE 57. LIKERT SCALE ITEM 8

Item 8: A new smartphone application with groups of sentences for word combinations would be useless				
ANSWER	LIKERT SCALE	%	MEAN	SD
Totally disagree	1	28%		
Disagree	2	30%		
Partially disagree	3	14%	2.64	1.55
Partially agree	4	14%		
Agree	5	6%		
Totally agree	6	8%		

In order to see which aspects of the treatment determined the most favourable attitudes from the learner, we summarised in Figure 34 the "totally agree"/ "agree" or "totally disagree" / "disagree" responses according to whether the items were worded positively or negatively, thus obtaining a normalised scale. The values corresponding to "partially agree" and "partially disagree" were excluded in order to only look at the attitudes displaying doubtless confidence in the responses.

As can be seen, the largest proportion of favourable attitudes was elicited in relation to comments on written homework (17%), whereas the smallest proportion of favourable attitudes was elicited in relation to concordance work (6%).

FIGURE 34. SUMMARY OF FAVOURABLE LEARNER ATTITUDES TOWARDS THE OVERALL DDL TREATMENT



4.2.1.2 Open-ended questions

This paragraph summarises the responses provided by the students in the open-ended questions of the questionnaire. These were aimed to elicit the students' attitudes regarding more general aspects of the pedagogical treatment, and leave them more freedom, compared to the likert scale items, to comment on their overall experience of the course. We will now provide a description of the results for each individual question, trying to find some common response patterns in relation to specific features characterising the DDL treatment.

In the first open-ended question we asked the respondents what they liked most in the course overall. Three students left the answer blank. Table 58 summarises the responses provided by all the other students according to the key concepts they expressed in their answers, listed in order of frequency of occurrence. There were some cases where the answer given contained more than one concept, which is why the total number of responses found in the table will not necessarily correspond to the total number of questionnaires collected.

As we can see, what the learners seemed to enjoy the most was the fact that the lessons were focused on learning word combinations (18 occurrences). The second aspect they seemed to enjoy the most was the gamified approach that was adopted: 8 students, in fact, wrote that playing games and class competitions while focusing on word combinations was what they liked the most. This is closely followed by the fact that the activities that were proposed allowed them to have a chance to speak and interact with their peers (7 occurrences). All the other aspects that were mentioned were either very generic (everything / nothing / all the activities and the homework), focused on the teacher (nice / patient) or on the writing practice that was set for homework each week and where the teacher provided feedback. A total of four students indicated working with groups of sentences as the aspect they most preferred of the course.

TABLE 58. OPEN-ENDED QUESTION 1

Question 1: What did you like most of the lessons?	
themes	*occurrences*
Learning word combinations	18
Playing games / competitions among different class teams	8
Speaking / working with my peers	7
Everything	5
The comments on the homework and the writing practice involved	5
The teacher (nice / patient)	5
All activities and the homework	4
The groups of sentences	4
Nothing	1
Speaking about my own experience	1
Total	*58*

The second open-ended question in the questionnaire was opposite to the first: "What did you least like of the lessons?". This time, a total of 7 students left this answer blank.

As can be seen from the top column in Table 59, most of the occurring key concepts refer to the fact that everything was enjoyable, which does not in fact provide us with an answer to the question: we have 16 occurrences of this.

The following key concept that emerges with 8 occurrences is linked to the fact that during the course there were too many tests: students wrote that they did not like that an explanation was never provided after they sat each test, which was perhaps expected in the form of a teacher-led corrective feedback, or that they just didn't like sitting tests and that they thought they were not important within the context of the course. Next, we see 5 students writing that time was too short and that they would have liked the lessons to be longer and the overall course to last for more weeks. Reading many sentences with the same combination was confusing for 3 students, while other 3 students did not enjoy working with their peers. All the other occurring key concepts were related to not enjoying the gamified approach to the lessons, the fact that there was homework to do, the focus on word combinations only, the pace of the lesson (either too fast or too slow), and one particular activity involving finding the error in a sentence.

TABLE 59. OPEN-ENDED QUESTION 2

Question 2: What did you like least of the lessons?	
themes	*occurrences*
Nothing / I liked everything	16
Too many tests and never an explanation / I don't like tests / Tests are not important	8
Time was too short	5
Reading many sentences with the same combination is confusing	3
Working with my peers	3
Playing games	2
The homework	2
Learning only word combinations	1
Sometimes activities are too slow	1
Sometimes activities are too fast, no time to talk	1
Searching for the error in a sentence	1
Total	*43*

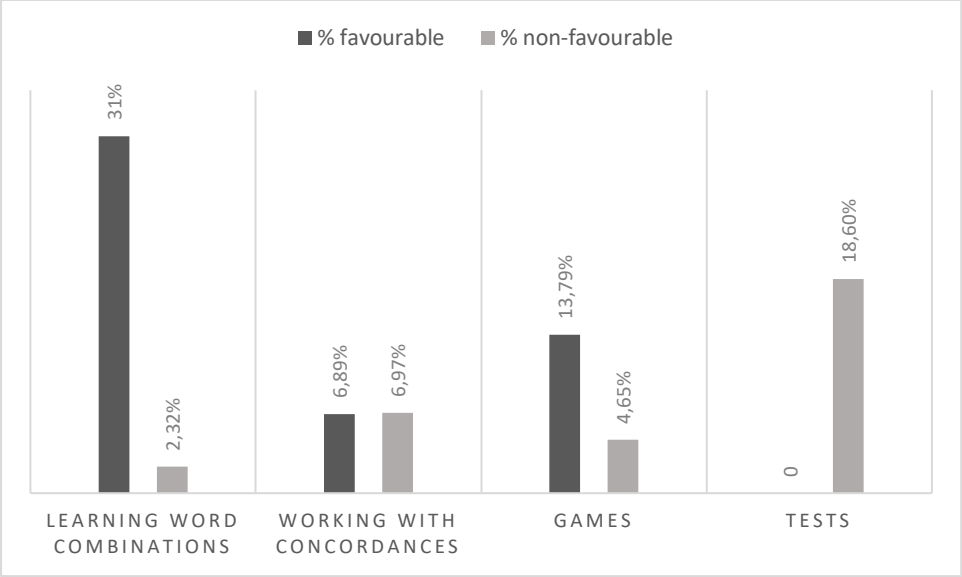
We can now isolate some of the key features characterising the DDL treatment and see the proportion of favourable and non-favourable attitudes from the students, on the basis of both open-ended questions 1 and 2. These features are: learning word combinations, working with concordances, games, tests.

In regards to the first feature, that is learning word combinations, we have 18 out of 58 favourable attitudes from open-ended question 1 (31%), and 1 out of non-favourable attitude from open-ended question 2 (2.32%). For the second feature, working with concordances, we have similar numbers in both open-ended question 1 and 2: 4 out of 58 in the first case (6.89%), and 3 out of 42 in the second case (6.97%). For the gamified aspect of the treatment, we have 8 out of 58 favourable attitudes elicited from open-ended question 1 (13.79%), and 2 out of 43 from open-ended question 2 (4.65). Finally, in relation to the testing, we have no favourable attitudes elicited from open-ended question 1, and 8 out of 43 non-favourable attitudes elicited from open-ended question 2.

Figure 35 shows this data graphically. The fact that the students were required to sit tests regularly, at four-week intervals, comes across as the aspect they least enjoyed. Engaging in lessons focused on word combinations gathered a considerable amount of favourable

attitudes, whereas the idea of working on concordance lines received mixed reactions. Furthermore, the gamified approach was enjoyed by most students, but the differences with those who did not are not as striking as for the aspect of learning word combinations (4.65% vs. 13.79% as opposed to 2.32% vs. 31%).

FIGURE 35. PROPORTION OF FAVOURABLE AND NON-FAVOURABLE ATTITUDES TOWARDS KEY DDL TREATMENT FEATURES



In the third open-ended question we asked the students to describe the course with three adjectives. Some students used less or more than 3, while 3 left this question blank. The adjectives used are listed in Table 60 in decreasing order of the number of occurrences. A vast majority of students wrote that the course was either interesting or useful, with 35 and 30 occurrences respectively. Out of a total of 21 adjectives chosen to describe the course, 18 were positive (interesting, useful, energic/active, happy, wonderful, necessary/fundamental/significant/important, enjoyable, fun, effective, relaxing, short, clear, complete, easy, good, responsible, unforgettable, unique), while only three were negative (boring, difficult, tiring).

TABLE 60. OPEN-ENDED QUESTION 3

Question 3: Describe with lessons with three adjectives	
adjectives	*occurrences*
Interesting	35
Useful	30
Energic / Active	7
Happy	5
Wonderful	5
Necessary / Fundamental / Significant / Important	5
Enjoyable	4
Fun	3
Boring	2
Difficult	2
Effective	2
Relaxing	2
Short	2
Tiring	2
Clear	1
Complete	1
Easy	1
Good	1
Responsable	1
Unforgettable	1
Unique	1
Total	*113*

The last question was aimed at eliciting general opinions about the overall course from the students, by asking to freely express any ideas or suggestions. This time, 23 students left this question blank. Furthermore, answers containing elements that were not relevant to the question, such as "I like learning Italian with Luciana", or "Nothing, everything was fine" were excluded.

Table 61 summarises the ideas expressed by the students. We see that three students ask for more practice of the language, beyond the concordance-based work on the

collocations, and as part of contextualised activities. Three students suggest they would like less of the same tests, and other 3 would like more lessons of the same course.
The other suggestions concern increasing the number of word combinations per lesson, having lessons outside, and playing more games (2 occurrences each), as well as not having any homework to do, having lessons with a faster pace and a longer duration, more exercises and explanations, more feedback on the tests, more grammar and more homework and tests (1 occurrence each).

TABLE 61. OPEN-ENDED QUESTION 4

Question 4: Any ideas or suggestions?	
Themes	*occurrences*
Extend the activities into a story or a dialogue with other students, so that we get freer practice / Contextualise in the real life so that we can remember more effectively	3
Less of the same tests	3
Meet every week / More of this course	3
Eight combinations per lesson could be increased to ten / more combinations	2
Have lessons outside	2
More games	2
I don't want to do the homework	1
Lessons can go faster	1
Longer lessons	1
More exercises and explanations	1
More feedback on the tests	1
More grammar	1
More homework and tests	1
Total	*20*

We can see, once more, how the theme of testing recurs, reinforcing what was shown in Figure 31, that is the non-favourable attitudes of the students towards having to sit tests

at regular intervals of time, without being able to get any feedback straight after sitting them, but only at the very end of the entire course.

4.3 Results summary

In this paragraph we summarise the results of the study, linking them with our research questions (see 2.3). The first three research questions related to etic perspective of the study, while the fourth research question related to the emic part of the study.

Our first research question was formulated as follows:

RQ1: How do learning patterns differ, in the development of phraseological competence, when comparing a DDL approach to a non-DDL approach over a period of time?

In order to investigate the question, we collected phraseological competence data over 13 weeks at 4 week intervals, on the basis of a between-groups design (see 3.1). The accuracy data collected was analysed with mixed effects modeling and contrast coding (see 3.6.1.1).

In the models on overall effects, congruency and dimensions of collocational knowledge condition displays a slightly positive effect on the intercept, whereas in the semantic transparency model in shows a slightly negative effect. In none all of the four models constructed, however, the effect is significant. This means that condition has no significant effect on the two groups, so it does not make learning easier, nor does it constitute a hindrance.

Time contrasts are highly significant predictors in all four models, with the exception of the time4-3 contrast in the semantic transparency model (see Table 41).

The development of phraseological competence follows a U-shaped learning pattern in all models and all conditions, with the exception of incongruent collocations in the experimental condition (see Figure 30): here, we notice a more linear pattern, with timepoint d resting almost on the same level as timepoint c.

The patterns in the overall effects model show different degrees of variation (see Figure 24): the pattern in the control condition covers a larger range of values, from about 40%

to almost 70%, while the pattern in the experimental group covers a more limited range, from about 47% to almost 65%. In particular, when focusing on the differences between timepoint c and timepoint d, which correspond to our operationalization of the notion of *retention rates* (see *Operational definitions of key terms,* p. xv*),* we notice that this difference is systematically narrower in the experimental condition in all four models, with the exception of the semantic transparency model, where these differences are not observable (see Figure 27). Furthermore, the overall effects model indicates that the only significant positive estimate between time and condition is the one related to time4-3 contrasts (see Table 38).

In terms of interacting factors, these emerged as significant and included in all the models, with the exception of the semantic transparency model. Condition was systematically found to have a highly significant interaction with test3-2 (see Table 38, Table 44, Table 47).

When looking at the random effects, the factor exhibiting most variance was systematically item ID (see Table 39, Table 42, Table 45).

The explanatory power of the models, expressed by marginal and condition R-squared values, was markedly higher when considering the whole model, with the inclusion of both the fixed effects as well as the random effects, rather than when considering the fixed effects only: the amount of variance explained by whole model, in each of the four modeling phases, went from a minimum of 38% to a maximum of 46% (see Table 40, Table 43, Table 46).

The predicted values in all models do not seem to perfectly fit a normal distribution (see Figure 26 and Figure 29).

Our second research question, focused on examining the role of the linguistic properties of the learning aims, and was formulated as follows:

RQ2: What is the effect of specific linguistic properties of the learning aims, when comparing a DDL approach to a non-DDL approach over a period of time?

It was then divided into the following two sub-questions:

2.1. How does semantic transparency influence the development of phraseological competence in the two conditions?
2.2. How does L1 congruency influence the development of phraseological competence in the two conditions?

In order to control for semantic transparency and L1 congruency in our study, the list of 64 collocation was coded by 13 raters in the first case and two expert Chinese speakers of Italian in the second case (see 3.6.1.2). In the case of the semantic transparency model, only the 32 collocations which returned a sufficiently reliable coding for semantic transparency amongst the 13 raters where included in the dataset used for the modeling.
What we found was that when isolating single linguistic properties of the learning aims, three different pictures emerge. In the case of the semantic transparency model, based on the reduced dataset, no interacting factors are part of model, though semantic transparency emerges as a moderately significant predictor, indicating that collocations coded as semantically transparency have significantly lower probabilities of accuracy in comparison to the collocations coded as semantically opaque (see Table 41). In this effect, condition does not play any differentiating roles between the two groups.
In the congruency model, incongruency emerges as a highly significant predictor with a positive estimate on the intercept (see Table 44). This indicates that incongruent collocations have a significantly higher predicted probability of accuracy in comparison to congruent collocations. This model also includes two levels of interactions: one between condition and time, the other between time and item type 2. In both cases, the interactions are strongest in relation to time3-2 contrasts.

Our third research question was formulated as follows:

RQ3: What is the effect of different dimension of collocational knowledge, when comparing a DDL approach to a non-DDL approach over a period of time?

In order to address this question, we identified two dimensions of collocational knowledge: definitional knowledge, corresponding to the initial and receptive level of knowledge, and transferable knowledge, corresponding to a more in-depth and productive

level of knowledge. We operationalised the two dimensions of knowledge by means of two different parts of a phraseological competence test: the first part, made of 32 multiple-choice items, was aimed to elicit definitional knowledge, whereas the first part, made of 32 gap-fill items, aimed to elicit transferable knowledge (see 3.5.1).

When looking at the dimensions of knowledge model, we see that test part is a mildly significant predictor only in its interaction with time2-1 contrasts, but not on its own. Once more, the strongest interaction exhibit by condition is the one with time3-2 contrasts (see Table 47).

Overall, although condition is not a significant predictor in any of models, it seems to determine better retention rates, and significantly interacts with time in the models on the overall effects, congruency and dimensions of collocational knowledge.

Our final research questions related to the emic dimension of the study, and was formulated as follows:

RQ4: What are the learners' overall attitudes towards DDL activities?

This question was addressed by means of questionnaire divided into likert scale items and open questions (see 3.5.2).

With specific reference to the pedagogical treatment of DDL, the likert scale items indicated overall positive attitudes towards the different aspects of the activities: 94% of the respondents thought that working on collocations was useful (see Table 50); 68% thought that group work on concordances helped with their learning (see Table 51); an equal percentage of respondents (32%) thought that reading groups of sentences was either confusing or not confusing (see Table 54), nevertheless, a large proportion of respondents (86%) thought that the approach based on multiple sentences helped them to understand how to use the word combination the sentences displayed in the future; 82% were confident that this would help them make fewer errors; finally, 58% thought that a smartphone application with groups of sentences for word combination entries instead of the definitions that are typical of a traditional dictionary would be useful. With the exception of the aspect related to feeling confused in front of the groups of sentences, all values are well above average.

When looking at what the students liked the most (see Figure 34), among the more typical DDL features we notice that concordance work itself was the aspect that was liked the least (6%), possibly because of the initial confusion, while understanding thanks to the concordances and feeling increasingly more confident thanks to the concordance work both attracted more favourable responses (15% and 14% respectively).

With regard to the open questions, learning word combinations emerged as the aspect that was enjoyed the most by the learners with the concordance work somewhat lagging behind (see Table 58). The aspect they enjoyed the least was having to sit too many tests (see Table 59).

A vast majority of the adjectives used to describe the lessons was positive, with "interesting" and "useful" at the top of the list of occurrences (see Table 60).

A number of interesting points were made by the students when asked to make suggestions for further improvements of the lessons, such as extending the activities into longer practice sessions and contextualising the concordance work with real life situations (see Table 61).

5 Discussion

This chapter discusses the results of study presented in chapter 4, in relation to both the etic and emic perspectives. For the former, we will discuss the results relating to the overall effects, to the effects linked with the linguistic properties of the learning aims, and those related to dimensions of collocational knowledge; for the latter, we will consider the results from both likert scale items and open-ended questions. In both cases, we will attempt to interpret the findings in light of the reviewed literature.

5.1 The etic perspective

This section of the chapter will discuss the findings representing the etic perspective of study, considering all four models that were constructed and illustrated in chapter 4.

5.1.1 Overall DDL effects

The first clear finding emerging from our study is that condition does not produce any significant learning outcome in terms of predicted probabilities of accuracy. In all four models we notice no significant differences between the control and experimental in terms of learning gains: both groups seem to develop phraseological competence over time in very similar ways.

The fact that a DDL approach produces no significant differences in learning outcomes when compared to a non-DDL approach can be explained by a number of reasons.

The first one coincides with one of the limitations of study, namely the limited amount of exposure that the learners were able to get from the approach. A one 1-hour lesson a week, of which only about 25 minutes actually devoted to DDL activities specifically, was the most that could be obtained in the context of the present study, and wanting to collect data from a relatively high number of different classes. Eight classes, for a total of about 123 students, can be considered high in terms of what is typical in DDL literature, as is evident when looking at the figures contained in the supplementary materials to Boulton & Cobb (2017): of the 64 studies included in Boulton & Cobb's meta-analysis, if we consider only the studies including a control group, adopting either a within or beween participant design, we have 39 studies, and the mean number of total participants

in these studies is 57, less than half of the total number of participants in the present study. A high number of participants is desirable to see variation over time and among classes, but when a study is conducted by a single researcher, this choice will inevitably come at the expense of some other aspect of the study. In our case, this was the reduced length of the lessons, and the limitation of having only one hour a week at our disposal. The logistics of organising lessons in eight classes, within the scheduled hours of lesson, and as part of other teachers' courses was an additional challenge and restraint in terms of the amount of exposure to DDL that would have been possible to provide to the students. A confirmation of the impact that a restricted amount of exposure can have on the analysis of DDL effectiveness emerges also from the meta-analysis by Lee et al. (2018) we reviewed in 0: a minimum amount of 10 DDL sessions is indicated as the threshold to increase probabilities of observing significant positive DDL effects in comparison to other methods. As a result, the lack of any observable differences might be a consequence of the restrictions in our study, which did not allow to operationalise the difference between the DDL and non-DDL approach more markedly, so that a better threshold of exposure for each of the two conditions could be attained.

