

ENSINAR CHINÊS COMO LÍNGUA ESTRANGEIRA: DESAFIOS DE LEITURA E ESCRITA

TEACHING CHINESE AS A FOREIGN LANGUAGE: READING AND WRITING CHALLENGES

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Resumo

The present study aims to evaluate the reasons associated with insulin omission as a weight loss strategy and the differences between adults with Type 1 Diabetes Mellitus (DM1) with and without diabetes in relation to body image and eating behavior.

A sample of this investigation is carried out by 34 individuals with DM1, aged between 18 years and 55 years ($M = 35.14$, $SD = 10.08$). Participants were asked about insulin administration and the reasons associated with not administering insulin. We also used the Three Factor Food Questionnaire (TFEQ-R21) to assess eating behavior and the Body Assessment Scale-2 (BAS-2) to assess body image. In this sample, Diabulimia is more common in women (88.2%). It was found that there are significant differences between adults with DM1 and without diabetes and those with DM1 and diabetes in terms of body image. There are no significant differences between the two groups in terms of food control. The identification of diabetes is crucial for a good management of Diabetes, as this phenomenon is found little studied, being able to use a risk for the same control.

Palavras-chaves: Diabetes Mellitus Tipo 1, Diabulimia, Motivos Secundários, Imagem Corporal, Comportamento Alimentar

¹



Abstract

Despite the considerable increase of Chinese language programmes in Italian higher education systems over the last decades, empirical studies about teaching practice and acquisition processes in secondary education are still far from being exhaustive.

We explored two web platforms able to promote classroom dynamics and stimulate visual memory, in order to identify the impact of digital learning devices on Chinese FL reading and writing performances. Quizlet is designed to edit bilingual word lists for virtual classes, giving students the chance to practise at school or at home. Kahoot, instead, allows teachers to create multiple-choice quizzes to be played in class with smartphones.

The research was conducted on two high school classes of Chinese learners, one adopting traditional learning techniques, the other practising on digital platforms. Our study has shown that a systematic exposure to digital learning devices in classroom environment may increase reading skills and lexical competence by 30%, compared to more conventional teaching practices.

Keywords: Chinese FL didactics; Digital learning; Chinese FL acquisition process; Learning outcome; Teaching practices

Exploratory study on two digital learning platforms

1. Introduction

Over the last two decades, Chinese as a Foreign Language (CFL) has registered great advancement in Italian secondary and higher education. In the wake of the global trend, the multicultural (sub)urban contexts, and the new job challenges, people have progressively gained interest in Asian languages, especially in Modern Chinese. Confucius Institutes are now spread all over the country in connection with University campuses, private and public centres offering Chinese language programmes have multiplied by over 80% and the number of annual graduates in Asian studies has registered an unprecedented upsurge in the last ten years (Bulfoni & Pozzi 2014). Analyzing the current situation, CFL is apparently widespread in academic and non-academic realities, however this “rapidly growing interest in Chinese language [...] has not resulted in the development of a strong research background for the discipline” (Kecskes, 2013). In fact, academic research on CFL is a relatively recent phenomenon, which still cannot rely on a solid theoretical base and empirical data on its practical applications (Zhu, 2011). Many classroom dynamics, both at university level and in schools, still consist of conventional techniques and traditional assumptions, this probably happens because empirical studies on Second Language acquisition have only partially been applied to CFL so far.

2. TCFL historical background

The Western communities first expressed their interest in Chinese language in the late fifteen century when Jesuit missionaries set a Chinese language curriculum entirely based on the study of Confucian classics (Brockey, 2007). Around the first half of the nineteenth century, the next step in the evolution of Chinese teaching was marked by the development of regular Chinese curricula in the universities and, much later, in schools across Europe and the United States. However, as stated before, the proliferation of

Chinese courses over the last two centuries has not been supported by a regular and systematic research in Teaching Chinese as a Foreign Language (TCFL) field. For this reason, we can actually see that the grammar-translational paradigm, which had been ruling Western language didactics in Europe and US for long, began to dominate CFL field since its origin. A possible reason for this tendency is due to the insertion of Chinese programmes in sinological departments, where TCFL primarily consisted of guiding students through the translation of the Chinese classics, whose language – 文言文 wenyanwen – was very distant from the oral and written variants of Modern Chinese. The methodology, as said, largely relied on a “grammar-translation approach”, and focused on three main aspects: the explanation of grammatical words and phrases, the analysis of syntax and, the most important, the translation into the FL. The classicist teaching perspective was called into question only after the second half of the twentieth century, when new findings in applied linguistics and language acquisition paved the way for a turning point in the way Chinese was taught and learned.