Though analogy-based inferencing is something that we do implicitly every day, gaining awareness of it within a formal learning context, such as that of a classroom context, and within a novel approach, such as that of DDL, requires time. And being able to use the strategy, extend it to other learning contexts, developing autonomy in using it requires even more time. So the minimum level of 10 DDL sessions indicated in Lee et al. (2018) is justified, and could be even higher in contexts with lower-proficiency learners.

A second possible reason contributing to the difficulty in detecting significant differences between the two conditions can be related to the overall design of the study. As both Boulton & Cobb (2017) and Lee et al. (2018) highlighted, it is much more difficult to detect positive results when collecting data based on a between-groups design rather than a within-groups design. A between-groups design makes it harder to detect differences in two groups, as "almost any kind of instruction is likely to lead to some effect" (Cobb & Boulton, 2015, p. 491, in ref. to Hattie, 2009 and Oswald & Plonsky, 2010). The reason is simple. In the between-groups design, the fact that two separate groups of participants are exposed to two different treatments introduces a high degree of variation in the comparison. And although all efforts are geared towards ensuring the absence of

significant differences between the two groups at the onset of the study, we are still dealing with two separate groups of participants, and the comparisons that can be made between the two groups will inevitably be challenging and harder to be significant because of their internal variation. On the other hand, in within-groups designs the data related to both the DDL and non-DDL treatment is collected in the same group of learners. This leads to a number of advantages: there is no inter-learner variation because they are all exposed to both approaches; individual development can be monitored in relation to both approaches; at the emic level, learners' impressions can be highly valuable because they can each voice their opinion in relation to both approaches they were exposed to, indicating pros and cons of each.

An additional reason why we observe no significant differences between the two conditions may be related to the fact that all three meta-analyses on DDL highlight that so far DDL seems to be more effective with higher proficiency learners. In our case, the learners were attending pre-intermediate level Italian language course. This, of course, determined the need to adapt corpus data manually and create suitable paper-based DDL activities (see 3.4.4.1) but the experimental activities developed were still a novelty for the learners. Their lower proficiency level, together with the limited amount of exposure to the DDL activities, might have contributed to limiting the significance of a DDL effect, though probably to a lesser degree compared to amount of exposure variable. Nevertheless, some observations can be made in terms of learning patterns and retention rates.

A U-shaped learning pattern is evident in all the models we constructed, which is in line not only with the literature on phraseological development in an L2 (see 2.2.3) but with SLA theories at large: learners tend to increase their accuracy over time, though when tested with a delayed test, which is generally administered after some time spent with no lessons, they seem exhibit slightly decreased accuracy levels, which however do not go as low as the second-last test that was administered, which in our case corresponds to Test 2. The only exception to this pattern was seen in the congruency model (see Figure 30) for incongruent collocations, which seem the only ones to exhibit a more linear pattern, with timepoint d, corresponding to Test 4, not decreasing as in all the other cases. What can this mean?

Incongruent collocations are learned significantly better in both conditions, however their retention rate in the experimental condition is markedly better that the control condition. This means that the learners in the experimental group tend to retain what they have learned generally better than their counterparts. This is visible also in the overall effects model, and in the dimensions of knowledge model. The visual representation of fixed effects in the overall effects model can be seen in Figure 23, and it shows, in fact, how the differences between timepoint c and timepoint d, corresponding to the differences between tests 3 and 4, which we have used to operational the construct of *retention rates* (see *Operational definitions of key terms*), are much smaller in the experimental groups when compared to the control group. A similar pattern can be seen in the dimensions of collocational knowledge model, which can be seen visually in related to its fixed effects in (see Figure 33), where, again, the difference between timepoint c and timepoint d in the experimental group is narrower than in control group.

This might be an effect of the DDL treatment, relying on the structured observation of multiple instances of sentences containing a single combination and thus increasing the frequency on input of that combination. The fact that the DDL treatment implied activities based on collaborative problem-solving, determining a higher cognitive load, may have played a role in leading to overall better retention rates in the experimental group as opposed to the control group.

Another reason might derive from the typographical enhancement of the input, which is indicated by the literature on the development of phraseological competence as a pedagogy-related variable that is able to improve learning (see 2.2.3.2) and is also a typical feature of DDL, which adopts input enhancement through the KWIC format, which in our case is most generally placed in bold character. The kind of operationalisation of the DDL materials may have had an impact on improved memorisation, leading to overall better retention rates.

We now turn to discussing the DDL effects related to single linguistic properties of the learning aims, namely semantic transparency and L1 congruency.

5.1.2 DDL effects related to linguistic properties of the learning aims

5.1.2.1 Semantic transparency

The semantic transparency model of DDL effects was based on a reduced dataset deriving from the coding of semantic transparency from 13 raters (see 3.6.1.2) As for the other models, condition was not a significant predictor, but it in the case, contrary to what was observed in the other models, it was not even significant in the form of interactions with other fixed effects. On its own, however, semantic transparency was a moderately significant predictor, with opaque collocations displaying higher predicted probabilities of accuracy in both the control and experimental conditions (see Figure 27). The general finding, seemingly unrelated to the effect of condition on accuracy, does not seem to be in line with what is generally know about semantic transparency in the development of phraseological competence in an L2.

We have seen how, in terms of variables influencing collocation learning, semantic transparency is assumed to be critical: Wang (2016) and Nesselhauf (2005) assume that collocations, and verb-noun collocations in particular, exhibiting a certain degree of semantic opacity will be more difficult to learn in comparison to collocations that are more semantically transparent, on the grounds that a semantically opaque collocation cannot be decode on the sole basis of decoding the single members that are part of it. Both of these major studies conduct specific analyses on verb-noun collocations containing elements of semantic opacity, though this kind of analysis does not include a systematic comparison between semantically transparent and semantically opaque collocations, in order to see whether one category of collocation is in fact harder to learn than the other, provide all other relevant variables are being controlled for.

The assumption is, however, corroborated by the psycholinguistic study conducted by Gyllstad & Wolter (2016), where both natives and non-natives display processing costs when confronted with semantically opaque collocations, both in terms of reaction times and accuracy rates. In their experiment, Gyllstad & Wolter did include both semantically transparent and non-semantically transparent items, in order to allow for systematic comparisons. However, it remains to be seen how the dynamics of processing can be connected with the dynamics of learnability.

Our findings could contain the effect of a variable that was not controlled for. This variable could be frequency, for instance. Durrant's meta-analysis showed how learners are significantly more sensitive to frequency than MI score values (see 2.2.3.3). It could be the case here as well, provided there be a significant difference in terms of frequency values between the list of collocations coded as semantically transparent, and the list of collocations coded as semantically opaque.

Furthermore, we do not observe any clear differences between the two conditions in relation to retention rates: the differences between timepoint c and timepoint d, is in fact very similar in both conditions. This sets the semantic transparency model somewhat apart from the other three that were constructed, suggesting, to some extent, the possible presence of other dynamics at play worthy of investigation.

5.1.2.2 L1 congruency

The model that was constructed to reflect the influence of L2 congruency in assessing the effects of DDL displayed a highly significant estimate for items coded with this linguistic property (see Table 44). Collocations coded as incongruent, in fact, have a significantly higher predicted probability of accuracy as opposed to collocations coded as congruent. The effect is much stronger than for semantic transparency, as can be seen by the plots overlapping much less than in the semantic transparency model (see Figure 27 and Figure 30). Once more, condition is not a significant predictor.

Nevertheless, it is in this model that we notice, more predominantly, the effect of DDL on retention rates: as previously mentioned, in fact, the pattern exhibited by incongruent collocations in the experimental condition is not U shaped like in other cases, but mostly linear, indicating very little or no loss in terms of accuracy, over the space of 4 week with no lessons at the end of course.

Incongruent collocations are indicated by the literature on the development of phraseological competence as generally more difficult to learn in comparison to congruent collocations (see2.2.3.2). However, an early study by Biskup indicated the cases where the language being learned and the L1 of learner are typologically distant, as cases where the errors produced by an adverse influence from the L1 tend to be fewer than those other cases involving languages that are typologically closer. Our study,

involving Chinese learners of Italian, might fit this case, considering that typological distance between Italian and Chinese, which may make, to the learners, incongruent collocations as more memorable, because they adopt lexical choices they would not find in the own language.

Furthermore, we saw that according to Yamashita & Jiang (2010) the adverse influence of an L1 is also likely to increase in a FL context, rather than a SL one. In our case, the Chinese learners were in a SL context, and this may have been a key factor in increasing the frequency of input of incongruent collocations, thus allowing the learners to go beyond the obstacle of incongruency with their L1.

As for the collocations coded for semantic transparency, here too we might check for the presence of other variables at play, determining the striking difference in terms of accuracy between congruent and incongruent collocations. It might, again, be a variable linked to frequency, provided this dimension differentiates the two lists of congruent and incongruent collocations significantly.

We now move on to discussing the DDL effects related to the different dimensions of collocational knowledge.

5.1.3 DDL effects related to dimensions of collocational knowledge

In our study, we operationalised two different levels of collocational knowledge as reflections of two different parts of the phraseological competence test that was administered to the learners at four points in time. The multiple-choice part corresponded to the initial, more superficial kind of collocational knowledge, while the gap fill part to the more in-depth kind of collocational knowledge. The former is usually associated with receptive knowledge, while the latter with productive knowledge, even in reference to learning aims other than collocations. A number of studies, as we have seen, have adopted these two kinds of test types to elicit definitional and transferable knowledge respectively (Koya, 2005; Jaén, 2009).

The result that is generally obtained is that the receptive or definitional knowledge develops earlier and more easily in comparison to productive or transferable knowledge (see 2.2.3.2). However, when reviewing the literature on DDL we found that the DDL approach in usually more effective in relation to in-depth knowledge of collocations.

This is not, however, the case in our study. As can be seen in Table 47, on its own, the dimension of collocational knowledge is not a significant predictor, though it does produce very mildly significant interactions with time and condition.

This may be due to a number of reasons. First, as previously indicated, the amount of pedagogical treatment the learners were exposed to might not have been enough to determine significant observable difference across dimensions of collocational knowledge. Second, the test itself may not have been suitable to detect the differences between the two dimensions of collocation, despite the fact that it reflected current trends in language testing for collocations. This, however, is a challenging area in the field of DDL research. A more rigorous approach to language testing in DDL, when language testing is used to collect etic data on the effects of DDL, could help in investigating what kind of constructs are specifically elicited by a given test item. The largest body of work in this sense is, to the best of our knowledge, the doctoral dissertation by Gyllstad (2005).

5.2 The emic perspective

This part of chapter will focus on discussing the research findings related to the emic perspective of the study, based on data collected by means of end-of-course questionnaire.

5.2.1 DDL effects on learner attitudes

As we have seen (see 4.2) that learner attitudes towards to the DDL pedagogical treatment were overall positive. We will discuss this in relation to both the likert scale and open-ended questions in the following paragraphs.

5.2.1.1 Likert scale items

The values reflected in the likert items were well over 50% in all cases except one. When the learners where asked whether groups of sentences confused them, 32% of them responded to some extent “yes”, and another 32% of them responded to some extent “no” (see Table 54). This element, together with the fact that concordance work was indicated as the favourite aspect of the lessons only in 6% of cases (see Figure 34) sheds light on a

series of particular aspects of the study, namely the development of the DDL materials, and the amount of exposure that the learners were provided with.

DDL activities were designed thinking about an ideal cline of difficulty within the lesson. However, the lessons were not preceded by any extensive explanation related to corpora, or DDL, or the overall rationale behind the approach that was being used in the classroom. This was done in order to avoid influencing the students, and avoid letting them know they were in an experimental group and part of a study. The shortcoming of this choice may have been not being able to provide the learners with sufficient time to familiarise themselves with the usefulness of the approach.

This need did not seem to emerge in relation to the explicit focus on word combinations. This, too, would have been a novelty for them, if we consider that formulaic language is not usually at the centre of Italian language curriculum, nor is there much awareness of it among teachers. The highest proportion of favourable attitudes was in fact related to having focused on word combinations (see Table 50).

Nevertheless, most students found the approach useful, despite their initial difficulties with it. This indicates clearly how worthwhile it would be to insist on DDL activity types, and on how to operationalise the use of corpus data in the classroom effectively, especially with lower proficiency learners.

5.2.1.2 Open-ended questions

The very positive attitudes towards learning word combinations is confirmed in open-ended question 1, where we find 18 occurrences of "learning word combinations" as the aspect that the learners liked the most in the lessons (see Table 59). The second aspect they enjoyed was related to the fact that the activities would be gamified, and the third that they had an opportunity to interact with their pears.

This is precious insight, as these three elements, working on word combinations, setting the activities in a gamified environment and fostering collaborative group work are three of the most characteristic features of the way in which DDL was operationalised in the present study.

In the second open-ended question (see Table 59), the aspect attracting the highest dislike was the fact that the students had to sit regular tests. This was unavoidable, due to the

need to collect data at regular time intervals. However, there are ways in which sitting a test can be maybe more enjoyable for the learners, so as to minimise any form of stress which could have a negative impact on the performance on the test itself. Gamified language testing, for instance, is gaining popularity, and a number of websites (e.g. Socrative, Kahoot, etc.) provide relatively easy tools for teachers, and researchers, to design and administer a test, within a gamified setting, and allowing students to have fun while sitting it, and possibly increasing their concentration and motivation because they are being engaged in a competition. The negative attitudes towards the testing phase and positive ones towards the gamified approach, as evident in Table 59 could thus usefully merge in future studies.

Largely positive attitudes are also elicited in open-ended question 3, which asked the learners to describe the lessons with three adjectives, confirming results found so far (see Table 60).

In open-ended question 4 (see Table 61), learners were asked to express their opinions freely in relation to what factors they thought might improve the approach. Interestingly the top suggestions go in the same direction that a teacher-researcher on DDL, with enough time and students, would go: develop extensions of the DDL activities so that the learning fostered through the concordance lines can be recycled and used in freer practice activities, even through contextualisations with one's real life. Again, this is very precious insight for the development of DDL activities in the future.

5.3 Discussion summary

Does DDL work? The answer seems to be "it depends". If we consider the etic data coming from the test, we may say that it does not seem to be better than other methods overall, except if we consider retention rates, where it seems to fare better.

What did not emerge in terms of language gains in the etic data was probably present in emic data in the form of largely favourable attitudes towards to the DDL activites that were proposed. This would lead us to think that, provided there be more time, longer and more frequent DDL sessions with learners could produce results also on the etic level.

But not only is emic data valuable for detecting dimensions of effectiveness eluded by etic data, but it is fundamental in getting impressions of what was done and how it can be improved in future work.

We have seen how the operationalisation of DDL and its adaptation to lower proficiency levels can be challenging: the development of DDL learning materials is key to a pedagogical intervention study aiming to analyse the effect of the approach. So, the learners' opinions are certainly fundamental in this sense.

6 Conclusion

After providing a brief overview of the research findings in our study, this chapter will illustrate the ways in which the study contributes to DDL research in general and Italian L2 teaching practices in particular. It will then describe the main limitations of the study, with an indication of how these may be overcome in future studies.

6.1 Overview of research findings

This study aimed at investigating the effects of DDL from an etic and emic perspective. The etic data was collected by means of a phraseological competence test, which was administered at four 4-week intervals over a 13-week timespan, on the basis of a between-groups design, with 4 experimental and 4 control groups of students. The emic data was collected by means of an end-of-course questionnaire divided into likert scale items and open-ended questions.

The modeling of the etic data revealed no significant differences between the two groups in terms of overall language gains. Both groups exhibited similar U-shaped learning curves over time. However, the retention rates of the experimental groups were better than those of the control groups and were characterised by a lower degree of variability.

When looking at the influence of the linguistic properties of the learning aims, semantic transparency and L1 congruency exhibited similar learning patterns in both groups: in relation to the former, semantically opaque collocations were learned more easily than semantically transparent collocation, with moderately significant differences between the two types of collocations in both conditions; in relation to the latter, incongruent collocations were learned better than congruent ones, with highly significant differences between the two types of collocations in both conditions. In particular, incongruent collocations in the experimental conditional exhibited a linear pattern between timepoint c and timepoint d, which was not observed in any of the other cases.

When looking at the different dimensions of collocational knowledge, no significant differences emerged between the two conditions.

On the emic level, likert scale items revealed largely favourable attitudes towards working on collocations and with concordance lines: despite admitting initial confusion with the groups of sentences, students largely agreed on the usefulness of the approach.

6.2 Contribution to DDL research

This study seeks to make a contribution in the field of DDL research in a number of ways. First and foremost, by focusing on a target language other than English, i.e. Italian. We have seen how the meta-analyses available on DDL are solely based on studies published in English and regarding the learning of English as a second language. And although target languages other than English are certainly present within DDL literature (Leray & Tyne, 2016; Vyatkina, 2016), they are arguably a vast minority.

As indicated in the literature review (see 2.1.4) the only empirical studies on Italian as the language being learned have been conducted by Claire Kennedy and Tiziana Miceli at Griffith University in Brisbane (Australia), and they are based on emic data only. The present study focuses on Italian by combining both etic and emic data, in order to try to capture different sides of the dynamics involved.

One other way of doing this was to examine the role that linguistic properties of the learning aims played in relation to learning and the effects of the DDL approach. The study considered the properties of semantic transparency and L1 congruency, which have received considerable attention in the field of collocation learning in general, but not so much in research related to the effects of DDL.

Furthermore, the analysis also included different dimensions of collocational knowledge, which were elicited with an operationalisation of the constructs of definitional and transferable knowledge via different test item types.

Finally, the study adopted a longitudinal design based on four data points distributed over a timespan of 13 week. The data the was collected was analysed through mixed-effects modeling, which is a method that is gaining popularity in second language research, because of its robustness and flexibility, though it is still used very rarely in DDL research.

6.3 Contribution to Italian L2 teaching

This study aims to make a contribution in the field of Italian L2 teaching in a number of ways. First, it wishes to continue the long tradition of interest that Italian scholars have demonstrated towards DDL (see 2.1.4) by examining the core principles it relies on, the practices that have been developed for the English language and how these can be adapted in Italian L2 teaching contexts.

Second, it wishes to provide a set of examples in terms of the activities that can be developed and used in the classroom. In relation to this, it seeks to highlight the usefulness of using a learner corpus to identify the areas where learners need more help, and to inform the development of a multiple-choice test, as well as the usefulness of a native corpus that can be used, even with manual adaptations if needed, as a source to build DDL learning activities.

Furthermore, in analysing the effects of DDL in Italian L2 learning and teaching context from both an etic and emic perspective, different kinds of insight may be gained in relation to what might work in certain contexts, and what might be further explored in other developments.

Lastly, the basic notions of DDL and educational effectiveness research were briefly introduced to the Italian L2 teachers leading the language courses within which this study took place: though it was challenging to find the time to illustrate the rationale behind the method and the study, some interest was sparked.

6.4 Limitations

The study was characterised by a number of limitations. A series of measures were taken in order to establish an initial lack of significant differences between the two samples in Test 1. As stated in paragraph 3.3.1, the entire dataset comprises missing values in the proportion of about 1/3 for each test. This means that the tests performed in test 1 to establish an initial lack of differences, do not, unfortunately, take into account the students who took tests 2, 3, 4, or 2, 3 or , 2 and 4.

Despite the fact that all the classes fitted into the same, or similar, competence levels, as tested by the University where the study was conducted, the reality of teaching 8 classes with the same two sets of materials provided a sense of the differences characterising the various classes. Looking at the experimental classes only, for example, there was an exceptional class, where all the activities planned were carried out on time and with no major problems; two classes that needed more time to successfully engage in the activities; and one that could only engage in the simpler concordance-based activities, while some of the planned activities needed to be systematically left out. This naturally caused some differences in terms of overall exposure of the experimental materials to all of the students in each class.

In the process of lesson planning, the activities had to be varied, in order to provide a dynamic learning setting at each lesson, so that the students would not get bored by engaging in activities based on a similar pattern. This meant that not all collocations were treated equally from a qualitative perspective, because different tasks had to be devised for different collocations or groups of collocations, and also from a quantitative perspective, because students did not have the chance to focus on all the collocations present in our list of learning aims for the same amount of time.

Furthermore, not all students were always present at the lessons. This may have caused some degree of disruption in the exposure to the experimental and control materials.

Another limitation of the study derives from the fact that only one hour a week in each class was possible to conduct the study. The sequences of activities devised for the given set of 8 collocations had to be tightly implemented in the space of one hour.

A more linguistically-related issue concerned the generalisations deriving from the concordance analyses. Because of their restricted scope, being based solely of the first 100 occurrences found, they may not be entirely valid for all contexts of occurrence. However, there is still no large-scale pattern analysis of high frequency Italian collocations, nor any corpus-based resource investigate Italian language usage from a pattern-oriented perspective.

A limitation regarding the lesson plan concerned the fact that despite the gamified setting of the lessons, the concordance-based activities were not as fun and stimulating as the beginning or the end of the lessons, even when placed within the gamified lesson structure. Although the students still diligently engaged in the activities, the way in which

tasks were designed would need to be looked into as a major influence in the effectiveness of the approach.

Finally, the richness of some of the DDL activities that were developed was not entirely reflected in the phraseological competence test, and this meant that the match between DDL activities and testing was not perfect. This can be as a consequence of having developed the test on the basis on the identification of the learning aims, and not of the DDL activities themselves.

6.5 Future directions

The limitations encountered in this study shed considerable light on the possible future direction that studies in this area may take.

Starting from the very last limitation that was indicated, it is clear that the heart of a study seeking to evaluate the effects of DDL activities must be found in the nature of the pedagogical activity. Concordance lines are extremely rich of information about their usage in context, and many times the teacher-researcher will not be able to fully predict the entire spectrum of patterns that learners may encounter when working through a set of concordance lines. The development of a language test seeking to measure language gains as an effect of DDL exposure should take into account the different aspects of a DDL activity and define constructs accordingly and adequately. And it should also be fun and motivating for the learners: one of the main emic findings indicated that the testing was not enjoyed by the students, causing possible negative effects on the reliability of the test itself. Using gamified mobile-based testing systems such as Socrative or Kahoot could address this limitation.

The development of DDL pedagogical activities should also take into major consideration the findings deriving from emic studies, eliciting the learners' ideas on how the DDL approach was applied by the teacher and it can develop further. One suggestion emerging from our end-of-course questionnaire was to extend the corpus work done within the DDL activity into other non-DDL activities, so that whether knowledge was developed within the DDL activity can be applied in the other kinds of activities. This is a crucial note, reflecting a need that only rarely seems to arise when discussing future direction for DDL,

namely how exactly DDL activities can be integrated within the lesson and within a language course more generally.

The DDL activities can also be developed with a construction grammar framework. The pedagogical activities that have been attempted in order to apply the principles of construction grammar are so far disjointed from the principles DDL (Holme, 2010). For this reason, it could be interesting to investigate this possibility further.

DDL activities characterise themselves chiefly for being based on language that is *used* by speakers, but they also need to foster the conditions for the learners to then *use* the language themselves. The usage-based nature of DDL could then be seen on a dual level, involving not only the language content that is chosen as input for the learners, but only the language content that the learners are then able to produce and use. And this would also reflect Bybee & Hopper's remark on that fact that not only *frequency of exposure* but also *use* is an crucial factor in the emergence and maintenance of linguistic structure (Siyanova-Chanturia & Spina, 2014; Bybee & Hopper, 2001, p. 3).

The issue of integrating DDL within existing classroom practices was discussed at EuroCALL 2017 (Thomas & Hartle, 2017) and one concrete attempt in this direction was made by Peter Crosthwaite (Crosthwaite, 2018). The crucial question is to see how what was done in the DDL activities can be linked to everything else. More reflective practice related to this aspect will inevitably constitute a natural development of the increasing interaction between language researchers and language teachers.

Insisting on collecting emic data reflecting the learners' views and impressions of DDL activities can be highly rewarding, especially in understanding how teacher-researchers can better adapt corpus data for different learner needs and proficiency levels, and possibly even different individual learning preferences.

The design of DDL activities can also be geared towards a more explicit path towards autonomy. The present study did not consider this aspect of DDL because of high level of control that the activities required in order to be viable for pre-intermediate proficiency level learners. This also derived from the fact that the corpus data, extracted form a native reference corpus, needed to be emended so that they would not contain any problematic instances of language for the learners. This is why the paper-based modality of DDL was chosen. However, autonomy can be certainly fostered not only with paper-based DDL material, but perhaps even more with computer-based or mobile-based DDL tools.

Throughout this study it was possible to notice how Chinese learners had more familiarity with their mobile phones, rather than with computers. They used their mobile phone routinely to consult dictionaries whenever they needed to. A corpus-informed mobile application, suitable for levels of different proficiency levels, could be the key to foster the increase in learner autonomy, not only within the context of DDL, but only as a way to develop searching, sorting and inferencing skills that can be transferred to many other learning and working domains.

Any development related to DDL applications in the classroom cannot be disjointed from a collaboration between researchers and teachers. The aim here would have to be not only to have DDL activities validated and tried out by the teachers, but more importantly to provide teachers with the necessary training, so that they can develop the skills and the confidence to create corpus-based activities themselves, based on the specific needs arising from their classrooms. Drawing on a notion that circulates in various other fields of scientific inquiry, Tim Johns famously maintained that "research is too important to be left to the researchers" (Johns, 1991, p. 3), referring to the importance of allowing the language learner to also be a research worker, "whose learning needs to be driven by access to linguistic data" (Johns, ibid). This quote can also be extended to teachers, whose teaching need to be driven not only by access to linguistic data, as for the language learners, but also to adequate opportunities for training and participation in the development of increasingly better tool and resources for the popularization of DDL.

An additional aspect that could lead to future lines of research is an increase in longitudinal and within-groups designs, which can provide better insight into how the effects of DDL unfold over time, and how they develop in relation to different variables. The present study tried to include some variables that are rarely considered. However, the linguistic variables were limited to the scope of study, and were confined to verb-noun collocations. It would be useful, as some studies have already done, to link learning effects and skills development related to DDL to overall developments at the level of general language proficiency. Accuracy could be measured not on a scale with only two values (i.e. correct and incorrect), but also with intermediate values reflecting different degrees of acceptability; the most dubious answers to classify could be given to multiple coders with teaching and testing experience, for improved error coding reliability. Furthermore, in terms of the linguistic properties of the learning aims, the directionality

of the collocations, measured by Delta P (see 2.2.1), could be considered as a factor in the analysis in order to see whether this aspect has any effect on competence development.

Lastly, DDL research can certainly continue to aim for scientific rigour, and work with hypotheses that are empirically testable and replicable, thus promoting the public sharing of data.

6.6 Concluding remarks

"The most valuable insights are arrived at last; but the most valuable insights are *methods"* (Nietzsche, 1967, p. 261).

This quote from Nietzsche is considered by many as a paradox. It closely reflects the initial perceptions in closing this study for the specific purposes it was initiated: given the chance to do it all over again, we would have a very clear idea as to how to proceed, starting precisely from the method.

We then realised that this is the inevitable product of scientific research and the empirical cycle it is based on: we start with an observation phase that triggers our research interest and then leads us to formulate a hypothesis, which is then tested and evaluated; the evaluation will guide us towards a new hypothesis and the empirical cycle starts again.

With this thesis we hope to have made a contribution to the empirical cycles that inform DDL research and, quoting Booth, Colomb, & Williams once more, we hope to have added a voice to the conversation on DDL and that other voices will respond us, so that we can in turn respond to them (Booth et al., 2008, p. 16).

But most of all, we look forward to seeing how DDL can be effectively integrated in existing teaching and learning practices, how this can ease language learning in the experience of both learners and teachers, and in turn facilitate the personal growth and social mobility that language learning is able to foster.

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Appendixes

Appendix A: Sample Experimental lesson plan and activities (week 4)

(lesson plan)

Lezione 4_E

Data: 17, 18, 19 aprile	**Durata:** 45 minuti
Obiettivi di apprendimento: avere fame preparare la cena sbagliare strada trovare la strada trovare casa affittare un appartamento (o una stanza) dividere un appartamento dividere una spesa	
Materiali: 1. Compiti per casa corretti. 2. Test stili di apprendimento. 3. Dispense con le attività del giorno. 4. Compito per casa 4. 5. Fogli compito per casa 1, 2, 3 per eventuali assenti che lo chiedessero.	

Svolgimento della lezione 4_E

Minuti	Attività e procedure	Obiettivi
2	Presenze (usa solo memoria per esercitare il riconoscimento di ogni studente) Resitituisci compiti corretti e raccogli compiti per casa svolti. (dare a tutti indirizzo mail e contatto WeChat) Dare test stili di apprendimento a chi non l'aveva fatto. Distribuire le dispense del giorno, chiedendo di aprire alla pagina con la prima attività.	Ricordare i nomi di tutti.
4	Giusto o sbagliato? *Su questa pagina c'è una lista di 24 combinazioni, con o senza errori. Ditemi quante sono le combinazioni giuste e quante quelle sbagliate. Avete 3 minuti. Chi si avvicina di più, vince.*	Per richiamare alla memoria e consolidare quanto visto le settimane precedenti.
2	Parola mancante. *Su questa pagina ci sono 8 frasi, ma in ogni frase manca una parola: qual è?*	Per introdurre le combinazioni della settimana.
25	Lavoro su concordanze.	Per guidare verso l'osservazione di regolarità d'uso delle combinazioni all'interno delle concordance fornite.
10'	Riordina le parole. *Su questa pagina trovate 8 frasi, ma le parole in queste frasi non sono nel posto giusto. Rimettere le parole al loro posto.*	Per riutilizzare e consolidare le caratteristiche d'uso delle combinazioni viste finora.
1'	Assegnazione compito per casa. *Su questo foglio ci sono le otto combinazioni che abbiamo fatto oggi. (Insegnante rilegge le otto combinazioni). Per la prossima settimana, scrivete un dialogo tra voi e un'altra persona con queste 8*	

	combinazioni. Quando avete finito, date un titolo al dialogo. Prima di iniziare a scirvere il dialogo, scrivete il contesto, il posto dove le due persone stanno parlando. Per esempio, potete scrivere: "siamo in un bar, la mattina presto, e c'è molta confusione intorno a noi". *Qual è la prima cosa che si scrive in un dialogo?* (elicita "nome della persona che parla seguito da due punti").	
5'	Attività finale: indovina la combinazione Sono incluse le combinazioni del giorno e quelle della settimana precedente, dunque 16 in totale, in forma di cartoncini singoli in un sacchetto, che a turno ogni studente prende e deve far indovinare alle squadre attraverso il mimo.	Per concludere la lezione in modo allegro, riutilizzando le combinazioni del giorno e quelle della settimana precedente.

(Handout with activities)

Lezioni con Luciana

Settimana 4

Giusto o sbagliato? Metti ogni combinazione nella colonna giusta.

1. Fare amicizia
2. Dare un sorriso
3. Avere 25 anni
4. Studiare l'economia
5. Innamorare lo sport
6. Fare passeggiata
7. Prendere il sole
8. Fare una gita
9. Prendere l'aria
10. Avere fretta
11. Pulire casa
12. Spendere soldi
13. Fare le spese
14. Prendere l'autobus
15. Fare colazione
16. Vestire la giacca
17. Avere lezione
18. Rifare il letto
19. Prendere la musica
20. Fare doccia
21. Mandare un messaggio
22. Organizzare una festa
23. Fare auguri
24. Fare un regalo

Combinazioni giuste:	Combinazioni sbagliate:

Soluzione:

Combinazioni giuste: 14!	**Combinazioni sbagliate: 10!**
1. Fare amicizia 2. Avere 25 anni 3. Prendere il sole 4. Fare una gita 5. Avere fretta 6. Pulire casa 7. Spendere soldi 8. Prendere l'autobus 9. Fare colazione 10. Avere lezione 11. Rifare il letto 12. Mandare un messaggio 13. Organizzare una festa 14. Fare un regalo	1. Dare un sorriso (fare un sorriso) 2. Studiare l'economia (studiare economia) 3. Innamorare lo sport (amare lo sport) 4. Fare passeggiata (fare una passeggiata) 5. Prendere l'aria (prendere aria) 6. Fare le spese (fare spese) 7. Vestire la giacca (mettere la giacca) 8. Prendere la musica (mettere o ascoltare la musica) 9. Fare doccia (fare la doccia) 10. Fare auguri (fare gli auguri)

Componi le 8 combinazioni di questa settimana:

1. VEAEERFAM
A _ _ _ _ F _ _ _

2. RRAERCANAEEPPAL
P_ _ _ _ _ _ _ _ L _ C _ _ _

3. TESSRBAAGRIDLAA
SB _ _ _ _ _ _ _ L _ ST _ _ _ _

4. AVTLSATROAAREDR
TR _ _ _ _ _ L _ S _ _ _ _ _

5. RNVEURAOTNPTPRAOMTAAE
T _ _ _ _ _ _ U _ AP _ _ _ _ _ _ _ _ _ _

6. TANFNFTEAAZRUTAAIS
AF _ _ _ _ _ _ _ U _ _ S _ _ _ _ _

7. MVETOIURNDRNEEIPDAPAAT
DI _ _ _ _ _ _ U _ AP _ _ _ _ _ _ _ _ _ _

8. NPEAVESUAIRDDSIE
DI _ _ _ _ _ _ U _ _ SP _ _ _

1	Passavo le giornate vagando per questa città bellissima. Non **avevo**	**fame.** Bevevo l'acqua fresca delle fontanelle.
2	"Caterina. È pronto a tavola." "Non **ho**	**fame**, grazie." "Ti prego tesoro, vieni."
3	"Ti ho lasciato da parte le polpette." "Grazie, ma non **ho**	**fame**."
4	Non voglio essere solo. **Ho** un'infinita	**fame** d'amore.
5	Non **avevo**	**fame**, quindi sono entrata in un negozio di dischi.
6	La nuova squadra **ha**	**fame** di cose nuove.
7	Quando torna da lavoro, **ha** sempre	una **fame** incredibile.
8	**Ho**	**fame** ma non riesco a mangiare.
9	"Li vedi quelli lì? **Hanno** sempre	**fame**."
10	"Io **ho**	una **fame** pazzesca, voi?"
11	"Vuoi mangiare qualcosa?" "Grazie, ho mangiato un panino fuori e non **ho**	**fame**."
12	L'opinione pubblica **ha**	**fame** di notizie.
13	"È mezzogiorno passato. **Ho**	**fame**, voi no?"
14	Appena entro in casa **ho** già	**fame.**
15	Le persone **hanno**	**fame** di giustizia.

1. In quali frasi c'è un articolo tra *avere* e *fame?*
2. Che tipo di articolo è?
3. In queste frasi, che cosa c'è dopo la parola *fame?*

Insieme ai tuoi compagni di squadra, scrivi qui sotto le risposte e spiega quando si usa l'articolo tra *avere* e *fame.*

.....

.....

.....

.....

.....

.....

4. In quali frasi *avere fame* non è riferito al cibo?
5. Se non è riferito al cibo, a cosa si riferisce la combinazione?
6. In queste frasi, che parole ci sono dopo *fame?*

Insieme ai tuoi compagni di squadra, scrivi qui sotto le risposte e spiega quando la combinazione *avere* + *fame* non si riferisce al cibo.

.....

.....

.....

.....

.....

.....

Scrivi la parola che manca in ogni gruppo di frasi:

1. ……..

Si è fatto molto tardi, devo	la cena.
Poi sono andata in cucina per	una cena veloce.
La mamma aveva passato il pomeriggio a	la cena.
Quel giorno sono tornata a casa prima per	una cena speciale.
Ho appena finito di	la cena.

2. ……

Ma qui dove siamo? Forse abbiamo	strada.
Quando non hai impegni di lavoro, anche	strada è bello.
Ammettiamolo: hai	strada.
Era stata un'avventura straordinaria,	strada in quelle notti buie.
Ho capito di aver	strada.

3. ……

Prova a	la strada giusta.
Come	la strada di casa in mezzo a gente che non capisce?
Finalmente ho	la strada e il numero di casa tua.
Dobbiamo	la strada migliore per uscire da questa crisi.
Non più	la strada.

4. ……..

Abbiamo trovato	un	bellissimo, vicino al mare.
Forse riusciamo a trovate	un	in cui c'è posto anche per i nostri cugini.
Ho trovato	un	in centro da condividere con altri studenti.
Lucia ha trovato	un	troppo piccolo per ospitare anche i genitori.
Alla fine, siamo riusciti a trovare	un	in via Vignoli.

5. ……..

Se hai bisogno di un posto per dormire, posso	una stanza a casa mia.
Ho	una stanza in un quartiere bruttissimo.
Chi ha una stanza vuota in casa, può	la stanza.
Matteo	una stanza molto grande in un appartamento con altre due ragazze.
Quella famiglia non	stanze agli studenti.

6. ……..

	l'appartamento con una ragazza spagnola, Pilar.
L'amica che	l'appartamento con me si è trasferita a Milano.
Mi piacerebbe moltissimo	l'appartamento con altri colleghi.
Spero che altri amici vorranno dividere	l'appartamento con noi.
C'era anche Carlo, con cui dividevo	lo stesso appartamento.

7. .....

Nessuno di voi due ha voluto	la spesa.
A pranzo qualcuno cucinava e poi si	le spese.
Se organizziamo un gruppo di viaggio, possiamo	le spese.
Visto che abbiamo case vicine, usiamo lo stesso wi-fi e	le spese.
Possiamo viaggiare con una sola macchina e poi	le spese della benzina.

Soluzioni:

1. **preparare**
2. **sbagliare**
3. **trovare**
4. **appartamento**
5. **affittare**
6. **dividere**
7. **dividere**

Rimetti le parole nell'ordine giusto:

1. a Andiamo una ho cena, pazzesca! fame

……

2. abbiamo sbagliato Forse siamo? strada. Dove

……

3. cena. Mentre una la preparo ti io doccia, tu fai

……

4. trovi ti strada. tua tu che Desidero la

……

5. mare. Abbiamo appartamento un trovato bellissimo al vicino

……

6. Vorrei all'università. vicino stanza una affittare

……

7. con un dividere appartamento piacerebbe Mi colleghi. altri molto

……

8. tutte viaggio insieme, le Quando un dividiamo spese. facciamo

……

Soluzione:

1. **Andiamo a cena, ho una fame pazzesca!**
2. **Dove siamo? Forse abbiamo sbagliato strada.**
3. **Mentre tu ti fai una doccia, io preparo la cena.**
4. **Desidero che tu ti trovi la tua strada.**
5. **Abbiamo trovato un bellissimo appartamento vicino al mare.**
6. **Vorrei affittare una stanza vicino all'università.**
7. **Mi piacerebbe molto dividere un appartamento con altri colleghi.**
8. **Quando facciamo un viaggio insieme, dividiamo tutte le spese.**

Appendix B: Sample Control lesson plan and activities (week 4)

(Lesson plan)

Lezione 4_C

Data: 17, 18, 19 aprile	**Durata:** 45 minuti
Obiettivi di apprendimento: avere fame preparare la cena sbagliare strada trovare la strada trovare casa affittare un appartamento (o una stanza) dividere un appartamento dividere una spesa	
Materiali: 1. Compiti per casa corretti. 2. Test stili di apprendimento. 3. Dispense con le attività del giorno. 4. Compito per casa 4. 5. Fogli compito per casa 1, 2, 3 per eventuali assenti che lo chiedessero.	

Svolgimento della lezione 4_E

Minuti	Attività e procedure	Obiettivi
2	Presenze (usa solo memoria per esercitare il riconoscimento di ogni studente) Resitituisci compiti corretti e raccogli compiti per casa svolti. (dare a tutti indirizzo mail e contatto WeChat) Dare test stili di apprendimento a chi non l'aveva fatto.	Ricordare i nomi di tutti.