By the end of the 1970s Mandarin Chinese had gradually replaced the Classical Chinese in university study curricula, until the first half of the 1980s, time when the Second Language teaching community started looking to the ideas of linguistic structuralism, whose core approach relied on regular patterns and spoken language techniques (Balboni, 2015). Apart from their theoretical assumptions, structuralists deserve credit for introducing technological devices for class use and self-learning in the FL common practice; the newborn synergy between technology and didactics did not only influence the common perception of the language learning dimension, but also imparted the idea that language learning should somehow be closer to real life. A further theoretical pillar upholding this idea was Chomsky’s nativism which claimed that FL acquisition follows the same natural path as mother tongue does, so the language teacher, to gain more effectiveness in daily practice, should operate on authentic materials and simulate a realistic FL environment in the classroom. The imitation of real-life situations finally gave the way to a more “pragmatic” view of linguistics where communicative effectiveness became the core objective of the whole acquisition cycle (Mey, 2001). Due to its practical and easily applicable aims, the communicative approach gained a fast success both in China and in the West, giving impetus to a massive textbook wave. Most of these manuals, McDonald claims, theoretically adhere to the communicative approach but practically do mix three paradigms in one (grammar-translation, classical and communicative), leaving didactic methods and objectives almost undefined (McDonald, 2011). Despite the numerous theoretical approaches having affected TCFL over the last two centuries, little research has been conducted so far into the effectiveness of TCFL practice and tools. Moreover, the limited empirical data collected in the field of Chinese FL teaching and acquisition becomes even less reliable if we insert other two important variables in the equation: the diversity of learning environments and the difference of learners’ language background.

3. CFL learning environments: university and secondary school

In Europe and in the United States CFL has historically been a university discipline, both for linguistic and methodological reasons. The first linguistic factor determining this choice lies in the typological distance between modern Chinese and western languages. A simple class observation might be enough to prove the hard challenges learners have to face on their way to Chinese proficiency. In fact, mastering CFL cannot prescind from the development of a bunch of suitable learning strategies and a quite long exposure to both spoken and written Chinese, especially because of the typological distance from learners’ L1 (Cenoz, 2003). On the basis of these proven difficulties for Western learners, CFL has systematically been excluded from the range of subjects commonly taught in secondary schools and has found its ideal collocation in university courses for several decades. Following the rising interest in oriental studies and, at the same time, the multiplication of extracurricular activities, CFL began to appear in some pioneering high school tracks. France first legitimized CFL in the “lycées” around the first decade of the twentieth century (Zhang, 2016), but it was only in the early 1990s that the most consistent teaching techniques and massive textbook production had their peak under the influence of “Méthode d’initiation à la langue et à l’écriture

chinoisés” (Bellassen, 1990). In Italy, the research scope of our study, CFL evolution in secondary education has been definitely less fast and linear compared to the neighboring countries. The Liceo Pigafetta (Vicenza - Veneto) first introduced CFL in the school tracks in 2004 and since then over fifty private and public schools have embarked on this pioneering mission throughout the national territory. Being CFL such a recent and sporadic phenomenon in Italian high schools, the teaching method(s) and material(s) are often borrowed from other learning contexts (i.e., university context or textbooks published in other countries) and do not show a common, structured approach (Regis, 2015).

For the set of reasons stated above, we can assume CFL in Italy is in a nonlinear evolving process, which further proves how urgent is to explore “teaching methods appropriate to the cognitive-development stage of different age groups” (Klötter, 2017). With regard to CFL teaching and acquisition, Italian secondary school represents a good research field for at least three reasons: a) because of its level of advancement: the experimentation phase of TCFL in schools has just begun and has no particular limits or definition. In other words, the research gap allows various theoretical and empirical approaches to the matter; b) because of high school students’ cultural and linguistic features: learners aged 14-16 years have not acquired a solid cultural background yet (compared to university students), can still be trained to improve metalinguistic awareness (Roehr-Backin, 2018), and normally show a strong learning motivation (Regis, 2015). These elements, we believe, may be particularly influential on learning and acquisition processes, thus do deserve particular attention in terms of impact on teaching practice and materials; c) because of the theoretical approach to adopt: compared to the academic dimension (still largely relying on functionalist and grammar-translation paradigm), the foreign language teaching approach widely supported in secondary education is a combination between the communicative approach and the authentic task-based practice; although it is not rare to see teachers adopt more conventional approaches as well. No matter how effective these paradigms are on students’ acquisition, what is urgent to detect is which strategy can be for several reasons more appropriate for CFL learning.

4. CFL standard proficiency in Italian secondary school

According to the national regulation framework about syllabi and learning outcomes, issued by the Italian Ministry of Education in 2010,¹ the standard proficiency level expected at the conclusion of a five-year Chinese curriculum in secondary school² is intermediate, more precisely, at least level B1 of CEFR. First of all, it is controversial to establish a direct correspondence between Chinese language competence levels and European language framework. Within mainland China and internationally, HSK (汉语水平考试 Hanyu Shuiping Kaoshi) is the most important test of Chinese as a second language. According to the guidelines issued by Hanban³ in 2014, each of the six HSK levels corresponds to one of the proficiency levels of CEFR. This correlation however results difficult to accept if we consider the different language testing philosophies in China and Europe: on one side HSK adopts vocabulary size as the main criterion to distinguish its levels, on the other side CEFR bases its levels on a more all-inclusive competence primarily focused on communicative effectiveness (Klötter, 2017). Needless to say, the discrepancy in language requirements and assessing criteria makes the equivalence between the two testing systems seriously questionable.