	Distribuire le dispense del giorno, chiedendo di aprire alla pagina con la prima attività.	
4	Giusto o sbagliato? *Su questa pagina c'è una lista di 24 combinazioni, con o senza errori. Ditemi quante sono le combinazioni giuste e quante quelle sbagliate. Avete 3 minuti. Chi si avvicina di più, vince.*	Per richiamare alla memoria e consolidare quanto visto le settimane precedenti.
2	Combinazioni anagrammate	Per introdurre le combinazioni della settimana.
	Parola mancante. *Su questa pagina ci sono 8 frasi, ma in ogni frase manca una parola: qual è?*	
10'	Riordina le parole. *Su questa pagina trovate 8 frasi, ma le parole in queste frasi non sono nel posto giusto. Rimettere le parole al loro posto.*	Per riutilizzare e consolidare le caratteristiche d'uso delle combinazioni viste finora.
	Inventa una frase. Per ogni combinazione, inventa una frase.	
1'	Assegnazione compito per casa. *Su questo foglio ci sono le otto combinazioni che abbiamo fatto oggi. (Insegnante rilegge le otto combinazioni). Per la prossima settimana, scrivete un dialogo tra voi e un'altra persona con queste 8 combinazioni. Quando avete finito, date un titolo al dialogo. Prima di iniziare a scirvere il dialogo, scrivete il contesto, il posto dove le due persone stanno parlando. Per esempio, potete scrivere: "siamo in*	

	un bar, la mattina presto, e c'è molta confusione intorno a noi". *Qual è la prima cosa che si scrive in un dialogo?* (elicita "nome della persona che parola seguito da due punti").	
5'	Attività finale: indovina la combinazione Sono incluse le combinazioni del giorno e quelle della settimana precedente, dunque 16 in totale, in forma di cartoncini singoli in un sacchetto, che a turno ogni studente prende e deve far indovinare alle squadre attraverso il mimo.	Per concludere la lezione in modo allegro, riutilizzando le combinazioni del giorno e quelle della settimana precedente.

(Handout with activities)

Lezioni con Luciana

Settimana 4

Giusto o sbagliato? Metti ogni combinazione nella colonna giusta.

1. Fare amicizia
2. Dare un sorriso
3. Avere 25 anni
4. Studiare l'economia
5. Innamorare lo sport
6. Fare passeggiata
7. Prendere il sole
8. Fare una gita
9. Prendere l'aria
10. Avere fretta
11. Pulire casa
12. Spendere soldi
13. Fare le spese
14. Prendere l'autobus
15. Fare colazione
16. Vestire la giacca
17. Avere lezione
18. Rifare il letto
19. Prendere la musica
20. Fare doccia
21. Mandare un messaggio
22. Organizzare una festa
23. Fare auguri
24. Fare un regalo

Combinazioni giuste:	**Combinazioni sbagliate:**

Soluzione:

Combinazioni giuste: 14!	**Combinazioni sbagliate: 10!**
1. Fare amicizia 2. Avere 25 anni 3. Prendere il sole 4. Fare una gita 5. Avere fretta 6. Pulire casa 7. Spendere soldi 8. Prendere l'autobus 9. Fare colazione 10. Avere lezione 11. Rifare il letto 12. Mandare un messaggio 13. Organizzare una festa 14. Fare un regalo	15. Dare un sorriso (fare un sorriso) 16. Studiare l'economia (studiare economia) 17. Innamorare lo sport (amare lo sport) 18. Fare passeggiata (fare una passeggiata) 19. Prendere l'aria (prendere aria) 20. Fare le spese (fare spese) 21. Vestire la giacca (mettere la giacca) 22. Prendere la musica (mettere o ascoltare la musica) 23. Fare doccia (fare la doccia) 24. Fare auguri (fare gli auguri)

Componi le 8 combinazioni di questa settimana:

1. VEAEERFAM
A _ _ _ _ F _ _ _

2. RRAERCANAEEPPAL
P_ _ _ _ _ _ _ _ L _ C _ _ _

3. TESSRBAAGRIDLAA
SB _ _ _ _ _ _ _ L _ ST _ _ _ _

4. AVTLSATROAAREDR
TR _ _ _ _ _ L _ S _ _ _ _ _

5. RNVEURAOTNPTPRAOMTAAE
T _ _ _ _ _ _ U _ AP _ _ _ _ _ _ _ _ _ _

6. TANFNFTEAAZRUTAAIS
AF _ _ _ _ _ _ _ U _ _ S _ _ _ _ _

7. MVETOIURNDRNEEIPDAPAAT
DI _ _ _ _ _ _ U _ AP _ _ _ _ _ _ _ _ _ _

8. NPEAVESUAIRDDSIE
DI _ _ _ _ _ _ U _ _ SP _ _ _

Soluzione:

1. **AVERE FAME**
2. **PREPARARE LA CENA**
3. **SBAGLIARE STRADA**
4. **TROVARE LA STRADA**
5. **TROVARE UN APPARTAMENTO**
6. **AFFITTARE UNA STANZA**
7. **DIVIDERE UN APPARTAMENTO**
8. **DIVIDERE UNA SPESA**

In ogni frase, manca una parola. La parola può essere un verbo, un articolo o un nome. Scrivi la parola che manca.

1. **"Caterina. È pronto a tavola." "Non _____ fame, grazie."**
2. **Vado a preparare _____ cena. Stasera ho ospiti.**
3. **Quando non hai impegni di lavoro, anche _____ strada è bello.**
4. **A volte, è difficile _____ la strada giusta.**
5. **Finalmente, ho _____ un appartamento da condividere con altre quattro persone.**
6. **Riccardo aveva _____ l'appartamento dell'ultimo piano a uno studente di medicina.**
7. **Quando vivevo a Milano, _____ l'appartamento con una ragazza spagnola, Pilar.**
8. **Se organizziamo un gruppo di viaggio, possiamo _____ le spese.**

Soluzione:

1. **“Caterina. È pronto a tavola.” “Non <u>ho</u> fame, grazie.”**
2. **Vado a preparare <u>la</u> cena. Stasera ho ospiti.**
3. **Quando non hai impegni di lavoro, anche <u>sbagliare</u> strada è bello.**
4. **A volte, è difficile <u>trovare</u> la strada giusta.**
5. **Finalmente, ho <u>trovato</u> un appartamento da condividere con altre 4 persone.**
6. **Riccardo aveva <u>affittato</u> l’appartamento dell’ultimo piano a uno studente di medicina.**
7. **Quando vivevo a Milano, <u>dividevo</u> l’appartamento con una ragazza spagnola, Pilar.**
8. **Se organizziamo un gruppo di viaggio, possiamo <u>dividere</u> le spese.**

Rimetti le parole nell'ordine giusto:

1) a Andiamo una ho cena, pazzesca! fame

……

2) abbiamo sbagliato Forse siamo? strada. Dove

……

3) cena. Mentre una la preparo ti io doccia, tu fai

……

4) trovi ti strada. tua tu che Desidero la

……

5) mare. Abbiamo appartamento un trovato bellissimo al vicino

……

6) Vorrei all'università. vicino stanza una affittare

……

7) con un dividere appartamento piacerebbe Mi colleghi. altri molto

……

8) tutte viaggio insieme, le Quando un dividiamo spese. facciamo

……

Soluzione:

1) **Andiamo a cena, ho una fame pazzesca!**
2) **Dove siamo? Forse abbiamo sbagliato strada.**
3) **Mentre tu ti fai una doccia, io preparo la cena.**
4) **Desidero che tu ti trovi la tua strada.**
5) **Abbiamo trovato un bellissimo appartamento vicino al mare.**
6) **Vorrei affittare una stanza vicino all'università.**
7) **Mi piacerebbe molto dividere un appartamento con altri colleghi.**
8) **Quando facciamo un viaggio insieme, dividiamo tutte le spese.**

Inventa una frase per ciascuna combinazione:

1. **AVERE FAME**

.....

2. **PREPARARE LA CENA**

.....

3. **SBAGLIARE STRADA**

.....

4. **TROVARE LA STRADA**

.....

5. **TROVARE UN APPARTAMENTO**

.....

6. **AFFITTARE UNA STANZA**

.....

7. **DIVIDERE UN APPARTAMENTO**

.....

8. **DIVIDERE UNA SPESA**

.....

Appendix C: Sample homework sheet (week 4)

Combinazioni di parole

Lezioni con Luciana

Compito per casa 4

Usa queste 8 combinazioni di parole per inventare un dialogo tra te e un'altra persona.

1. Avere fame
2. Preparare la cena
3. Sbagliare strada
4. Trovare la strada
5. Trovare casa (o un appartamento)
6. Affittare un appartamento/stanza (vs. prendere in affitto un appartamento/stanza)
7. Dividere un appartamento
8. Dividere una spesa

Nome: _____ Corso: _____

Contesto (luogo, momento del giorno, periodo dell'anno, che cosa c'è intorno alle persone che parlano):

Dialogo:

Appendix D: Full range of DDL activities (weeks 1-8)

Week 1

Activity 1 – Warmer

The teacher shows an enlarged set of concordance lines cut in half and says: *What's this?* (eliciting aim towards which the teacher will pose guiding questions: *"a group of sentences, cut into half after the verb 'fare', to do/to make"*).

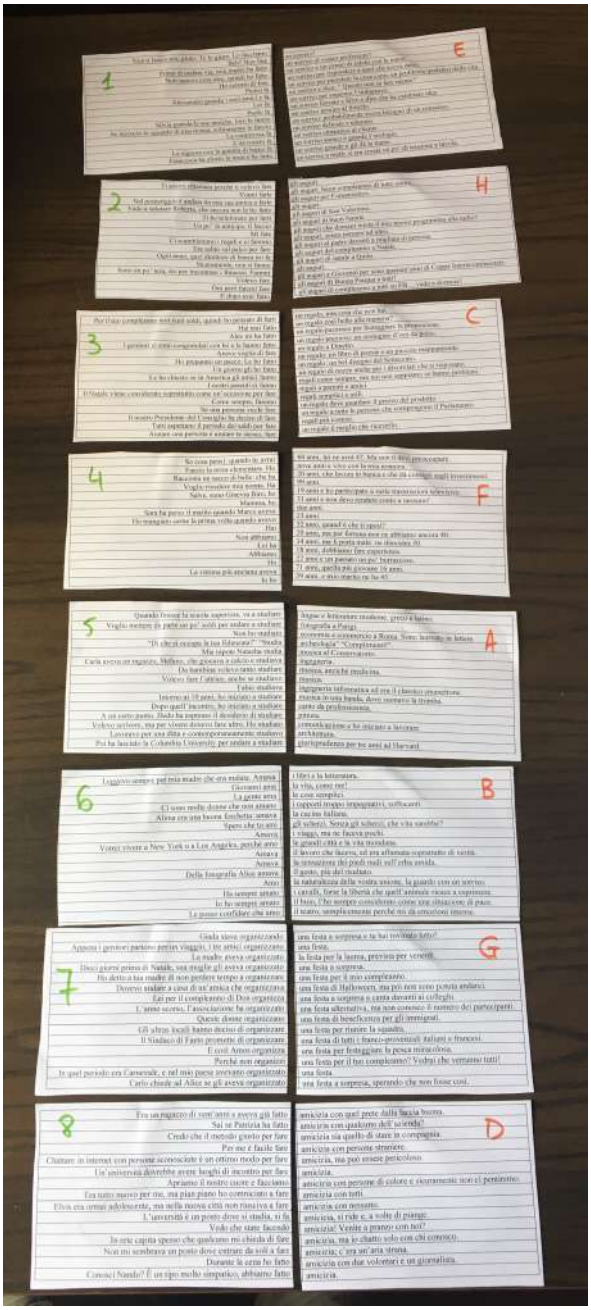
Era un ragazzo di vent'anni e aveva già fatto
Sai se Patrizia ha fatto
Credo che il metodo giusto per fare
Per me è facile fare
Chattare in internet con persone sconosciute è un ottimo modo per fare
Un'università dovrebbe avere luoghi di incontro per fare
Apriamo il nostro cuore e facciamo
Era tutto nuovo per me, ma pian piano ho cominciato a fare
Elvis era ormai adolescente, ma nella nuova città non riusciva a fare
L'università è un posto dove si studia, si fa
Vedo che state facendo
In rete capita spesso che qualcuno mi chieda di fare
Non mi sembrava un posto dove entrare da soli a fare
Durante la cena ho fatto
Conosci Nando? È un tipo molto simpatico, abbiamo fatto

Activity 2 – Guess the missing cotext

The teacher then says: *"I have another 8 groups of sentences like these, cut into half. In your groups, try to guess what comes after each group of sentences"*. The teacher gives a cut-up set of 8 half concordances to each team. The activity is difficult, but the aim is to make the students activate the mental lexicon related to those verbs, and imagine what may come after only on the basis on the left cotexts that they have.

Activity 3 – Match the concordance halves

After 2-3 minutes, the teacher says: "Any ideas?". The teacher elicits some of the students' hypotheses, and then says: *"See that each group of sentences has a number; put the numbered groups of sentences in order from 1 to 8. Now, these are the other halves, that is the right part of the group of sentences. Each group has a letter. Match the numbers with the correct letter"*. The teacher elicits the correct matches.



Activity 4 – Identify combinations and focus on article use

The teacher gives each student the eight full groups of sentences containing the weekly verb – noun combinations, as asks: *"These groups of sentences all have a line in the middle. What kind of word do you see on the left of the line? (eliciting aim: verbs). What kind of word do you see on the right of the line? (eliciting aim: nouns). Now, in this table, write the verb-noun combination with an article in the left column, and those without an article in the right column".*

VERB + ARTICLE + NOUN	**VERB + NOUN**

Week 2

Activity 1 – Noun anagrams in concordance groups

Teacher: *"The following groups of sentences contain combinations of verbs and nouns, but the nouns have been replaced by their anagrams. Read the sentences and try to work out what nouns they are".*

Quand'è l' ultima volta che abbiamo **fatto**	una **atgeiaspsga**? Ormai stiamo insieme solo per abitudine.
Tu lavori qui? Sono qui per **fare**	una **atgeiaspsga.** Vieni qui a passeggiare? Ci sono tanti bei posti!
Io esco con Nadia, andiamo a **fare**	una **atgeiaspsga** in collina.
"Facciamo	una **atgeiaspsga**?", propose il dottor Cardoso, "farà bene a entrambi".
Passava gran parte del tempo a **fare**	**atgeiespsga** nei dintorni del castello.
Vorrei **fare**	una lunga **atgeiaspsga** romantica con lui.
Non gli interessava mangiare, bere, dormire, **fare**	una **atgeiaspsga**, voleva solo suonare: suonare e basta.
Ho lasciato la spesa a casa e sono andato a **fare**	una **atgeiaspsga.**
Io qui ci vengo a **fare**	le **atgeiespsga**, a stare in solitudine.
Abbiamo bevuto delle birre e poi **abbiamo fatto**	una **atgeiaspsga** sotto i portici a guardare i negozi chiusi.
Quando il tempo era buono, andavo a **fare**	**atgeiespsga** in montagna e partivo la mattina presto.
Qui gli fanno **fare**	le **atgeiespsga** all'aria aperta in montagna oppure in campagna
Dopo cena **abbiamo fatto**	una **atgeiaspsga** e siamo andati a bere un'altra birra.
Facciamo	una **atgeiaspsga** in solitudine e li tocchiamo la nostra follia.
Un vecchio giornalista che conosco da anni mi portò a **fare**	una **atgeiaspsga** tra vari monumenti nel cuore di Washington.

Guarda che se io **prendo**	il **oles**, sai come divento nero? Ma nero, nero, nero, nero!
Bravi! Io a fare la rivoluzione e voi a **prendere**	il **oles**!
"Poi chi c'era?","Una ragazza carina che **prendeva**	il **oles**"
Di giorno stavano sulla riva a **prendere**	il **oles** e a nuotare.
Il direttore è nel parco che **sta prendendo**	il **oles**, disse l' impiegato, non so se devo disturbarlo.
È stata un' idea dell'ultimo momento e ci siamo stesi a **prendere**	il **oles** in mezzo ai rovi.
Ci sono molte panchine dove le persone si possono rilassare, **prendere**	il **oles**, leggere, parlare con gli amici…
Mandaci una cartolina e una foto di te che **prendi**	il **oles** sulla spiaggia.
Prendere	il **oles** fa bene: può migliorare l' umore.
Possiamo **prendere**	il **oles** e nuotare facendo nudismo integrale...
Nel pomeriggio **ho preso**	il **oles** nel terrazzo.
Più del 58 % degli intervistati è pronta a **prendere**	il **oles** senza costume dove è consentito.
È frustrante vivere in California e non poter **prendere**	il **oles.**
Fra un po' vado a **prendere**	il **oles** in giardino
Odio i fanatici dell' abbronzatura che mi vogliono costringere a **prendere**	il **oles** per forza e senza un'adeguata protezione.

La domenica mattina siamo andati a **fare**	una **igat** sul lago di Bracciano.
Quando uno **fa**	una **igat** all'estero, inizialmente vede tutto più bello.
Angela e Glauco stavano sempre insieme, andavano a **fare**	**iget** in motocicletta, su per le montagne, a nuotare, a sciare…
È il giorno del tuo compleanno . Mi avevi detto che volevi **fare**	un **gigviao.** Vedi ? Ci ho messo mesi per organizzare tutto.
Marcolino e la sua fidanzata volevano **fare**	un **gigviao** da soli.
Andiamo via. **Facciamo**	un **gigviao** io e te.
Sono ancora indecisa se **fare**	un **gigviao** nel Rajastan, o invece andare a Montecarlo.
Mi piacerebbe **fare**	un **gigviao** con Italia, dormire negli alberghi, fare l' amore, ripartire.
Dopo l'esperienza londinese, ho spesso **fatto**	**gigvia** da solo.
Era tanto che non **facevo**	un **gigviao** da solo in una città lontana.
Quando osserviamo il cielo e le stelle, in realtà **facciamo**	un **gigviao** nel tempo!
Benedetta si appoggia alla mia spalla dopo che abbiamo **fatto**	un **gigviao** insieme e si addormenta.
Si riunivano una volta alla settimana e **facevano**	**iget** culturali.
L'idea di **fare**	un **gigviao** in America mi è passata.
All'università, mentre gli altri si organizzavano per **fare**	**gigvia**, vacanze o feste, io passavo le estati a studiare il pianoforte!

Se ha i funghi, prendi i funghi. E fai **prendere**	**iraa** ai formaggi. Ora ci fai un bel caffè con la cremina.
Rocchi, vieni a **prendere**	**iraa.**
Il caldo è quello di luglio, umido e afoso. Ho deciso di far **prendere**	**iraa** alla casa.
Quanto tempo è che non faccio **prendere**	**iraa** alla casa, tre mesi? Cinque?
Hai bisogno di **prendere**	**iraa.**
Padre Emanuele lo incitava a **prendere**	**iraa** fresca.
Volevano mandarla a **prendere**	**iraa** buona nelle fotezze alpine.
Forse la ragazza era uscita a **prendere**	**iraa**. Forse stava facendo un bagno.
Perché allontanarsi tanto dal luogo dell'esplosione? Per **prendere**	**iraa**?
Le finestre erano aperte come tante bocche spalancate a **prendere**	**iraa** buona.
Mi sono sentito svenire. Sono uscito a **prendere**	**iraa**, avevo bisogno di allontanarmi.
Con una strana piroetta, come una ballerina, fa **prendere**	**iraa** a una divertente tuta di raso blu.
Esco fuori a **prendere**	**iraa.**
Ho detto a un telespettatore di andare a **prendere**	**iraa.**
Da quel momento si consiglia di far **prendere**	**iraa** al tatuaggio e di coprirlo più volte al giorno con una pomata.