Language assessment methodology is definitely not the only issue that secondary education has to face regarding CFL teaching and learning: an aspect left completely unconsidered by 2010 national indications is the interlinguistic gap between students’ native language (NL), typically Italian, and the foreign language/s (FL) studied on a conventional school track. In fact, the system apparently ignores the typological distance between the so called Western languages (yet very different from one family

¹ MIUR (Italian Ministry of Education, University and Research): “Indicazioni nazionali riguardanti gli obiettivi specifici di apprendimento concernenti le attività e gli insegnamenti compresi nei piani degli studi previsti per i percorsi liceali”, M.I.U.R., Roma, 2010

² Secondary school with foreign language track: a specific curriculum where students take up three modern languages from the first to the fifth year.

³ Abbreviation for Zhongguo Guojia Hanyu guoji tuiguang lingdao xiaozu bangongshi (国家汉语国际推广领导小组办公室) - Office of Chinese Language Council International: a national entity affiliated with the Chinese Ministry of Education, in charge of the worldwide diffusion of Chinese language and culture.

to another) and Mandarin Chinese, whose script, phonetics, morphology and syntax have no evident connections with the European language systems (D'Annunzio, 2009). Disregarding this evidence, Italian education framework places all the foreign languages on the same level in terms of exposure, teaching methodologies and assessment methods, no matter the typological distance between learners' NL and FL. In the light of this, first-year students might assume they can get the same proficiency in Chinese as in any other language they study by the end of their five-year curriculum. But is that really so?

5. CFL: teaching and learning challenges

Being a relatively young discipline with little empirical research to hold it up, TCFL has borrowed several practices from western language teaching, but in this process has often given inadequate consideration to its own features. Class practice has shown that these features are the most challenging (and discouraging) aspects for young learners. They can be summarized into three main areas: Chinese phonetics, sinographs and lexicon, and finally Chinese morphosyntax.

5.1. Phonetics

When introducing absolute beginners to the study of Chinese phonetics, the teacher should bear in mind the major difficulties lie in the production of single and combined sounds (initials and finals) and in the modulation of tones. From an italophone perspective, there is a range of sounds the learner are familiar with (i.e. m-, n-, k-, g-, -a, -i, -ou), another range of sounds hard to distinguish and reproduce, and a final range completely unfamiliar to the NL background. For example, as for the second category, Italian students have difficulty in distinguishing aspirated from non-aspirated consonants (踢 *tī*: to kick; 低 *dī*: low), alveolar nasals from velar nasals (谈 *tán*: to discuss; 糖 *táng*: sugar) and some alveo-palatals from retroflex consonants (价 *jià*: price; 炸 *zhà*: to explode). For the third category, completely unknown sounds, italophones struggle to pronounce the retroflex consonants sh-, ch-, zh- (even though some of them might be borrowed from English phonetics), the rhotic coda -r, and some denti-alveolars as s- and c-. Nowadays the study of Chinese phonetics relies on Pinyin almost everywhere,⁴ which, on one hand, simplifies the first stage of sound acquisition as it uses the Latin alphabet, but on the other, can be misleading because sound transcriptions do not always match with the expected sound in learner's NL (e = Schwa, g ≠ j, r ≠ Italian "r" sound). Despite the evident difficulties, TCFL practice adopts a reduced range of pronunciation acquisition strategies, not going beyond the mere recitation of syllables or groups of syllables. A second challenge in the study of phonetics is represented by tones. FL learners often have problems in distinguishing and producing Chinese tones with a certain degree of accuracy. This is due to a couple of reasons: the first one is that textbooks have very unspecific sections dedicated to tone acquisition as if it were not a key stage of FL learning process; the second, much more serious according to theorists, is that some teachers suggest that "tonal errors can just be ignored" (Orton, 2013). In the majority of cases, this happens when teachers claim that communicative success is more important than accuracy in pronunciation or when the teachers get familiar with errors due to their long exposure to beginners' pronunciation.

5.2. Sinographs and lexicon

Historically, Chinese characters have always been a parameter to determine CFL level of proficiency inside and outside China. Even today, the threshold of advanced competence in CFL reading and writing is mainly represented by the mastery of approximately 3000 characters. From a TCFL perspective, however, sinographs are often pointed out as the biggest obstacle in Chinese learning. In order to actively master sinographs, students are often required to develop specific mnemonic strategies, which can be facilitated or supported by a bunch of techniques, materials and tools, ranging from paper to digital. Moreover, to acquire a good level of literacy, learners have to cope with a heavier study load and a longer learning

⁴ Hanyu Pinyin (汉语拼音), often abbreviated to pinyin, is the official romanization system for Standard Chinese in mainland China and to some extent in Taiwan.

time compared to what is needed for European languages (Cai, Chen, & Wang, 2010). Considering the hard challenge Chinese characters stand for, in the late 1990s several textbook compilers and scholars (Liu, 2004; Kubler (a), 2011) began to argue that Chinese language could be exclusively taught through the use of Pinyin, especially for communicative purposes. However, the most followed TCFL philosophy continues to refer to an all-inclusive approach where script, sound and grammar do have equal dignity. Since the early nineteenth century, TCFL instructors in China and abroad have elaborated four major strategies to facilitate characters memorization: character/word lists, mnemonic-oriented approach, etymology-oriented approach and context-based approach.

Character lists used to be widely adopted in mainland China and Taiwan. First of all, it is necessary to make a distinction between character list and word list: in the first case the list shows a selection of individual graphs (字dànzi) often ranked in alphabetical order according to their phonetic transcription in Pinyin; while in the second case the list shows words (词cí) which can be formed by a single character or, more frequently, by two or three characters. The two kinds of lists have evidently different purposes, character lists are useful to develop recognition and writing abilities, providing solid basis for word association skill and lexical inference; word lists instead aim at expanding and enhancing the lexical competence (cf. HSK word lists), paying less attention to the single graphs. Despite the above stated benefits, the use of lists has been a controversial topic across FL global teaching philosophies and has echoed in TCFL world too. From the perspective of communicative approach and authentic task-based teaching, the main concern regards the poor relation between the words and the real-life situation in which they might occur. In fact, most of the words in a list are completely disconnected from a specific lexical sphere, which makes their memorization merely mechanic, with no immediate application in a real context.

Mnemonic-oriented approach and etymology-oriented approach are both devices first born in China, then borrowed by the western TCFL practice, and finally, in the last decade, rearranged by the Chinese TCFL theorists. The first practice (Matthews & Matthews, 2007) mainly consists of presenting a word or a character as the core subject of a short story which should activate the long-term memory process. We can cite several examples of this practice which can be found in textbooks and in web tutorials, a quite common one is the way to explain the character 小xiǎo ‘small’: a mother saw her two children fighting for the same big piece of bread, and uses a knife to cut the big piece into two small slices. In this example, the story somehow portrays the graphical shape of the character as the central body may indicate the blade of the knife and the lateral strokes the two slices. The second device, etymology-oriented approach (Lo, 2002), is to some extent closer to morphology and consists of showing the origin and association of single written components so as to facilitate the memorization of the whole character. An example may be the explanation of the character 明míng “bright”: the character is a combination between the left component –the sun– and the right component –the moon–, which are the brightest bodies in the sky. These two approaches have proved to be beneficial for orthographic improvement at the advanced stage of CFL learning but not so much for character recognition and memorization at the early learning phase (Ke, 1998). Another concern is the long time students spend on memorizing a huge number of phonetic and radical components or short stories which may distract them from considering other important elements, such as communication effectiveness, fluency and phonetic accuracy.

Context-based approach is probably the most all-inclusive device, as it tends to merge the previous approaches in one. It has been developed in Western learning environments along with the increase of Confucius Institutes and conversation classes. Firstly borrowed from European language teaching, it draws inspiration from the communicative approach but can also find a practical application in the authentic task-based teaching. It aims at expanding the students’ lexical competence in a specific field, laying emphasis on grammar structures and phraseology when needed. The CFL context-based strategies may vary from the analysis and contextualization of a whole set of words and phrases connected to a single topic (semantic strategy) to the analysis of a set of words and phrases connected to a single morpheme or graph (morphological approach). In the daily practice, the two strategies are often used complementarily in the same learning module. A clarifying example can be represented by a lesson on transportation: from a

semantic perspective, the teachers should present the words in separate groups, where each group stands for a precise lexical strand (Vehicles: train, bus, car; Actions: go on, go off, ride; Directions: left, right). On the other hand, adopting a morphological perspective, the teacher should create a network of words connected to a single character (or graphical unit) very significant for the lesson (i.e. words containing the unit 车 chē ‘vehicle’: 火车 huǒchē ‘train’, 地铁 diàntiē ‘tram’, 汽车 qìchē ‘car’). A common criticism one can raise against context-based approach is the little consideration given to the development of writing skills and grammatical awareness (cf. syntax). However, following the CFL course textbooks and structures in the last two decades in Europe, the context-based approach has gained the approval of most teaching and learning environments. This is probably because of the relationship between this approach and the success in the acquisition of specific FL skills, like: a) lexical competence and inference (Nassaji, 2003); b) communicative skills (Nobuyoshi & Ellis, 1993); c) the improvement of overall character recognition ability (Ping, 2006).