L' importante è non **avere**	**trtfea,** e io fretta non ne ho.
Scusate, **abbiamo**	**trtfea.** Perché? Dove dovete andare? A casa.
Noi dobbiamo andare a casa. **Abbiamo**	**trtfea.**
Salvatore, non è giornata! Fai guidare me! Levati! **Abbiamo**	**trtfea!** Dai, fai guidare me! Guido io!
Potete rispondere quando volete, non **abbiamo**	**trtfea.** Grazie.
Ti richiamo domani. Adesso **ho**	**trtfea.** Sto andando da un cliente
Ho	**trtfea** di abbandonare questo assurdo posto.
Io non **ho**	**trtfea.** Ho solo la necessità di capire.
Lui **ha**	**trtfea** e non può aspettare.
Oggi **ha**	**trtfea**; vedo che guarda continuamente l' orologio.
Anch'io vorrei parlargli, ma questa volta sono io ad **avere**	**trtfea.**
Non **ho**	**trtfea**, gusto il cibo, parlo, scherzo.
"Perché ti arrabbi ?". "Perché **ho**	**trtfea**".
Non **aveva**	**trtfea** di trovarsi clienti, le decisioni potevano aspettare.
Aveva	**trtfea** di arrivare, ma qualcosa lo frenava.

Tra otto ore ho ospiti a cena, devo **pulire**	la **aasc** e tu devi sistemare la cameretta.
Domani devo andare a lavorare e poi al ritorno dovrò **pulire**	**aasc**, lavare, stirare...
Mia nonna lavava i piatti o **sistemava**	la **aasc** e poi si metteva sul divano e riposava.
Cantava le opere mentre **metteva a posto**	la **aasc.**
Prima di andare via, ha **sistemato**	**aasc** e sul tavolo in cucina un biglietto per me.
Vado a prepararmi, **sistemare**	**aasc,** e poi andiamo fuori a festeggiare il compleanno di mio fratello.
Quella sera, mentre **riordinavano**	la **aasc**, Ernestina disse: "Brioschi sembra proprio una brava persona".
Cosima era uscita, mentre Gina **riordinava**	la **aasc** e preparava la cena.
Gli adulti ogni mattina **mettono a posto**	la **aasc,** cucinano, ed alcuni ci portano ancora a scuola.
Facevo le ore piccole per riuscire a **riordinare**	la **aasc** e le cucce degli animali.
Nessuno **sistemerà**	la **aasc,** preparerà il pranzo o semplicemente mi consiglierà su un vestito.
Dobbiamo **riordinare**	la **aasc.**
Mettendo a posto	la **aasc**, aveva trovato in fondo a un cassetto due pacchetti di lettere.
Sto **mettendo a posto**	**aasc.**
Tua figlia qualche volta **pulisce**	la **aasc**?

Gli puoi fare un fax, senza **spendere**	**Isiod.**
Alcune abitudini servono solo a **spendere**	**Isiod.**
Il consumo consiste in persone che **spendono**	**Isiod** che non hanno, per comprare beni che non vogliono.
Alcuni lettori giovani non accettano l'idea di dovere **spendere**	**Isiod** per leggere e informarsi.
La crisi economica ha messo in pericolo la tradizione natalizia di **spendere**	**Isiod** in regali costosi.
Quando i virus entrano nel computer, poi i nostri genitori **spendono**	**Isiod** per farlo riparare .
Quando mi regalano le figurine, le accetto perché così non devo **spendere**	**Isiod** in edicola .
A volte, si **spendono**	**Isiod** per cercare l'introvabile o l'inguardabile.
Purtroppo si continua a **spendere**	**Isiod** tra centrocampisti e attaccanti, e non per la difesa.
Si deve mostrare nei fatti come si **spendono**	**i Isiod**.
È un diritto entrare nell'establishment solo perché si son fatti **spendere**	**Isiod** alla famiglia e si sono letti dei libri?
Si potrebbe regalare gli artcioli invece di **spendere**	**Isiod** in comunicazioneper promuoverli.
Basta **spendere**	**Isiod** per la campagna elettorale
Nella mia famiglia si cerca di **spendere**	**i Isiod** per le cose indispensabili.
Mio nonno dice sempre di guardare come **spendo**	**i Isiod** perché basta un attimo a spenderli tutti.

In moltissimi campi della vita quotidiana (**fare**	la **apsse**, andare in banca ecc.), Internet e il computer sono molto usati.
Domani andiamo a **fare**	la **apsse**.
Voi due **fate**	la **apsse** e io compro i botti. Faremo i fuochi d'artificio.
Non ci possiamo sedere, devo **fare**	la **apsse**.
Io porto i bambini a scuola e poi vado a **fare**	la **apsse** con Eminè.
La domenica mattina lui va a **fare**	**epsse** in un paesino vicino a dove abita; l' c'è un mercato pieno di bancarelle.
Esco solo per **fare**	la **apsse** e così incontro qualche vecchio amico.
Chi deve lavare, pulire, stirare, cucinare, **fare**	la **apsse**? Io, sempre e solo io!
Senti cosa è successo. Abbiamo **fatto**	la **apsse** per cinque persone e invece siamo in tre!
Cosa faremo ... Vivremo. **Faremo**	la **apsse**, ci prepareremo da mangiare ... Che altro possiamo fare?
Per non fare rumore, si preparò un caffè e andò a **fare**	la **apsse** al supermercato.
Mi devo arrangiare, non posso **fare**	la **apsse** tutte le mattine.
Mentre **facevo**	la **apsse** ho incontrato il professor A.
Il Natale sarà più povero, non si **faranno**	**epsse** esagerate, ma si penserà solo all'essenziale.
Sono felice e fiera di me anche quando **faccio**	la **spesa** e spingo il carrello .

Activity 2 – Focus on article use (presence/absence frequency).

After introducing the nominal components of this week's verb-noun combinations through anagrams, the teacher gives the students the sheets with eight groups of concordances and says: *"Read the sentences and for each group decide whether the article is used always, sometimes or never"*. The teacher elicits answers from each group and then goes onto the next activity.

Activity 3 – Focus on article use (effect of number of the noun)

Teacher: *"Now look the sentences again. What happens if the noun is plural? Is the article still used?"*. The teacher elicits the answers and then goes onto the next activity.

L' importante è non **avere**	**fretta,** e io fretta non ne ho.
Scusate, **abbiamo**	**fretta.** Perché? Dove dovete andare? A casa.
Noi dobbiamo andare a casa. **Abbiamo**	**fretta.**
Salvatore, non è giornata! Fai guidare me! Levati! **Abbiamo**	**fretta!** Dai, fai guidare me! Guido io!
Potete rispondere quando volete, non **abbiamo**	**fretta.** Grazie.
Ti richiamo domani. Adesso **ho**	**fretta.** Sto andando da un cliente
Ho	**fretta** di abbandonare questo assurdo posto.
Io non **ho**	**fretta.** Ho solo la necessità di capire.
Lui **ha**	**fretta** e non può aspettare.
Oggi **ha**	**fretta**; vedo che guarda continuamente l' orologio.
Anch'io vorrei parlargli, ma questa volta sono io ad **avere**	**fretta.**
Non **ho**	**fretta**, gusto il cibo, parlo, scherzo.
"Perché ti arrabbi ?". "Perché **ho**	**fretta**".
Non **aveva**	**fretta** di trovarsi clienti, le decisioni potevano aspettare.
Aveva	**fretta** di arrivare, ma qualcosa lo frenava.

Tra otto ore ho ospiti a cena, devo **pulire**	la **casa** e tu devi sistemare la cameretta.
Domani devo andare a lavorare e poi al ritorno dovrò **pulire**	**casa,** lavare, stirare...
Mia nonna lavava i piatti o **sistemava**	la **casa** e poi si metteva sul divano e riposava.
Cantava le opere mentre **metteva a posto**	la **casa.**
Prima di andare via, ha **sistemato**	**casa** e sul tavolo in cucina un biglietto per me.
Vado a prepararmi, **sistemare**	**casa,** e poi andiamo fuori a festeggiare il compleanno di mio fratello.
Quella sera, mentre **riordinavano**	la **casa**, Ernestina disse: "Brioschi sembra proprio una brava persona".
Cosima era uscita, mentre Gina **riordinava**	la **casa** e preparava la cena.
Gli adulti ogni mattina **mettono a posto**	la **casa,** cucinano, ed alcuni ci portano ancora a scuola.
Facevo le ore piccole per riuscire a **riordinare**	la **casa** e le cucce degli animali.
Nessuno **sistemerà**	la **casa,** preparerà il pranzo o semplicemente mi consiglierà su un vestito.
Dobbiamo **riordinare**	la **casa.**
Mettendo a posto	la **casa**, aveva trovato in fondo a un cassetto due pacchetti di lettere.
Sto **mettendo a posto**	**casa.**
Tua figlia qualche volta **pulisce**	la **casa**?

La domenica mattina siamo andati a **fare**	una **gita sul lago** di Bracciano.
Quando uno **fa**	una **gita** all'estero, inizialmente vede tutto più bello.
Angela e Glauco stavano sempre insieme, andavano a **fare**	**gite in** motocicletta, su per le montagne, a nuotare, a sciare…
E il giorno del tuo compleanno . Mi avevi detto che volevi **fare**	un **viaggio.** Vedi ? Ci ho messo mesi per organizzare tutto.
Marcolino e la sua fidanzata volevano **fare**	un **viaggio** da soli.
Andiamo via. **Facciamo**	un **viaggio** io e te.
Sono ancora indecisa se **fare**	un **viaggio** nel Rajastan, o invece andare a Montecarlo.
Mi piacerebbe **fare**	un **viaggio** con Italia, dormire negli alberghi, fare l' amore, ripartire.
Dopo l'esperienza londinese, ho spesso **fatto**	**viaggi** da solo.
Era tanto che non **facevo**	un **viaggio** da solo in una città lontana.
Quando osserviamo il cielo e le stelle, in realtà **facciamo**	un **viaggio** nel tempo!
Benedetta si appoggia alla mia spalla dopo che abbiamo **fatto**	un **viaggio** insieme e si addormenta.
Si riunivano una volta alla settimana e **facevano**	**gite** culturali.
L'idea di **fare**	un **viaggio** in America mi è passata.
All'università, mentre gli altri si organizzavano per **fare**	**viaggi**, vacanze o feste, io passavo le estati a studiare il pianoforte!

Se ha i funghi, prendi i funghi. E fai **prendere**	**aria** ai formaggi. Ora ci fai un bel caffè con la cremina.
Rocchi, vieni a **prendere**	**aria.**
Il caldo è quello di luglio, umido e afoso. Ho deciso di far **prendere**	**aria** alla casa.
Quanto tempo è che non faccio **prendere**	**aria** alla casa, tre mesi? Cinque?
Hai bisogno di **prendere**	**aria.**
Padre Emanuele lo incitava a **prendere**	**aria** fresca.
Volevano mandarla a **prendere**	**aria** buona nelle fotezze alpine.
Forse la ragazza era uscita a **prendere**	**aria**. Forse stava facendo un bagno.
Perché allontanarsi tanto dal luogo dell'esplosione? Per **prendere**	**aria**?
Le finestre erano aperte come tante bocche spalancate a **prendere**	**aria** buona.
Mi sono sentito svenire. Sono uscito a **prendere**	**aria**, avevo bisogno di allontanarmi.
Con una strana piroetta, come una ballerina, fa **prendere**	**aria** a una divertente tuta di raso blu.
Esco fuori a **prendere**	**aria**.
Ho detto a un telespettatore di andare a **prendere**	**aria**.
Da quel momento si consiglia di far **prendere**	**aria** al tatuaggio e di coprirlo più volte al giorno con una pomata.

Quand'è l' ultima volta che abbiamo **fatto**	una **passeggiata**? Ormai stiamo insieme solo per abitudine.
Tu lavori qui? Sono qui per **fare**	una **passeggiata.** Vieni qui a passeggiare? Ci sono tanti bei posti!
Io esco con Nadia, andiamo a **fare**	una **passeggiata** in collina.
"Facciamo	una **passeggiata**?", propose il dottor Cardoso, "farà bene a entrambi".
Passava gran parte del tempo a **fare**	**passeggiate** nei dintorni del castello.
Vorrei **fare**	una lunga **passeggiata** romantica con lui.
Non gli interessava mangiare, bere, dormire, **fare**	una **passeggiata**, voleva solo suonare: suonare e basta.
Ho lasciato la spesa a casa e sono andato a **fare**	una **passeggiata.**
Io qui ci vengo a **fare**	le **passeggiate**, a stare in solitudine.
Abbiamo bevuto delle birre e poi **abbiamo fatto**	una **passeggiata** sotto i portici a guardare i negozi chiusi.
Quando il tempo era buono, andavo a **fare**	**passeggiate** in montagna e partivo la mattina presto.
Qui gli fanno **fare**	le **passeggiate** all'aria aperta in montagna oppure in campagna
Dopo cena **abbiamo fatto**	una **passeggiata** e siamo andati a bere un'altra birra.
Facciamo	una **passeggiata** in solitudine e li tocchiamo la nostra follia.
Un vecchio giornalista che conosco da anni mi portò a **fare**	una **passeggiata** tra vari monumenti nel cuore di Washington.

Guarda che se io **prendo**	il **sole**, sai come divento nero? Ma nero, nero, nero, nero!
Bravi! Io a fare la rivoluzione e voi a **prendere**	il **sole**!
"Poi chi c'era?"."Una ragazza carina che **prendeva**	il **sole**"
Di giorno stavano sulla riva a **prendere**	il **sole** e a nuotare.
Il direttore è nel parco che **sta prendendo**	il **sole**, disse l' impiegato, non so se devo disturbarlo.
È stata un' idea dell'ultimo momento e ci siamo stesi a **prendere**	il **sole** in mezzo ai rovi.
Ci sono molte panchine dove le persone si possono rilassare, **prendere**	il **sole**, leggere, parlare con gli amici…
Mandaci una cartolina e una foto di te che **prendi**	il **sole** sulla spiaggia.
Prendere	il **sole** fa bene: può migliorare l' umore.
Possiamo **prendere**	il **sole** e nuotare facendo nudismo integrale...
Nel pomeriggio **ho preso**	il **sole** nel terrazzo.
Più del 58 % degli intervistati è pronta a **prendere**	il **sole** senza costume dove è consentito.
È frustrante vivere in California e non poter **prendere**	il **sole.**
Fra un po' vado a **prendere**	il **sole** in giardino
Odio i fanatici dell' abbronzatura che mi vogliono costringere a **prendere**	il **sole** per forza e senza un'adeguata protezione.

Gli puoi fare un fax, senza **spendere**	**soldi.**
Alcune abitudini servono solo a **spendere**	**soldi.**
Il consumo consiste in persone che **spendono**	**soldi** che non hanno, per comprare beni che non vogliono.
Alcuni lettori giovani non accettano l'idea di dovere **spendere**	**soldi** per leggere e informarsi.
La crisi economica ha messo in pericolo la tradizione natalizia di **spendere**	**soldi** in regali costosi.
Quando i virus entrano nel computer, poi i nostri genitori **spendono**	**soldi** per farlo riparare .
Quando mi regalano le figurine, le accetto perché così non devo **spendere**	**soldi** in edicola .
A volte, si **spendono**	**soldi** per cercare l'introvabile o l'inguardabile.
Purtroppo si continua a **spendere**	**soldi** tra centrocampisti e attaccanti, e non per la difesa.
Si deve mostrare nei fatti come si **spendono**	i **soldi.**
È un diritto entrare nell'establishment solo perché si son fatti **spendere**	**soldi** alla famiglia e si sono letti dei libri?
Si potrebbe regalare gli articoli invece di **spendere**	**soldi** in comunicazioneper promuoverli.
Basta **spendere**	**soldi** per la campagna elettorale
Nella mia famiglia si cerca di **spendere**	i **soldi** per le cose indispensabili.
Mio nonno dice sempre di guardare come **spendo**	i **soldi** perché basta un attimo a spenderli tutti.

In moltissimi campi della vita quotidiana (**fare**	la **spesa**, andare in banca ecc.), Internet e il computer sono molto usati.
Domani andiamo a **fare**	la **spesa.**
Voi due **fate**	la **spesa** e io compro i botti. Faremo i fuochi d'artificio.
Non ci possiamo sedere, devo **fare**	la **spesa**.
Io porto i bambini a scuola e poi vado a **fare**	la **spesa** con Eminè.
La domenica mattina lui va a **fare**	**spese** in un paesino vicino a dove abita; l' c'è un mercato pieno di bancarelle.
Esco solo per **fare**	la **spesa** e così incontro qualche vecchio amico.
Chi deve lavare, pulire, stirare, cucinare, **fare**	la **spesa**? Io, sempre e solo io!
Senti cosa è successo. Abbiamo **fatto**	la **spesa** per cinque persone e invece siamo in tre!
Cosa faremo ... Vivremo. **Faremo**	la **spesa**, ci prepareremo da mangiare ... Che altro possiamo fare?
Per non fare rumore, si preparò un caffè e andò a **fare**	la **spesa** al supermercato.
Mi devo arrangiare, non posso **fare**	la **spesa** tutte le mattine.
Mentre **facevo**	la **spesa** ho incontrato il professor A.
Il Natale sarà più povero, non si **faranno**	**spese** esagerate, ma si penserà solo all'essenziale.
Sono felice e fiera di me anche quando **faccio**	la **spesa** e spingo il carrello .

COMBINAZIONI CON ARTICOLO		
Sempre	**A volte**	**Mai**

COMBINAZIONI CON ARTICOLO		
Sempre	**A volte**	**Mai**
1. Prendere il sole	1. Fare una passeggiata/fare passeggiate 2. Fare una gita/fare gite; fare un viaggio/fare viaggi 3. Pulire/sistemare/riordinare/mettere a posto la casa/casa 4. Spendere soldi/spendere i soldi 5. Fare la spesa/fare spese	1. Prendere aria 2. Avere fretta

Activity 4 – Concordance gap-fill (verb)

Teacher: *"On these pages (T shows from a distance) there are eight groups of sentences, but in each group the verb is missing. In your groups, find the missing verb. When you finish, turn the page, read the solution, and tell me how many you got right".*

Qual è la parola che manca?

1. ……

Io esco con Nadia, andiamo a	una passeggiata in collina.
Vorrei	una lunga passeggiata romantica con lui.
Non gli interessava mangiare, bere, dormire,	una passeggiata, voleva solo suonare: suonare e basta.
Ho lasciato la spesa a casa e sono andato a	una passeggiata.
Dopo cena	una passeggiata e siamo andati a bere un'altra birra.
Un vecchio giornalista che conosco da anni mi portò a	una passeggiata tra vari monumenti nel cuore di Washington.

2. ……

Di giorno stavano sulla riva a	il sole e a nuotare.
Guarda che se io	il sole, sai come divento nero? Ma nero, nero, nero, nero!
Ci sono molte panchine dove le persone possono	il sole, leggere, parlare con gli amici…
Mandaci una cartolina e una foto di te che	il sole sulla spiaggia.
	il sole fa bene: può migliorare l' umore.
Fra un po' vado a	il sole in giardino.

3. ……

Quando uno	una gita all'estero, inizialmente vede tutto più bello.
Angela e Glauco stavano sempre insieme, andavano a	gite in motocicletta, su per le montagne, a nuotare, a sciare…
Marcolino e la sua fidanzata volevano	un viaggio da soli.
Sono ancora indecisa se	un viaggio nel Rajastan, o invece andare a Montecarlo.
Mi piacerebbe	un viaggio con Italia, dormire negli alberghi, fare l' amore, ripartire.

4. ……

Rocchi, vieni a	aria.
Quanto tempo è che non faccio	aria alla casa, tre mesi? Cinque?
Hai bisogno di	aria.
Padre Emanuele lo incitava a	aria fresca.
Volevano mandarla a	aria buona nelle fotezze alpine.
Esco fuori a	aria.

5. ……

Domani devo andare a lavorare e poi al ritorno dovrò	casa, lavare, stirare...
Mia nonna lavava i piatti o	la casa e poi si metteva sul divano e riposava.
Cantava le opere mentre	la casa.
Prima di andare via, ha	casa e sul tavolo in cucina un biglietto per me.
Vado a prepararmi,	casa, e poi andiamo fuori a festeggiare il compleanno di mio fratello.
Quella sera, mentre	la casa, Ernestina disse: "Brioschi sembra proprio una brava persona".