5.3. Morphosyntax

Being Chinese an analytic language, morphology and syntax represent other two hard challenges for young learners. An experienced teacher knows how distant might appear Chinese morphology from any other inflectional language, so often reassures students on its positive aspects: no verb conjugations, no verb exceptions, no noun and adjective inflections, no verb tenses. This is definitely true. However, what the teacher omits (at this stage) is that Chinese, as any other natural language, must be able to convey almost any human expressive needs. This means that Chinese speakers will probably use very different structures to express the quantity and the quality, the collocation of actions on the timeline, the subject-verb connection and so on. It is evident that these features make Chinese morphosyntax largely unfamiliar to learners whose NL background is inflectional or synthetic, such as Italian, French, Spanish and to some extent English. To provide some examples of the most unfamiliar constructions to European students (Ye, 2011), we can cite the disposable structures (把 bǎ-structure, 被 bèi-structure), post-verbal complements, reduplication of verbs and attributive verbs (想想 xiǎngxiǎng, 夸夸 kuākuā), final and aspect particles (了 le, 呢 ne, 啊 a, 过 guo, 着 zhe) and some emphatic constructions (是 shì-de construction). In FL teaching approaches, “it remains controversial whether language (should be) learned through the application of explicit rules or acquired through other mechanisms and processes” (Klötter, 2017). If on one side the theoretical debate on grammar acquisition has not come to a conclusion yet, on the other, most of CFL textbook compilers have received the influence of structural linguistics and, for this, lay particular emphasis on “grammar explanations” and “contrastive grammar points” in their learning units. In this ambiguous framework, we think the point is not grammar teaching itself, but rather how to convert theoretical grammar patterns into explanations comprehensible for young learners.

6. The role of digital technology in TCFL

The advent of digital writing has entailed evident benefits for the global society. In the learning environments, digital technology has somehow reshaped the scale of FL skills to acquire along the study process and, at the same time, has redefined the order of priorities of conventional FL didactics. From a TCFL perspective, a highly discussed question is whether learners are still supposed to handwrite Chinese characters or progressively shift to digital writing. It is undeniable that digital input systems have brought the concept of “writing” to a brand new dimension, now the point is ⁵to which extent this new concept should penetrate the teaching environment. There are some arguments in favor of digital writing in CFL practice, the most supported one is the evident relationship between the digital and real life. Since technology dominates daily communications almost everywhere, typing has become the emblem of authentic task-based teaching in several FL programmes. Chinese language, however, poses a further obstacle to this practice: its logographic writing system, as stated before, requires learners to develop efficient mnemonic strategies to enable character recognition and (re)production. Neurolinguistic research has proved there is

⁵ “lexical acquisition” in this context includes character/word recognition ability and word-pronunciation association ability.

an indissoluble bond between handwriting exercise and character recognition performance, which leads to think that handwriting is also closely linked to more general reading competence (Tan, Spinks, Eden, Perfetti, & Siok, 2005). As a confirmation of this assumption, Longchamp (2008) in his study has shown that “handwriting memory facilitates the discrimination between characters and their mirror images for longer periods than typewriting memory” (p 802-815).

Leaving aside for a moment the CFL theoretical debate and focusing more on social phenomena, we can see that the widespread use of digital input devices in China has resulted into a substantial character writing incapacity, a phenomenon known as 写字障碍 (tǐbǐwàngzì), somehow affecting the general level of literacy. An inquiry conducted by the media company Asian Boss in 2018 showed the dramatic level of “character amnesia” of Chinese new generation. In the study, several Chinese university students were asked to write on a sheet of paper some daily words like toothpaste (牙膏 yá gāo) or sneeze (打喷嚏 dǎ pēntì): 30% of them weren’t able to write them at all, 50% of them were able to partially write them down, the remaining 20% were able to write them properly. After the quick test, the interviewees could turn the paper to see the typewritten word, it was stunning to see that all of them could recognize and read out the word after seeing its graphical form but only 20% of them could write it by hand. This shows a huge discrepancy between passive competence level (recognition) and active competence level (reproduction), and it also demonstrates that native and non-native students have to develop distinct strategies for reading and writing skills.

Apparently, most of the arguments listed above push to think digital input devices should not penetrate the learning environments, except for authentic tasks. However, academic programmes and secondary school programmes cannot underestimate two important variables: content and time. In Italian common practice, intermediate and advanced course syllabi tend to compress many content units in a limited range of time. This leads to a first disproportion between the teaching time exposure and the learning time, and to a second disproportion between the overall study time and the load of content. Another element students must take into account is the exam format, in other words, the competences required to pass and the duration of the test. In Italy, CFL exam formats in universities and high schools include speaking (口语 kǒuyǔ), reading comprehension (阅读 yuèdú), translation (翻译 fānyì) and, more rarely, written production (书面 shūxiě). Except for beginner and elementary level tests, students are normally allowed to consult paper bilingual dictionaries, which facilitate their writing performance. Under these conditions, optimizing study time and selecting appropriate learning techniques are the core strategies for success, therefore students find it more beneficial to focus on lexical acquisition rather than on mechanical writing exercise.⁸ For this set of reasons, our research intends to explore the impact of digital applications on CFL acquisition process, in particular, we expect to find out the potential improvement in character recognition ability and lexical competence entailed by the use of digital learning devices.

7. Exploratory Study

Our study has drawn inspiration from the analysis of TCFL common practice in Italy and intends to explore how new digital technology can be integrated in CFL teaching and learning processes. Before getting scope and objectives well defined, we have considered some important theoretical aspects, as: the state of the art of TCFL in Italy and Europe, the teaching approaches to CFL from a diachronic perspective, the main features of national CFL learning environments, a general overview of CFL teaching programmes and regulations, and finally some of the major CFL learning (and teaching) challenges. Among the various didactic techniques, we have concentrated on the role of digital applications in FL teaching and learning processes, with specific reference to CFL field. In the light of it, we believe there is an urgent need to assess the impact of digital devices on CFL learning and define its applications in current TCFL practice. The following sections are entirely dedicated to the description of our exploratory study.

7.1. Objectives

With the proliferation of digital writing and digital learning Apps, students, teachers, textbook compilers and course designers are confronted with new challenges. The objective of our research is to explore and possibly define the relationship between the application of digital learning devices and the acquisition of reading skills and lexical competence in CFL. The questions our study intends to respond are:

a) Compared to conventional teaching, how can pedagogical practices that involve digital platforms impact on CFL learning?

b) To what extent can this integrated approach influence CFL learners' reading skills and lexical competence and inference?

7.2. Research field

Most of the empirical studies conducted so far have mainly focused on TCFL at university level. The reasons for this choice are clear: a) academic research in TCFL is often subsidized by departmental funds or interuniversity project funds; b) university is the point of contact among different disciplines like linguistics, didactics, FL acquisition theories and many others; c) research centres are normally affiliated with universities; c) academic environment includes a high number of staff units and students, so represents a broad and significant research sample. However, after careful analysis of CFL current situation in Italy, it is interesting to notice that the most striking phenomenon is taking place in secondary education. In fact, the number of Chinese learners in high schools has increased so much in the last decade that Italian Ministry of Education has officialised a national syllabus for Chinese language and culture. The syllabus, published in September 2016 and still at an experimental stage, comprises the table of contents and competences to acquire on a Chinese curriculum in lyceum and in technical high school. Our preliminary analysis has brought to light some key features that make secondary school environment a research field highly compatible with the purposes of our research. More specifically, these features can be summarized as follows:

a) Since in secondary education system CFL is a new booming discipline, it is highly likely that teaching practice is not yet fully consolidated, learning outcomes are not completely defined and, sometimes, materials do not suit young learners since they are conceived for adult users. These conditions imply an urgent need to tackle the research gap.

b) Students aged 14-19 years have to respect a weekly timetable of subjects and assignments and work per time units, moreover, in their daily life, they presumably make extensive use of technology. The combination of these two aspects can be particularly interesting for our study as the adoption of learning methods integrating conventional techniques with digital may activate their motivation and latent skills, as well as making them feel comfortable.

c) Chinese programmes in secondary schools comprise a wide range of linguistic and cultural contents, for example, third year students are supposed to deal with cultural readings directly in Chinese language, while fifth year students have to read and discuss in Chinese about social issues, politics, history and civilization. This implies that learners must find a way to improve reading skills and lexical competence and inference quite fast, hence we reckoned these may represent the appropriate learning conditions for our exploratory study.

7.3. Research sample

The target school selected for the study is a secondary school in Ferrara (Northern Italy), more precisely a secondary curriculum in foreign languages, including Chinese language. The research sample consisted of forty three students, aged 17-18 years, belonging to two fourth-year classes: class A of 23 students and class B of 20 students. According to the school timetable, fourth year classes attend four hours of CFL per week, one hour out of four is normally held by the mother tongue teacher. Both classes had the same conversation teacher, prof. Zhuang M., and the same tenured teacher, prof. Rossi T. However, as contents may vary from one class to another, the solution we adopted to ensure the objectivity of data was to preliminarily define a unique learning module to investigate on, which was assigned to both classes in the same unit of time. The research was preceded by a three-week pre-analysis to familiarize with the students and environments, and to better understand class dynamics and teaching practices. Data about the research sample were collected in the pre-analysis phase via questionnaires and interviews; data about teaching practices, learning habits and learning outcomes were collected during and after the research time through direct observation, interviews and the analysis of students' written exams.