6. ……

Noi dobbiamo andare a casa.	fretta.
Salvatore, non è giornata! Fai guidare me! Levati!	fretta! Dai, fai guidare me! Guido io!
Potete rispondere quando volete, non	fretta. Grazie.
Ti richiamo domani. Adesso	fretta. Sto andando da un cliente
	fretta di abbandonare questo assurdo posto.
Io non	fretta. Ho solo la necessità di capire.

7. .....

La crisi economica ha messo in pericolo la tradizione natalizia di	soldi in regali costosi.
Quando i virus entrano nel computer, poi i nostri genitori	soldi per farlo riparare .
Quando mi regalano le figurine, le accetto perché così non devono	soldi in edicola .
A volte, si	soldi per cercare l'introvabile o l'inguardabile.
Purtroppo si continua a	soldi tra centrocampisti e attaccanti, e non per la difesa.
Si deve mostrare nei fatti come si	i soldi.

8. .....

Non ci possiamo sedere, devo	la spesa.
Io porto i bambini a scuola e poi vado a	la spesa con Eminè.
La domenica mattina lui va a	spese in un paesino vicino a dove abita.
Esco solo per	la spesa e così incontro qualche vecchio amico.
Chi deve lavare, pulire, stirare, cucinare,	la spesa? Io, sempre e solo io!
Senti cosa è successo.	la spesa per cinque persone e invece siamo in tre!

Week 3

(This is a modified sequence of the activities I actually did. In class, I started with the matching, but it was too difficult for the first class of students, so for the following three I improvvised a more guided focus-on-form series of activities)

Activity 1 – Focus on article use (presence/absence frequency)

Teacher: *"Read each group of sentences and decide whether the article is used always, sometimes or never".*

Activity 2 – Focus on definite article use

Teacher: *"Find the combinations that use the definite article always, sometimes or never".*

Activity 3 – Focus on definite article use (number of the noun variable)

Teacher: *"Find the combinations that use the definite article with a plural noun always, sometimes or never".*

I contadini aspettavano il giorno di festa per mettere	il vestito buono e dimenticare per un poco le sofferenze.
Molte donne e uomini, quando vogliono sedurre, mettono	determinati vestiti, per colpire l' attenzione .
Mi alzo nel gelo più totale, e metto	i vestiti sotto le coperte , per scaldarli.
Mettiti	la giacca, che c'è vento!
Fausto non ha neppure il tempo di fare una doccia, si mette	una giacca sulla maglia rosa, prende la bici in spalla.
La ministra che si mette	la giacca rossa per una foto è perché vuole essere notata.
Si era messo	la giacca nera e la camicia.
Per rimanere all' aperto dopo cena era necessario mettersi	una giacca a vento.
Va bene. Metto	le scarpe e andiamo.
Per mesi avevo sempre usato le infradito e adesso che mettevo	le scarpe mi sembrava che i piedi si fossero ingranditi.
Perché per camminare in quei sentieri impervi doveva mettere	scarpe basse ...
Niki rannicchia le gambe al petto e mette	le scarpe sul sedile.
Mi piace l'idea di essere stato in un posto dove non ho messo	le scarpe per così tanto tempo.
Devo andare! Mi metto	le scarpe e raggiungo papà in macchina.
Mi sono messa	le scarpe e siamo andati alla fermata del pulmino.

Devo scappare, ho	lezione. Ciao!
Cercherò di esserci anch'io, ma a quell'ora ho	lezione e sarà difficile.
"Io domani non ho	lezione". "Beata a te!"
Devo purtroppo scappare perché ho	lezione e poi ritorno qua all'una e mezza.
Oggi pomeriggio ho	lezione di turco.
Scusate, ho solo 10 minuti perché poi ho	lezione.
Di solito mi alzo a quest'ora perché insegno e ho	lezione alle otto.
Io vivo a Roma, ma stamattina purtroppo ho avuto	lezione e non sono potuta andare.
Io sicuramente non posso alle 12, perché ho	lezione, quindi penso che mi collegherò verso le 18.
"Vieni a cena con me stasera?". "Stasera ho	lezione di ballo. "A che ora finisci? Ti vengo a prendere."
Avrò	molte lezioni quando tornerò a scuola.
Quel giorno aveva	lezione, ma prima voleva parlare con un altro alchimista.
Era già tardi, forse le due passate e lui aveva	una lezione il mattino dopo.
"Ti va di fare un salto da Mondi domattina?". " Lo sai che ho	lezione all'università, non posso".
Quel mercoledì, i seminaristi e i loro insegnanti non avevano	lezione.

Ieri ho fatto una corsa pazzesca per prendere	l'autobus!
"Mi dai un passaggio?". "Non se ne parla proprio. Prenditi	l'autobus!"
"Io faccio un'ora di straordinario mi aspetti?". "No, prendo	l'autobus, faccio prima".
Noi al ritorno prendiamo	l'autobus.
Per andare da casa al lavoro e viceversa prendo	l'autobus.
Sono vent' anni che vengo qui. Prendo	l'autobus e poi la metro.
Elena, in un gelido giorno di bora, ha preso	l'autobus e si è diretta a Grado a conoscere suo padre.
La mattina mia sorella si sveglia sempre alle 5:45 per prendere	l'autobus che porta al liceo.
Quando esco di casa, devo prendere	l'autobus che arriva sempre 1 minuto dopo il mio arrivo alla fermata.
Proprio questa settimana mi è capitato di andare in centro con	l' autobus.
Mi alzo, mi preparo e in dieci minuti sono pronto per prendere	l'autobus delle sette e dieci.
Devo raggiungere piazzale Roma e prendere	l'autobus per tornare a Marghera.
Nel frattempo, prendiamo	l'autobus ci porta nello stupendo paesino di Caprala.
Tra poco prenderò	un autobus notturno e tornerò a Melbourne.
Per raggiungere l'università ogni mattina, o si prende	un autobus, o si fa una bella passeggiata di circa 20 minuti...

Voglio svegliarmi con te, baciarti per strada, fare	colazione insieme, e leggere insieme nella vasca da bagno.
"Come si sente?". "Bene. Non c' è niente. Non faccio	mai colazione a casa. Prendiamo qualcosa al bar."
Dai che fai tardi a scuola. Allora ancora devi fare	colazione, sbrigati.
Buongiorno. Noi andiamo a fare	colazione a Borgo Pio.
Nella sala ristorante vide il suo amico Silva che faceva	un'abbondante colazione con brioche e caffellatte.
"Hai fatto tardi". "Dovevo fare	colazione". "Beh certo, ti pareva."
Prendo solamente una tazza di caffè. Ho già fatto	colazione a Milano e sono a dieta.
Avevano fatto	colazione nella casa sul lago e poi erano ripartiti.
Domenica mattina ci siamo alzati tardi. Abbiamo fatto	una colazione leggera e poi siamo usciti.
Giorgio si è alzato. Devo rientrare per fare	colazione con lui. Se non mi trova, si arrabbia.
Dopo aver fatto	colazione, con lentezza sono tornata in soffitta.
La mattina, quando faceva	colazione, mangiava sempre i biscotti in numero pari.
La mia giornata inizia alle ore sette quando mi alzo, dopodiché faccio	immediatamente colazione con una tazza di caffellatte.
Se la sera vai a letto tardi, la mattina ti alzi con fatica, fai	una colazione veloce se vai di fretta .

Joan dorme in un furgone parcheggiato e va a fare	la doccia da Tina.
È obbligatorio fare	la doccia e indossare la cuffia prima di entrare in acqua.
Ora fatti	una doccia che io nel frattempo preparo la cena.
Mi stavo facendo	la doccia ed è andata via l'acqua.
Per fare	la doccia ci stava anche un'ora.
Io vado a fare	una doccia.
Jenny era rimasta con lui mentre faceva	la doccia e si vestiva.
Tra un'ora stacco, me ne torno a casa, mi faccio	una bella doccia, mi preparo una zuppa.
L'allenamento è finito, andate a farvi	la doccia.
Devo scappare in ufficio da Finzi. Mi faccio	una doccia e vado.
Appena finita la lezione sono andato a farmi	una doccia e rivestirmi.
Ho fatto	una doccia di venti minuti.
Lasciò la finestra e andò in bagno a fare	una doccia.
Credo che scenderò a fare	una doccia.
Vado a fare	una doccia e poi mi metto in movimento.

Devo mandare	un messaggio a suo fratello in inglese cercandomi di spiegarmi.
Tu l' hai vista? La senti? Non chiama, non manda	un messaggio.
Quando mia mamma mi manda	un messaggio, non l' ho mai vista scrivere "per", ma sempre e solo "x".
Appena arrivo ti mando	un messaggio.
Se ci siete verso le 18, vi mando	un messaggio.
Non l'ho più voluto vedere. Mi ha mandato	messaggi per settimane.
Quando mandiamo	messaggi al cellulare, scriviamo parole come "tvb" per "ti voglio bene".
Decido di mandarle	un messaggio. Cosa scrivo? Faccio il simpatico?
Con i cellulari la gente raramente telefona, ma manda	messaggi molto brevi.
Stasera le farò sapere qualcosa, le manderò	un messaggio.
Poi manderò	un messaggio ad un paio di amici di Milano.
E dalla casa in cui era entrata mandava	messaggi telefonici al fidanzato.
Gli amici continuano a mandargli	messaggi su Facebook.
Ho cambiato operatore, ma la Tim continua a mandarmi	messaggi pubblicitari
Voglio che mi chiami ogni 5 minuti, mi mandi	messaggi, video messaggi, mi dici dove sei...

"Ci penserà lei, a cambiare le lenzuola, rifare	il letto: puoi andartene, dunque."
A volte, se ho tempo, faccio prendere aria alla casa e rifaccio	i letti.
La mia compagna ha sognato di rifare	il letto insieme a me, con molta calma e serenità.
Sono stata al telefono finora e non sono ancora riuscita a rifare	letti, lavarmi, e tutte queste cose da casalinga .
Venne una cameriera a sistemare	i letti per la notte e mise sui cuscini un bacio Perugina
In fondo alla scala, posai la candela in terra, lei sistemò	il letto.
Ragazzi. Vi ho portato cuscini e lenzuola, così fate	il letto. Dormite in due in un letto.
Caterina cucinava e faceva	i letti.
"Io vado a farti	il letto. Lorenzo mi aiuti?"
Nella camera di mio cugino Giorgio abbiamo fatto	un letto matrimoniale per la mamma, mia sorella Piera e me.
La mamma di Giulietta faceva	il letto nella grande stanza in cima alle scale.
La mamma aveva finito di fare	il letto.
La mamma dell' altra bambina faceva	il letto in un' altra grande stanza.
Apprendere dall'esperienza con lavoretti in casa (rifare	il letto o sparecchiare), ma anche a scuola.
Erano letteralmente piegati in due per rifare	il letto.

Insieme ad altri amici, erano andati in un bar dove mettevano	la musica.
C'è stata una grande festa che c'ero io lì a mettere	musica.
Anche in certi momenti, io non spengo le luci, non metto	la musica. E che a me piace ridere.
Quando in radio ho iniziato a mettere	la musica di Pat Matheny, lui non era molto conosciuto in Italia.
Per svegliarmi, i miei dolci genitori mettono	la musica a tutto volume e allora mi alzo subito.
Il dj metteva	musica bellissima che nessuno riusciva a non ballare.
Amo la musica leggera, ma quando voglio scatenarmi metto	musica rock.
Andrea ha messo	la musica e Ruby Tuesday riempie la cucina.
Andò al giradischi e mise	una musica lenta.
Ha acceso lo stereo, ha messo	la nostra musica, quella che mi fa ascoltare al telefono.
Un'occupazione minima, eppure fatta con gioia, mettendo	una buona musica di sottofondo, offrirà piccoli momenti di leggerezza.
Appena metti	una musica a volume altissimo, loro si portano le mani alle orecchie.
Prima di ogni partita metto	le musiche che mi "gasano" di più.
Voglio vivere fermando il tempo, e in sottofondo mettere	buona musica.
Questi mettono	la musica al centro del loro pensiero creativo.

Activity 4 – Match combination to usage description

Teacher: *"Read the eight descriptions and match them to one of the groups of sentences that you just read".*

Leggi i gruppi di frasi e abbina le lettere e i numeri in modo corretto.

A. La combinazione viene usata a volte con l'articolo determinativo, a volte con l'articolo indeterminativo e a volte senza articolo. La combinazione viene usata quasi sempre con il nome al singolare.	1. prendere + autobus
B. la combinazione viene usata quasi sempre senza articolo, raramente con l'articolo indeterminativo.	2. fare + colazione
C. la combinazione viene usata sempre con l'articolo. Spesso, l'articolo è determinativo, a volte è indeterminativo. La combinazione viene usata sempre con il nome al singolare.	3. mettere + musica
D. la combinazione viene usata quasi sempre con l'articolo determinativo, raramente con l'articolo indeterminativo e raramente senza articolo.	4. mettere + scarpe/giacca/vestito
E. La combinazione viene usata sempre con l'articolo, a volte determinativo e a volte indeterminativo. Il nome è sempre al singolare.	5. avere + lezione
F. la combinazione viene usata spesso senza articolo; a volte si usa con l'articolo indeterminativo, se il nome è accompagnato da un aggettivo, ma mai con l'articolo determinativo. A volte, tra il verbo e il nome c'è un avverbio. La combinazione viene usata sempre con il nome al singolare.	6. rifare + letto
G. La combinazione viene usata sempre con un articolo indeterminativo se il nome è al singolare, e senza articolo se il nome è al plurale.	7. fare + doccia
H. la combinazione si usa molto spesso nella forma riflessiva, quasi sempre con l'articolo determinativo, qualche volta con l'articolo indeterminativo.	8. mandare + messaggio

Soluzione:

A. La combinazione viene usata a volte con l'articolo determinativo, a volte con l'articolo indeterminativo e a volte senza articolo. La combinazione viene usata quasi sempre con il nome al singolare.	3. mettere + musica
B. la combinazione viene usata quasi sempre senza articolo, raramente con l'articolo indeterminativo.	5. avere + lezione
C. la combinazione viene usata sempre con l'articolo. Spesso, l'articolo è determinativo, a volte è indeterminativo. La combinazione viene usata sempre con il nome al singolare.	1. prendere + autobus
D. la combinazione viene usata quasi sempre con l'articolo determinativo, raramente con l'articolo indeterminativo e raramente senza articolo.	6. rifare + letto
E. La combinazione viene usata sempre con l'articolo, a volte determinativo e a volte indeterminativo. Il nome è sempre al singolare.	7. fare + doccia
F. la combinazione viene usata spesso senza articolo; a volte si usa con l'articolo indeterminativo, se il nome è accompagnato da un aggettivo, ma mai con l'articolo determinativo. A volte, tra il verbo e il nome c'è un avverbio. La combinazione viene usata sempre con il nome al singolare.	2. fare + colazione
G. La combinazione viene usata sempre con un articolo indeterminativo se il nome è al singolare, e senza articolo se il nome è al plurale.	8. mandare + messaggio
H. la combinazione si usa molto spesso nella forma riflessiva, quasi sempre con l'articolo determinativo, qualche volta con l'articolo indeterminativo.	4. mettere + scarpe/giacca/vestito

Week 4

Activity 1 - Focus on indefinite article use

Teacher: *"Read the sentences and answer the following questions: 1. In which sentences do you find an article between the verb and noun? 2. Is it a definite or indefinite article? (indefinite). 3. In these sentences, what kind of word do you see after the noun? (adjective). With the other members of your team, write your answers and describe the rule".*

1	Passavo le giornate vagando per questa città bellissima. Non **avevo**	**fame.** Bevevo l'acqua fresca delle fontanelle.
2	"Caterina. È pronto a tavola." "Non **ho**	**fame**, grazie." "Ti prego tesoro, vieni."
3	"Ti ho lasciato da parte le polpette." "Grazie, ma non **ho**	**fame**."
4	Non voglio essere solo. **Ho** un'infinita	**fame** d'amore.
5	Non **avevo**	**fame**, quindi sono entrata in un negozio di dischi.
6	La nuova squadra **ha**	**fame** di cose nuove.
7	Quando torna da lavoro, **ha** sempre	una **fame** incredibile.
8	**Ho**	**fame** ma non riesco a mangiare.
9	"Li vedi quelli lì? **Hanno** sempre	**fame**."
10	"Io **ho**	una **fame** pazzesca, voi"
11	"Vuoi mangiare qualcosa?" "Grazie, ho mangiato un panino fuori e non **ho**	**fame**."
12	L'opinione pubblica **ha**	**fame** di notizie.
13	"È mezzogiorno passato. **Ho**	**fame**, voi no?"
14	Appena entro in casa **ho** già	**fame.**
15	Le persone **hanno**	**fame** di giustizia.

1. In quali frasi c'è un articolo tra *avere* e *fame*?
2. Che tipo di articolo è?
3. In queste frasi, che cosa c'è dopo la parola *fame*?

Insieme ai tuoi compagni di squadra, scrivi qui sotto le risposte e spiega quando si usa l'articolo tra *avere* e *fame*.

Activity 2 – Literal vs. metaphorical meaning + article pattern

Teacher: *"Read the sentences and answer the following questions: 1. In which sentences is the word combination not referred to food (i.e. is not used in the literal meaning)? If the combination is not referred to food, what is it referred to? 3. In these sentences, what kind of words come after the noun? With the other members of your team, write your answers and describe the rule".*

Activity 3 - Concordance gap-fill (verb and noun)

Teacher: *"On these pages (T shows from a distance) there are eight groups of sentences, but in each group the verb or the noun are missing. In your groups, find the missing verb or the missing noun. When you finish, turn the page, read the solution, and tell me how many you got right".*

Scrivi la parola che manca in ogni gruppo di frasi:

1. ……..

Si è fatto molto tardi, devo	la cena.
Poi sono andata in cucina per	una cena veloce.
La mamma aveva passato il pomeriggio a	la cena.
Quel giorno sono tornata a casa prima per	una cena speciale.
Ho appena finito di	la cena.

2. ……..

Ma qui dove siamo? Forse abbiamo	strada.
Quando non hai impegni di lavoro, anche	strada è bello.
Ammettiamolo: hai	strada.
Era stata un'avventura straordinaria,	strada in quelle notti buie.
Ho capito di aver	strada.

3. ……..

Prova a	la strada giusta.
Come	la strada di casa in mezzo a gente che non capisce?
Finalmente ho	la strada e il numero di casa tua.
Dobbiamo	la strada migliore per uscire da questa crisi.
Non più	la strada.

4. ……..

Abbiamo trovato	un	bellissimo, vicino al mare.
Forse riusciamo a trovate	un	in cui c'è posto anche per i nostri cugini.
Ho trovato	un	in centro da condividere con altri studenti.
Lucia ha trovato	un	troppo piccolo per ospitare anche i genitori.
Alla fine, siamo riusciti a trovare	un	in via Vignoli.

5. ……..

Se hai bisogno di un posto per dormire, posso	una stanza a casa mia.
Ho	una stanza in un quartiere bruttissimo.
Chi ha una stanza vuota in casa, può	la stanza.
Matteo	una stanza molto grande in un appartamento con altre due ragazze.
Quella famiglia non	stanze agli studenti.

6. ……..

	l'appartamento con una ragazza spagnola, Pilar.
L'amica che	l'appartamento con me si è trasferita a Milano.
Mi piacerebbe moltissimo	l'appartamento con altri colleghi.
Spero che altri amici vorranno dividere	l'appartamento con noi.
C'era anche Carlo, con cui dividevo	lo stesso appartamento.

7. .....

Nessuno di voi due ha voluto	la spesa.
A pranzo qualcuno cucinava e poi si	le spese.
Se organizziamo un gruppo di viaggio, possiamo	le spese.
Visto che abbiamo case vicine, usiamo lo stesso wi-fi e	le spese.
Possiamo viaggiare con una sola macchina e poi	le spese della benzina.