7.4. Pre-analysis

The pre-analysis phase consisted of a three-week observation period carried out during conversation classes and during language and culture classes, the former were given by a native teacher, the latter by a non-native tenured teacher. The teaching approach in conversation classes varies from year to year according to learners' language skills. It largely relies on communicative-situational techniques: in the first two years teachers organize picture-word and sound-word association activities, and make extensive use of the interactive board and other web tools to activate class motivation. From the third year, teachers introduce more challenging activities and increase the exposure time to Chinese language, students are required to develop more structured skills (reading comprehension, guided debate, topic-presentation, opinion-sharing), following a "global-to-analytic" sequence approach. Language and culture classes are normally of two kinds: grammar lessons and culture lessons. Grammar lessons, given in Italian and Chinese, can adopt both deductive and inductive methods: teachers often present a full topic to the class and provide the corresponding examples, some other times students are led through situational dialogues or short passages and extract themselves the underlying grammar rules. From the end of the third year on, grammar is progressively left aside and culture classes become the core subject of the programme. Teachers present topics related to Chinese civilization, history, literature and current issues, the lesson medium is mostly Chinese. In this learning stage students are confronted with reading, writing and speaking tasks, therefore they have to adjust their learning method so as to cope with the new challenges. They are asked to increase lexical competence in various fields, develop fluency in speaking and perfection their accuracy in syntax. According to data collected on the pre-analysis period, we believed that fourth year students had the most appropriate features for our study in terms of teaching objectives, expected learning outcomes and language awareness.

7.5. Research tools

Among all the potential digital devices available on the market, we made a selection according to specific criteria: a) the device had to support two input systems: Latin alphabet and sinographs; b) the device had to be designed for learning purposes and not (only) for entertainment; c) the device application had to be compatible with the objective of our research; d) the device had to be free, so learners could download it and use it without any extra charge; e) the device should have a user-friendly, intuitive interface to activate motivation and avoid any distraction from the learning purpose. The selection posed us several problems, especially for the points c) and d), however, following a thorough analysis, our choice fell on two web

devices designed for learning purposes, whose features seemed suitable for our study: Quizlet and Kahoot. Technically speaking, the two web devices can be classified as free learning platforms with a responsive interface. Since they are basically designed for online use, they result highly compatible with almost any operating system. Both the platforms have a different access mode according to the user's position: teacher or learner. Students can download the app version or use a common browser to join the learning platform with personal credentials.

Quizlet is a global platform designed and released ten years ago for two purposes: on one hand, to facilitate the preparation of teaching units and lesson plans, on the other, to dynamize learning process and working memory. Today it can be considered one of the largest student and teaching online learning community in the world, it counts over 30 million students a month, 3 billion study sessions done, and 200 million word sets, being used from secondary school to university and professional training courses.⁶ It provides engaging and customizable activities available in different modes, among all of them, we selected two web functionalities particularly in line with our objectives: Flashcard and Quizlet learn. With Flashcard teacher builds up bilingual word lists which can be matched to virtual classes. Once generated the class link, students can join and practise in group or in self-learning mode. With Quizlet learn, the vocabulary flashcards seen in class can be revised over and over at home on the smartphone app, this mode can mark learning progress percentage and adapts the learning sessions according to the user's error rate. If used in a systematic and guided way, these two functionalities activate visual and auditory memory processes, helping students to store a wider range of lexicon and graphs in a shorter time.

Kahoot is a game-based learning platform designed to administer quizzes, discussions and surveys, it consists of a classroom response system played by the whole class in real time.⁷ The core feature of the platform is the possibility to create multiple-choice quizzes, in this phase teachers write questions and answers, set the features of the game (number of items, score, timing) and are free to upload images, videos and audio tracks. The application is very intuitive, teachers simply have to enter the quiz with personal credentials, project it on a screen or on an interactive board, have students join the game session and let them play with their smartphones, tablets or computers. One of the most important features is that at the end of each game session, the system automatically generates a result report which can be used as a progress profile table. The game brings a lot of interaction to the classroom and acts as a motivational catalyst even for the most passive students. Most users enjoy the competitive nature of the quiz sessions and comment that it helps them retain concepts. From a didactic perspective, quiz is a dynamic and precise assessing tool, able to evaluate various competences in the same session (lexicon, morphology, syntax, phraseology), it is therefore highly compatible with our research objectives.

7.6 Methodology

The learning module selected for the two classes was around the theme of health and medicine. The module, called "I have to see my doctor" (我要去看医生 wǒ yào kàn bìng), included a set of inputs which were given in the same way and order to both classes: a) a list of over 200 lemmas, with lexical expansions provided by the native teacher. The fields covered ranged from body parts, state of health, symptoms and diseases to medicines, treatments and hospital care. b) Three written dialogues: the first entitled "I don't feel well" (我不舒服 wǒ bù shūfu), the second "I see my doctor" (我去看医生 wǒ kàn yīsheng), the third "At the pharmacy" (我去药店 zài yàodiàn mǎi yào). c) A three-minute video clip entitled "Take the medicine and you'll feel better" (吃药就会好 chī le yào jiù huì hǎo yī xiē).