Soluzioni:

1. **preparare**
2. **sbagliare**
3. **trovare**
4. **appartamento**
5. **affittare**
6. **dividere**
7. **dividere**

Week 5

Activity 1 – Concordance matching

Teacher: *"On this page there are four groups of sentence halves. The left part of the sentences has a number, while the right part of the sentences has a letter. Match the numbers and the letters correctly. When you finish, turn the page and read the solution".*

Abbina i gruppi di frasi in modo corretto.

		1		A	
	Ho uno zio in Albania che **suona**				**shopping.**
	Quel ragazzo **suonava**				**shopping.**
	Alex **suona**				**shopping,** si innervosiva subito.
	Cominciò a **suonare**				**shopping** con la mia amica che è incinta.
	Raniero **suona** benissimo				**shopping** con gli amici.

		2		B	
	Camilla è andata a **fare**				una **foto**? Siamo in viaggio di nozze…
	Esco con Niki per **fare**				le **foto** coi telefonini, spingono…
	Odiava **fare**				una **foto** mentre dormiva.
	Oggi sono uscita a **fare**				**foto** da turisti.
	Vedevo tanta gente che girava tranquilla **facendo**				la **foto** all'altro.

		3		C	
	Perché scriviamo poesie, **dipingiamo**				la **chitarra**.
	Oggi sarebbe impossibile **dipingere**				la **chitarra** meglio di tutti.
	Il prete non ricordava chi avesse **dipinto**				la **chitarra** e compone per un gruppo di rock progressivo.
	Potevi fare il pittore e **dipingere**				la **chitarra** e il contrabbasso da solo.
	Lionello Spada aveva **dipinto**				la **chitarra**: repertorio classico e Led Zeppelin.

		4		D	
	Scusi, ci potrebbe **fare**				**quadri**, componiamo sinfonie?
	Tutti parlano, **fanno**				un **quadro** come quello di Pellizza da Volpedo.
	Un giorno mi sono svegliata e gli ho **fatto**				i pochi **quadri** che si trovavano nella sua chiesa.
	Io, da parigina, trovavo sciocco **fare**				**quadri** sempre diversi.
	Il primo di noi due che apriva gli occhi **faceva**				un bel **quadro** che rappresentava san Francesco d'Assisi.

Soluzione:

		1		C	
	Ho uno zio in Albania che **suona**				la **chitarra**.
	Quel ragazzo **suonava**				la **chitarra** meglio di tutti.
	Alex **suona**				la **chitarra** e compone per un gruppo di rock progressivo.
	Cominciò a **suonare**				la **chitarra** e il contrabbasso da solo.
	Raniero **suona** benissimo				la **chitarra**: repertorio classico e Led Zeppelin.

		2		A	
	Camilla è andata a **fare**				**shopping.**
	Esco con Niki per **fare**				**shopping.**
	Odiava **fare**				**shopping,** si innervosiva subito.
	Oggi sono uscita a **fare**				**shopping** con la mia amica che è incinta.
	Vedevo tanta gente che girava tranquilla **facendo**				**shopping** con gli amici.

		3		D	
	Perché scriviamo poesie, **dipingiamo**				**quadri**, componiamo sinfonie?
	Oggi sarebbe impossibile **dipingere**				un **quadro** come quello di Pellizza da Volpedo.
	Il prete non ricordava chi avesse **dipinto**				i pochi **quadri** che si trovavano nella sua chiesa.
	Potevi fare il pittore e **dipingere**				**quadri** sempre diversi.
	Lionello Spada aveva **dipinto**				un bel **quadro** che rappresentava san Francesco d'Assisi.

		4		B	
	Scusi, ci potrebbe **fare**				una **foto**? Siamo in viaggio di nozze…
	Tutti parlano, **fanno**				le **foto** coi telefonini, spingono…
	Un giorno mi sono svegliata e gli ho **fatto**				una **foto** mentre dormiva.
	Io, da parigina, trovavo sciocco **fare**				**foto** da turisti.
	Il primo di noi due che apriva gli occhi **faceva**				la **foto** all'altro.

Activity 2 – Guided observation of patterns through options

A

Teacher: *"Read the options in the description and choose the right option according to what you observe in the 15 sentences for the combination ascoltare + music (listen + music). Check with the person next to you. Then we check together".*

Leggi le frasi selezionate dal Perugia Corpus e scegli l'opzione giusta per descrivere le combinazioni.

A

1	Il podcast è molto diffuso tra i giovani, che **ascoltano**	**musica** a tutto volume dai loro lettori mp3 .
2	Credeva di non aver bisogno di nessuno. **Ascoltava**	la **musica** e faceva sport, ma solo quelli individuali.
3	Margherita li avrebbe raggiunti e avrebbero **ascoltato**	la **musica** e chiacchierato.
4	Quest'uomo fa cose normalissime: beve l'aperitivo, **ascolta**	**musica**, compra il giornale, va al ristorante,
5	Ha ancora le cuffiette alle orecchie, **ascolta**	la **musica** e accelera.
6	Tu cucinavi, parlavi, leggevi libri, **ascoltavi**	**musica** e ripetevi le poesie a memoria.
7	La vicina di casa di Francesca **ascolta**	sempre **musica** tipo Ricky Martin o Shakira
8	Ho ascoltato e **ascolto**	molta **musica**. Mi affascina molto la musica etnica.
9	I miei hobby sono **ascoltare**	**musica**, tipo hip hop e rap.
10	Quando prendo i mezzi ascolto sono sola, quindi **ascolto**	la **musica**, così il tempo scorre più velocemente.
11	Uso l'mp3 molto frequentemente. **Ascolto**	tantissima **musica** anche a casa.
12	Uso l'iPod per **ascoltare**	**musica** di vario genere, soprattutto quando sono in giro.
13	Litigo con mia sorella perché lei mi disturba mentre io **ascolto**	la **musica**.
14	Nella mia camera ci sono la televisione e il computer, dove **ascolto**	**musica**, e vado in Internet a volte.
15	**Ascolto**	molta **musica**. Il mio cantante preferito è Justin Timberlake.

Descrizione:

Nella combinazione *ascoltare + musica*, l'articolo determinativo

a. non si usa mai
b. si usa a volte
c. si usa sempre

Se prima di *musica* c'è un

a. un aggettivo indefinito
b. un avverbio
c. una preposizione

l'articolo determinativo

a. non si usa mai
b. si usa a volte
c. si usa sempre

, come si può vedere nelle frasi n. …, …., …., …. .

B

Teacher: *"Read the options in the description and choose the right option according to what you observe in the 15 sentences for the combination fare + sport (do + sport). Check with the person next to you. Then we check together".*

B

1	Prometto che comincio a **fare**	**sport**!
2	Non fumava, **faceva**	**sport** ma non amava il calcio.
3	Non ha mai smesso di **fare**	**sport.**
4	Chi non è sereno può **fare**	uno **sport** estremo alle terme e riposarsi.
5	Non aveva un grammo di grasso non perché **faceva**	molto **sport**, ma perché saltava i pasti.
6	I bambini sono sempre più restii a **fare**	uno **sport** che permetta loro di sviluppare le capacità fisiche
7	Lui **faceva**	molto **sport**: correva la mattina e faceva palestra la sera.
8	Ho sempre **fatto**	**sport**.
9	Mi piacciono i film d'azione, anche se girarli è un po' come **fare**	uno **sport** estremo.
10	Chi **fa**	tanto **sport** corre rischi. Ne faccio poco.
11	Mi hanno fatto **fare**	**sport** anche se dimostravo di non essere troppo serio.
12	Chi **fa**	**sport** difficilmente è sovrappeso.
13	L'unica soluzione per continuare a **fare**	**sport** è attrezzarsi per farlo in casa.
14	Per non incorrere in problemi gravi, meglio **fare**	tanto **sport** e mangiare sano ...
15	Se si **fa**	**sport** è per vincere, o almeno per provarci.

Descrizione:

Nella combinazione *fare + sport*, l'articolo determinativo

a. non si usa mai
b. si usa a volte
c. si usa sempre

mentre l'articolo indeterminativo si usa se

dopo sport c'è

a. un aggettivo
b. un avverbio
c. che…

come si vede nelle frasi n. …., …., in cui c'è l'aggettivo …….. .

Inoltre, tra *fame* e *sport* a volte c'è

a. un aggettivo
b. un avverbio
c. che…

come si vede nelle frasi n. …., …., ….., e …. , e se c'è

l'avverbio l'articolo

a. non c'è mai
b. a volte c'è
c. c'è sempre

Activity 3 - Guided observation of patterns through questions

A

Teacher: *"Read the questions and find the answers in the group of 15 sentences for the combination leggere + romanzo (read + novel).*

Questions: *1. When the noun is singular, which article is used? 2. In the sentences with a definite article between the verb and noun, what kind of word do you see after "romanzo"? (an adjective). 3. When the noun is plural, are articles used? (no)"*

Leggi le frasi selezionate dal Perugia Corpus e rispondi alle domande:

A

1	La ragazza dietro il banco stava **leggendo**	un **romanzo**.
2	Volevo solo mettermi da qualche parte a **leggere**	**romanzi**.
3	Quando non lavorava **leggeva**	**romanzi** storici.
4	**Aveva letto** molti	**romanzi** e libri sull' Italia.
5	Prima leggevo libri con poche pagine, invece adesso **leggo**	**romanzi** in una settimana.
6	Capita a tutti prima o poi di non riuscire a finire di **leggere**	un **romanzo**.
7	Nessuno **legge**	un **romanzo** di 500 pagine su schermo.
8	Nella corte di papi nessuno **aveva letto**	il celebre **romanzo** di David H. Lawrence.
9	**Ho letto**	il bel **romanzo** di Helen Humphreys.
10	Il giovane Walter **leggeva**	**romanzi** e resoconti sul viaggio.
11	**Ho letto**	i tuoi **romanzi** con tanta passione.
12	**Ho letto**	il **romanzo** di Felipe Arago ma ero stanco e non ricordo molto.
13	Quando **leggiamo**	un **romanzo**, ci chiediamo se la storia potrebbe essere vera.
14	Capirete la storia se **leggerete**	il **romanzo** che vi ho consigliato.
15	Molti ragazzi del 2000 pensano che non abbia senso **leggere**	questo **romanzo** perché antico e inutile per il bagaglio culturale

1. **Quando il nome è al singolare (romanzo), quale articolo si usa?**
2. **Quando si usa l'articolo "il", cosa c'è dopo "romanzo"?**
3. **Quando il nome è al plurale, si usano articoli?**

B

Teacher: *"Read the questions and find the answers in the group of 15 sentences for the combination vedere/guardare + film (see/look + film).*

Questions: *1. Which verb is used more frequently? (vedere). 2. Which article is used when the noun is singular? 3. Which article is used when the noun is plural? Is it used often? In the sentences with this kind of use, what kind of words can you see after the noun?".*

B

1	Ha preparato in fretta qualcosa da mangiare, **guardando**	un **film** in televisione.
2	Francesca mi piaceva molto. **Abbiamo guardato**	un **film** sul divano.
3	Quando **vedi**	un **film** d'amore pensi, "ecco un vero film!"
4	Non mi portate a **vedere**	**film** horror, perché sono ansiosissima.
5	Erano andati al cinema a **vedere**	un **film** in costume interpretato da Sophia Loren.
6	Puoi **vedere**	i **film** di Mel Gibson senza leggere i sottotitoli.
7	Vado spesso a **vedere**	**film** come Harry Potter che sono tratti da libri.
8	Normalmente, **guardando**	un **film** siamo abituati a vedere punti di vista diversi.
9	Devi aspettare di **vedere**	il **film** di Mauro per capire esattamente la storia.
10	Avevo proposto di **vedere**	un **film** in pineta, all'aperto.
11	**Guardare**	i **film** in lingua originale è un buon allenamento.
12	Una volta **aveva visto**	un vecchio **film** con Elliot Gould.
13	Guarda che **sto vedendo**	un **film**, non mi disturbare.
14	Ci **guardiamo**	un **film** allora?
15	C'è una lavagna multimediale usata per **vedere**	**film**, video, immagini.

1. **Quale verbo si usa di più con "film"?**
2. **Quale articolo si usa nella combinazione quando "film" è al singolare?**
3. **Quale articolo si usa nella combinazione quando "film" è al plurale? Viene usato frequentemente? Nelle frasi in cui si usa, cosa c'è dopo "film"?**

Week 6

Activity 1 - Guided observation of patterns through questions

A

Teacher: *"Read the questions and find the answers in the group of 15 sentences for the combination organizzare + viaggio (organise + trip).*

Questions: *1. What kind of article is used between the verb and the noun? Only the definite, only the indefinite or both? 2. In which sentences is the definite article used?In these sentences, what comes after the noun? 3. In which sentences is the indefininte article used? In these sentences, what comes after the noun? 4. In which sentences in the article never used?"*

A) organizzare un viaggio

1	Mario ha bisogno di qualcuno che gli **organizzi**	**viaggi**, vacanze e momenti di svago.
2	Abbiamo **organizzato**	il **viaggio** in aereo e la sistemazione in hotel.
3	Ho bisogno di consigli per **organizzare**	il mio **viaggio** a Brescia.
4	Se ti piace **organizzare**	i tuoi **viaggi** da solo, questi sono i voli più economici.
5	Se dovete **organizzare**	**viaggi**, fatelo alla nuova agenzia che ha aperto in centro.
6	A luglio Hemingway aveva **organizzato**	un **viaggio** per la Fiesta di Pamplona.
7	La famiglia di Alessandro sta **organizzando**	un **viaggio** per andare a Milano.
8	Ad agosto, il maestro **organizzò**	un **viaggio** lunghissimo attraverso l' Europa.
9	Ciao a tutti, sto **organizzando**	un **viaggio** per visitare Gardaland e avrei bisogno di consigli.
10	C'è un'associazione di campeggiatori turistici che **organizza**	**viaggi** per gli associati.

1. Tra il verbo e il nome si usa solo l'articolo determinativo, solo quello indeterminativo oppure entrambi?
2. In quali frasi si usa l'articolo determinativo?

   In queste frasi, che cosa c'è dopo il nome?
3. In quali frasi si usa l'articolo indeterminativo?

   In queste frasi, che cosa c'è dopo il nome?
4. In quali frasi non si usa mai un articolo?

B

Teacher: "*Read the questions and find the answers in the group of 15 sentences for the combination prendere + treno (take + train).*

Questions: *1. What kind of article is used between the verb and the noun? Only the definite, only the indefinite or both? 2. In which sentences is there a verb in the present tense? And in the past tense? And in the infinitive? And in the imperative?"*

B) prendere il treno/l'aereo

1	Ieri ho fatto una corsa pazzesca per **prendere**	il **treno**.
2	Partiamo, ti porto da qualche parte. **Prendiamo**	il **treno**, partiamo noi due soli.
3	Dovrei stargli più vicino. Io **prendo**	l'**aereo** con voi.
4	Non hai mai **preso**	un **aereo**?
5	Il giorno dopo Liliana **prese**	il **treno** per Varese.
6	**Prendi**	il **treno** e vieni. Non posso dirti altro.
7	Usciva dal seminario, **prendeva**	il **treno** fino a Cadorna.
8	Quando lasciò la clinica, per **prendere**	l'**aereo** per Lisbona, si sentiva in forma.
9	A Milano ho **preso**	il **treno** per Venezia e sono scesa a Mestre.
10	Vuoi **prendere**	un **treno** di notte pieno di paralumi e di damasco per dormire?

1. Tra il verbo e il nome si usa solo l'articolo determinativo, solo quello indeterminativo oppure entrambi?
2. In quali frasi il verbo è al presente?
3. In quali frasi il verbo è al passato?
4. In quali frasi il verbo è all'infinito?
5. In quali frasi il verbo è all'imperativo?

Activity 2 – Noun and verb anagrams in concordance groups

Teacher: *"The following pages contain 6 groups of sentences. In each group, the noun and the verb have been transformed into anagrams. For each group find the right verb and the right noun. Work with the person next to you. When you're finished, check the solution on the following page".*

Sciogli l'anagramma e scopri la combinazione in ogni gruppo di frasi:

a. .....

1	Ho impiegato due giorni a **arraerppe**	le **gaevlii**.
2	Caterina mi ha aiutata a **arraerppe**	la **gaavlii** il mattino presto.
3	Quando questo ragazzo ti telefona, tu inizi a **arraerppe**	la **gaavlii**.
4	Ho voglia di **arraerppe**	le **gaevlii** e partire!
5	Corro a **arraerppe**	la **gaavlii**!
6	Vorrei vederti **arraerppe**	la **gaavlii** e scomparire nel cuore della notte.

b. .....

1	Viaggiare significa **reaspaasor**	**iicb** diversi, apprendere una lingua straniera e fare cose nuove.
2	Ho trovato una taverna dove si cena a poco prezzo e **asurgte**	alcuni **iicb** nuovi.
3	Carlo dà consigli su come **asurgte**	il **iocb** conservandone i principi nutritivi.
4	Andiamo in vacanza per dimenticare il pc e per **asurgte**	il miglior **iocb** mai mangiato prima.
5	Si inventa problemi fisici per non **issgaagare**	**iicb** nuovi.
6	Valeria voleva **asurgte**	il **iocb** senza glutine.

c. .....

1	Vorrei descrivere il posto per chi non ha ancora potuto **iaivstre**	questa **àtict**.
2	Mi faceva compagnia quando mia mandre andava a **iaivstre**	le **àtict** vicine.
3	E una cosa straordinaria riuscire a **iaivstre**	**àtict** , musei, biblioteche attraverso il computer.
4	A Londra, Marco mi ha fatto **iaivstre**	la **àtict** ; mi sono divertita molto!
5	Si è fatta portare da un taxi in centro per **iaivstre**	la **àtict** .
6	Molti personaggi famosi hanno voluto **iaivstre**	questa **àtict** .

d. .....

1	Puoi utilizzare Internet per **ealmapir**	le tue **sozneccoene**.
2	Liliana era felice di **ealmapir**	le sue **sozneccoene**.
3	Internet serve anche per cose buone: facilitare e **ealmapir**	le **sozneccoene** nello studio e nella vita di tutti i giorni.
4	Le differenze tra persone aiutano ad **ealmapir**	le nostre **sozneccoene**.
5	Ho lavorato un po' in un negozio ma mi piacerebbe **ealmapir**	le mie **sozneccoene**.
6	Attraverso la lettura che possiamo **ealmapir**	le nostre **sozneccoene**.

e. .....

1	Ho pensato a tutte le persone che mi possono **rceoirrda**	un'**rzsepieean** vicina al mio personaggio.
2	Carlo mi ha fatto **rceoirrda**	la mia **rzsepieean** in Cina.
3	E sempre piacevole **rceoirrda**	un' **rzsepieean** di viaggio.
4	Vorrei **rceoirrda**	la straordinaria **rzsepieean** di Antonio in Piemonte.
5	Marta sta creando un sito per condividere e **rceoirrda**	le propria **rzsepieean** in Grecia.
6	Si sono incontrati dopo molto tempo e per **rceoirrda**	le loro **rzsepieeen** in comune.

f. .....

1	Per fortuna c'era poca gente, non ho dovuto **eafr**	la **aifl**.
2	C'è anche una signora a **eafr**	la **aifl** .
3	E tu non perdere il tuo tempo a **eafr**	la **aifl** alla cabina.
4	Nei bagni a volte gli specchi non ci sono e devi **eafr**	la **aifl** per lavarti le mani.
5	Sono tutti in via Condotti a **eafr**	la **aifl** per i saldi di Louis Vuitton
6	Adesso dobbiamo andare a **eafr**	la **aifl** all'ufficio immatricolazioni.

Soluzione:

a. preparare la valigia/le valigie

b. assaporare/gustare/assaggiare i cibi

c . visitare la città

d. ampliare le conoscenze

e. ricordare un'esperienza

f. fare la fila

Week 7

Activity 1 – Rewriting underlined words with word combinations

Teacher: *"On the following pages you will find eight groups of sentences. In each group, some word sequences are underlined. Choose one of the word combinations presented ealier in the lesson that has a similar meaning to the underlined words, and rewrite the sentences accordingly with the combination you choose. Pay attention to gender and number variation".*

Riscrivi la parte sottolineata di questi gruppi di frasi con una delle combinazioni a pagina 4. Scrivi la combinazione facendo attenzione al genere (maschile/femminile) e al numero (singolare/plurale).

A

1	Era un ragazzo di vent'anni e	aveva già fatto	amicizia con quel prete dalla faccia buona.
2	Sai se Patrizia	ha fatto	amicizia con qualcuno dell'azienda?
3	Credo che il metodo giusto per	fare	amicizia con Marta sia quello di passare del tempo con lei.

Combinazione n.:

1	
2	
3	

B

1	Ogni notte, Salvatore	mi parla	di qualcosa.
2	Xeno	mi ha parlato	di qualcosa che non avevo mai sentito prima.
3	Per	parlare	di qualcosa, bisogna partire dall'inizio.

Combinazione n.:

1	
2	
3	

C

1	Tommaso è uno sciocco, su questo la penso	sempre allo stesso modo.
2	Negli ultimi tempi ho riflettuto e non la penso	più allo stesso modo.
3	Spero che dopo aver letto l'articolo non la penserete	più allo stesso modo.

Combinazione n.:

1	
2	
3	

D

1	Marta ha deciso di riflettere	sul punto di vista della madre.
2	Alfonso non amava riflettere	sul punto di vista degli altri.
3	All'inizio eravamo incerti, ma poi abbiamo riflettuto	sul punto di vista degli altri.

Combinazione n.:

1	
2	
3	

E

1	Devo chiedere informazioni a Carlo, non sono	sicura.
2	Se qualcuno di voi non è	sicuro, mi faccia delle domande.
3	Era	sempre sicuro. Sapeva come raggiungere un obiettivo.

Combinazione n.:

1	
2	
3	

F

1	Non sono molto adatto per dire	cosa penso quando mi parlano di un problema sentimentale.
2	Lucia diceva	a Maria quel che pensava perché avevano avuto un'esperienza simile.
3	Io sono brava a dire	cosa penso agli altri, ma non a me stessa.

Combinazione n.:

1	
2	
3	

G

1	Abbiamo un giorno e una notte per risolvere	il problema.
2	Andate a lezione. Dopo risolveremo	il problema.
3	Devo risolvere	questo problema, ma ho poco tempo.

Combinazione n.:

1	
2	
3	

H

1	Vorrei	un parere del mio trainer sul tipo di allenamento che sto praticando in palestra.
2	Ti scrivo perché vorrei	un tuo parere su quale università scegliere per studiare arte.
3	Di solito non voglio	pareri degli altri sui libri da leggere: li scelgo da solo.

Combinazione n.:

1	
2	
3	

Soluzioni:

A
Combinazione n.: 2

1	Era già diventato amico di
2	È diventata amica di
3	Diventare amica di

B
Combinazione n.: 1

1	Mi racconta una storia
2	Mi ha raccontato una storia
3	Raccontare una storia

C
Combinazione n.: 20

1	Non ho cambiato opinione
2	Ho cambiato opinione
3	Cambierete opinione

D
Combinazione n.: 17

1	Ascoltare il consiglio/ i consigli
2	Ascolare i consigli
3	Ascoltato i consigli

E
Combinazione n.: 5

1	Ho dubbi/ho qualche dubbio
2	Ha dubbi
3	Non aveva mai dubbi

F
Combinazione n.: 13

1	Dare consigli/dare un consiglio
2	Dava a Maria dei consigli
3	Dare consigli

G
Combinazione n.: 18

1	Trovare una soluzione
2	Troveremo una soluzione
3	Trovare una soluzione

H
Combinazione n.: 10

1	Chiedere un consiglio al
2	Chiedere un consiglio
3	Chiedere consigli agli

Activity 2 – Guided observation of literal vs. metaphorical meaning

Teacher: *"In this group of sentences, the word combination has two meanings. Read the sentences and identify in which sentences the meaning is literal, and in which it is metaphorical. Then, answer the two additional questions: 1. Which meaning never requires the use of the article between the verb and the noun? 2. Which meaning always requires the use of a plural noun?".*

Leggi le domande e osserva le frasi per trovare le risposte:

1	Ogni notte, Salvatore mi **racconta**	una **storia.**
2	Xeno mi ha **raccontato**	una **storia** che non avevo mai sentito prima.
3	Per **raccontare**	una **storia**, bisogna partire dall'inizio.
4	A: "Laura mi ha detto che Marco ha mangiato il veleno". B: "Laura **racconta**	**storie**"
5	I miei amici mi ha **raccontato**	**storie** di quando sono andati in vacanza.
6	L'equipaggio della nave **raccontava**	**storie** dell'orrore.
7	Ieri sera, mia zia mi ha **raccontato**	una **storia** vera.
8	Nessuno le credeva: **raccontava**	sempre **storie.**
9	Tu non sai **raccontare**	le **storie**. Mi annoio sempre.
10	Ti ho **raccontato**	**storie** perché avevo paura di dirti la verità.

In queste 10 frasi, la combinazione *raccontare + storia* ha due significati. In ciasuna colonna, scrivi i numeri delle frasi con il significato 1 oppure 2.

Significato 1: parlare di una serie di fatti	Significato 2: dire qualcosa di non vero

Per quale dei due significati non si usa mai l'articolo?
Per quale dei due significati il nome è sempre al plurale?

Activity 3 - Gap fill with options

Teacher: *"In this table you see 9 sentences. Each one contains the same noun: consiglio. The verb in each sentence is missing. Choose one of the three verbs listed to fill in the gap"*.

In ogni frase, manca il verbo. Scegli quello giusto tra:

a) **Dare**
b) **Chiedere**
c) **Ascoltare**

1	Marta ha deciso di	i **consigli** della madre.
2	Non sono molto adatto per	**consigli** quando mi parlano di un problema sentimentale.
3	Alfonso non amava	i **consigli** degli altri.
4	Vorrei	un **consiglio** al mio trainer sul tipo di allenamento da fare in palestra.
5	Lucia	a Maria dei **consigli** perché avevano avuto un'esperienza simile.
6	Ti scrivo perché vorrei	un **consiglio** su quale università scegliere per studiare arte.
7	Di solito non	**consigli** agli altri sui libri da leggere: li scelgo da solo.
8	All'inizio eravamo incerti, ma poi	i **consigli** degli altri.
9	Io sono brava a	**consigli** agli altri, ma non a me stessa.

Week 8

Activity 1 – Guided observation of patterns through questions

Teacher: *"On this page there is a group of ten sentences taken from the Perugia Corpus. Find the answers to the questions by reading the sentences: 1. How many and which verbs are used with the noun 'artist'? 2. Which verb requires the use of only the definite article? 3. Which verb requires the use of only the indefinite article? 4. In which sentences do you see an adverb between the verb and the noun?".*

Leggi le domande, e poi leggi le frasi del Perugia Corpus e trova le risposte.

1	Non importa se **diventerò**	un **artista** di fama internazionale, oppure no.
2	Facevo bene i conti ed ero libero di organizzarmi. **Ero diventato**	un **artista.**
3	Sa fare tante cose: **diventerà**	un **artista**!
4	A volte chi **fa**	l'**artista** è troppo egoista.
5	Qualcuno ci riuscirà, ma per **fare**	veramente l'**artista** lo spazio è limitato.
6	In fondo, cosa significa **fare**	l'**artista**? Partire da qualcosa e creare qualcosa di nuovo.
7	Negli occhi di questo bambino leggo che **diventerà**	un vero **artista.**
8	Da oggi in poi **farò**	solo l'**artista.**
9	Questa volta abbiamo **fatto**	gli **artisti** e non gli organizzatori di musica.
10	Marco amava la libertà e l'indipendenza. Per questo ha deciso di **fare**	l'**artista**.

1. Quanti e quali verbi sono usati con il nome "artista"?

   .....

2. Con quale verbo si usa solo l'articolo indeterminativo (un, uno, una)?

   .....

3. Con quale verbo si usa solo l'articolo determinativo (il, lo, la/i, gli, le)?

   .....

4. In quali frasi c'è un avverbio tra verbo e nome? Quale avverbio è?

   .....

Activity 2 – Concordance gap-fill (verb and noun)

Teacher: *"On the following pages you will find four groups of sentences. In each group, the verb – noun combination is missing. Choose the appropriate verb – noun combination from the ones we saw earlier in the lesson".*

Scrivi la combinazione giusta per ogni gruppo di frasi.

1. ……

Non ho voglia di	Li voglio spendere tutti adesso.
Per	, Luca passava la notte in treno.
Secondo me scriviamo sms per	e sprecare meno tempo.
Perché non	così possiamo fare un viaggio lungo?
Se ci muoviamo a piedi possiamo	

2. ……..

Vivere in questo mondo significare	sempre	nuove.
Devi essere felice di		nuove.
Ho pensato che		in Calabria poteva arricchire le mie conoscenze.
In quel continente, Paolo poteva		nuove e stimolanti.
Vorrei		nuove in una città che non conosco, per esempio Parigi.

3. ……..

Se Franca non vuole dividere le spese, può	
Chi segue il blog di Francesca sull'arredamento vuole	
Non voglio più vivere con te. Voglio	
Ho deciso di	e cercare un posto con un terrazzino.
Maria mi ha promesso di	

4. ……

Vogliamo partire, ma dobbiamo	di dove possiamo andare.
Se ci vuoi aiutare, devi	che funziona.
Se pensate di	buona per migliorare il mondo, credeteci e realizzatela.
Melissa mi ha detto di non	precisa di cosa vorrà fare dopo l'università.
Lottare per un'idea, senza	è molto pericoloso.

Soluzione:

1. risparmiare soldi
2. fare esperienze
3. cambiare casa
4. avere un'idea

Appendix E: Phraseological competence test

Test

Data: _____

Nome (cinese e italiano): _____

Codice studente: _____ Codice del corso: _____

Scegli l'opzione corretta.

1. In estate vorrei…

a. fare viaggio
c. fare un viaggio
b. fare la viaggio
d. nessuna di queste

2. Mi sono trasferito per…

a. avere nuove esperienze
c. fare nuove esperienze
b. fare le nuove esperienze
d. nessuna di queste

3. Molti italiani…

a. innamorano lo sport
c. prendono sport
b. amano sport
d. nessuna di queste

4. Quando ci sono i saldi, moltissime persone…

a. fanno shopping
c. hanno shopping
b. fanno il shopping
d. nessuna di queste

5. Prima di uscire di casa…

a. vestiamo la giacca
c. ci vestiamo la giacca
b. ci mettiamo la giacca
d. nessuna di queste

6. Nei pomeriggi di primavera è piacevole…

a. fare la passeggiata
c. fare una passeggiata
b. fare passeggiata
d. nessuna di queste

7. In estate, a molte persone piace…

a. spendere il sole
c. prendere il sole
b. avere il sole
d. nessuna di queste

8. Un'attività molto comune è…

a. ascoltare la musica
c. prendere musica
b. prendere la musica
d. nessuna di queste

9. Le foto sono belle per…

a. ricordare un'esperienza
c. commemorare il esperienza
b. commemorare esperienze
d. nessuna di queste

10. Ogni settimana, dal lunedì al venerdì, …

a. abbiamo lezione
c. abbiamo una lezione
b. abbiamo la lezione
d. nessuna di queste

11. Se qualcuno ci chiede la nostra età, possiamo rispondere…

a. sono 25 anni
c. ho 25 anni
b. faccio 25 anni
d. nessuna di queste

12. Quando una persona è contenta…

a. fa un sorriso
c. mette un sorriso
b. dà un sorriso
d. nessuna di queste

13. Claudio vuole…

a. fare l'artista
c. fare un artista
b. fare artista
d. nessuna di queste

14. Dopo una lunga passeggiata, spesso…

a. siamo fame
c. facciamo fame
b. abbiamo fame
d. nessuna di queste

15. Quando ci svegliamo la mattina…

a. prendiamo la colazione
c. mettiamo la colazione
b. facciamo una colazione
d. nessuna di queste

16. Dopo molte ore di studio, è una buona idea…

a. prendere aria
c. avere aria
b. dare aria
d. nessuna di queste

17. Ai nonni piace spesso…

a. dire una storia
c. dire storia
b. raccontare una storia
d. nessuna di queste

18. Nel fine settimana, molte persone…

a. fanno la gita
c. fanno una gita
b. hanno una gita
d. nessuna di queste

19. Diventare amico o amica di una persona significa...

a. ritirare amicizia
c. fare amicizia
b. fare amici
d. nessuna di queste

20. Una persona sportiva…

a. fa sport
c. ha sport
b. fa lo sport
d. nessuna di queste

21. Chi vuole diventare musicista deve…

a. studiare le musiche
b. studiare musica
c. studiare la musica
d. nessuna di queste

22. La biblioteca è il posto perfetto per…

a. leggere il romanzo
b. leggere romanzo
c. leggere un romanzo
d. nessuna di queste

23. Per comprare qualcosa che costa molto, bisogna…

a. salvare soldi
b. risparmiare soldi
c. salvare i soldi
d. nessuna di queste

24. Nel tempo libero, molti studenti…

a. suonano chitarra
b. giocano la chitarra
c. giocano una chitarra
d. nessuna di queste

25. Andiamo al cinema per…

a. guardare il film
b. vedere film
c. vedere il film
d. nessuna di queste

26. Per andare all'università, alcuni studenti devono…

a. prendere l'autobus
b. prendere autobus
c. avere autobus
d. nessuna di queste

27. La settimana scorsa, io e i miei amici abbiamo…

a. guardato la città
b. guardato città
c. visitato la città
d. nessuna di queste

28. Quando visito un posto nuovo, mi piace…

a. godere i cibi del posto
b. gustare i cibi del posto
c. godere cibi del posto
d. nessuna di queste

29. Viaggiare significa…

a. imparare conoscenze
c. ampliare le conoscenze
b. imparare la conoscenza
d. nessuna di queste

30. Una persona che studia pittura, spesso…

a. dipinge le pitture
c. dipinge pitture
b. dipinge quadri
d. nessuna di queste

31. Quando torniamo a casa la sera…

a. prepariamo cena
c. prepariamo la cena
b. cuciniamo cena
d. nessuna di queste

32. Se vediamo qualcosa di bello, possiamo…

a. fare il foto
c. fare una foto
b. prendere foto
d. nessuna di queste

Scrivi il verbo che manca.

1. Tra poco, il film al cinema inizierà. _____ una doccia e andiamo.
2. Appena arrivo ti _____ un messaggio.
3. Ho deciso di _____ casa e trovarmi un posto con un terrazzino.
4. Abbiamo un giorno e una notte per _____ una soluzione.
5. Possiamo creare un gruppo di viaggio e _____ le spese, così risparmiamo e non perdiamo molto tempo per il viaggio.

6. Non mi sembra di essere adatto a _____ consigli sentimentali.

7. Ho bisogno di consigli per _____ un viaggio.

8. Non _____ dubbi, quasi mai. Sapeva come raggiungere un obiettivo.

9. Abbiamo _____ la spesa al supermercato, poi abbiamo mangiato e adesso facciamo una passseggiata.

10. Alcuni venivano costretti a fare pulizia e a _____ i letti.

11. Mi compro un nuovo vestito. _____ soldi mi dà soddisfazione.

12. In alcuni Paesi, quando uno studente decide di iscriversi all'università, deve _____ un esame di ammissione.

13. Mi piacerebbe moltissimo _____ un appartamento con altre persone, per avere uno scambio più intenso.

14. D'inverno, doveva _____ il treno ogni giorno per andare a scuola in città.
15. Il romanzo "Fontamara" ha _____ successo in tutto il mondo.

16. C'è molta gente fuori che _____ la fila per entrare. Vogliono entrare tutti.

17. Era molto riservato e non _____ i consigli degli altri.

18. Ma qui dove siamo? Forse ho _____ strada.

19. Per il mio compleanno, le mie amiche hanno _____ una festa a sorpresa.

20. Tommaso, sei uno sciocco; su questo non ho _____ opinione.

21. Dopo essermi perso, ho finalmente _____ la strada.

22. Sono entrata in un negozio di dischi, perché volevo _____ un regalo a Diego.

23. Voglio _____ tanti auguri di buon compleanno a Marco.

24. Non bisogna passare il fine settimana a _____ la casa.

25. _____ le valigie e andiamo via.

26. Litigavamo e facevamo pace. E poi ci piaceva _____ la musica a tutto volume.

27. Se hai bisogno di un posto dove stare, ti posso _____ una stanza a casa mia.

28. Se pensate di _____ un'idea buona per migliorare il mondo in cui viviamo, cercate di realizzarla.

29. Di solito non _____ consigli per scegliere i libri, ma leggo tutto quello che trovo.

30. Lo stimavo come artista, quindi è bastato poco per _____ amici, e scoprire le cose che avevamo in comune.

31. Sono innamorati e vogliono vivere insieme, ma è difficile _____ casa per una coppia con poco lavoro.

32. Aspettiamo da mezz'ora! _____ fretta, dobbiamo andare a lavorare!

In ciascun riquadro, scrivi SÌ, se il verbo <u>si può</u> usare insieme al nome, oppure NO se il verbo <u>non si può</u> usare insieme al nome.

	sole	musica	esperienze	colazione	vestiti	treno
prendere						
mettere						
fare						

Appendix F: End-of-course student questionnaire

Lezioni con Luciana: come sono state?

跟 Luciana 学意大利语：感觉如何？

Grazie mille per aver partecipato alle mie lezioni! Rispondendo alle domande qui sotto, mi aiuterai a migliorarle per il futuro.

非常感谢大家参加了我的课程！请回答以下的问题，来帮助我提高以后的教学水平。

1= totalmente in disaccordo 完全不赞同

2= in disaccordo 不赞同

3= parzialmente in disaccordo 部分不赞同

4= parzialmente d'accordo 部分赞同

5= d'accordo 赞同

6= totalmente d'accordo 完全

	1	2	3	4	5	6
	totalmente in disaccordo 完全不赞同	in disaccordo 不赞同	parzialmente in disaccordo 部分不赞同	parzialmente d' accordo 部分赞同	d' accordo 赞同	totalmente d' accordo 完全赞同

1. Studiare le combinazioni di parole è stato utile. 学习词语组合非常有用。						
2. Lavorare con gli altri compagni di classe ha rallentato il mio apprendimento. 和班上其他同学的分组合作减慢了我的学习。						
3. I commenti sui compiti per casa mi hanno aiutato a scrivere meglio. 家庭作业上的批语帮助我写的更好。						
4. Fare esercizi su otto combinazioni in un'ora è stato troppo impegnativo. 一个小时完成八个词语组合的练习太费劲了。						
5. Leggere molte frasi con la stessa combinazione mi ha confuso. 阅读同一词组的很多例句会让我混淆。						
6. Osservare molte frasi con la stessa combinazione mi ha aiutato a capire come usare quella combinazione in futuro. 观察同一个词组在不同例句中的应用帮助我明白之后如何使用该词组。						
7. I gruppi di frasi mi aiuteranno a fare meno errori in futuro. 句子群体的练习会让我以后出现更少的错误。						
8. Una nuova applicazione per cellulari con un elenco di frasi per ogni combinazione di parole sarebbe inutile. 如果有一个新的手机软件能够给每个词组都配备一系列的例句应该没什么用。						

Che cosa ti è piaciuto di più del corso? 你喜欢该课程的哪些部分呢？

Che cosa ti è piaciuto di meno del corso? 该课程的哪些部分你不喜欢呢？

Descrivi il corso con tre aggettivi: 用三个形容词来描述这个课程：

Altre idee e suggerimenti: 其它想法和建议：

GRAZIE!