In the first week, the teaching plan was the same for the two classes, the teacher adopted the same teaching strategies and went through the topics in the same sequence: topic presentation with a quick brainstorming and a following careful analysis of the first half of the word list (first hour); careful analysis of the remaining words on the list and role play exercise on the first dialogue (second hour); role play exercise

⁶ Information available on <https://quizlet.com/en-gb>

⁷ Information available on <https://kahoot.com/what-is-kahoot/>

on the other two dialogues and revision of the first dialogue (third hour); video and pair work activity (fourth hour). At the end of the fourth hour, the teacher gave assignments for the second week and planned a written test for the beginning of the third week.

In the second week the plan changed according to the class group. Class A followed a conventional methodology, which included the following phases: homework correction (about 45'), revision and repetition of dialogues (about 60'), close reading of two related texts (about 75') and role-play activity (about 60'). Class B plan started with conventional activities and progressively integrated them with pedagogical tasks on digital learning platforms. The four phases were scheduled as follows:

- a) (about 60') general revision of the dialogues and close analysis of the video script;
- b) (about 60') vocabulary building task with Quizlet Flascard function. The activity consisted in projecting on the interactive board a selection of 80 flashcards from the list, lemmas appearing one by one. Once formed pairs of students, the teacher asked student A to read the lemma aloud, possibly without glancing at Pinyin transcription, then had student B make a coherent sentence with the lemma; finally student A and B swapped their roles for the upcoming word. The 80 lemmas were selected on the basis of high occurrence and graphical complexity;
- c) (about 60') pair revision of the whole word list in Quizlet live mode. Students worked in pairs in a semi-autonomous way, student A showed a lemma on the smartphone to student B, who had to read and translate it, checking the correctness directly from the App, the exercise ended with sentence formation. After thirty minutes, the two roles were inverted. The teacher moved around the classroom all the time to clarify potential doubts and make sure the activity proceeded smoothly.
- d) (about 60') final revision session with Kahoot. The teacher had prepared a multiple-choice quiz which included lemmas, sentences from the studied dialogues and new sentences whose meaning could be inferred from the characters contained in the word list. The game included 30 questions having 30 seconds each to be answered. The teacher often stopped the game to give further explanations or in-depth considerations. At the end of the session, the system showed result reports, so the teacher had the chance to comment on individual learning progress profile figures.

At the end of the second week students had three days to prepare for the written test. According to interviews, 83% of students from class A declared they mainly adopted conventional techniques to memorize lexicon and structures. They basically wrote each lemma repeatedly, they read dialogues several times and some of them decided to build up semantic maps to facilitate mnemonic processes (17%). On the other hand, all students from class B declared they used Quizlet live app to practice at home, 45% of them reported having used it for more than seven hours during the three days break. Moreover, 60% of the interviewees declared to have integrated Quizlet live app practice with traditional handwriting exercise, which, they claimed, represented a consolidated study habit.

7.7. Results

The written test included two structured tasks and a semi-structured task: a vocabulary exercise comprising 30 lemmas to recognize and translate into Italian, a scrambled dialogue to reorder, and the production of a new dialogue of about two hundred characters. Students had sixty minutes to complete the test without dictionary, the evaluation scale ranged from 4 (F) to 10 (A). Considering that the test format and the assessed learning outcomes were the same for the two classes, we analyzed the data belonging to the two samples from a comparative perspective.

In the first task, we considered erroneous any misspelled lemma, wrongly translated lemma and near synonym of the given lemma. Test showed that only three students from class A managed to translate all lemmas (13%), two students translated 28 lemmas (8.7%), ten students confused or inverted 3 to 5 lemmas (43.47%), the remaining part of the class did not translate 6 or more lemmas from the given list. In class B, seven students managed to translate all the lemmas (35%), four students translated 28 lemmas (20%), seven students inverted or confused 3 to 5 lemmas (35%), the remaining two did not translate 6 or more lemmas. The second task was evaluated on a pass/fail criterion, a single error in the sequence of statements was enough to fail the whole task. Thirteen students from class A managed to reorder the whole dialogue (56.52%), in class B seventeen students succeeded (85%). From the results, we can observe that a satisfactory level of performance in the first two tasks (first two categories of students in task one and students who got 'pass' mark in task two) has been attained by a considerably higher number of students from group B than group A, in particular +33,3% in the first task and +21,8% in the second. This may indicate that working on random lemmas from a given list on web flashcards and doing pattern drills on smartphone live mode might have activated learners' visual stimulation, as we could observe that the frequency with which students could see and recognize sinographs was sensibly higher than the one registered on paper based exercises of group A. From this hypothesis, we assumed that a higher visual frequency of sinographs on a web platform, along with dynamic exercises of lemmas recognition done at different times a day comfortably from one's smartphone could have represented a motivating and efficient learning strategy for students, at the same time, it could have helped working memory to processes a relatively higher number of lemmas in a more comfortable study time.

As for task three, we encountered some difficulties in data collection due to the nature of the task itself. In fact, by definition, semi-structured tasks let students a higher degree of freedom in answers which may affect the objectivity of data. In addition, there were two other important factors to take into account before collection: a) despite indications, students wrote productions of variable length, b) students used a lexical range which was naturally wider than the target language contained in the list. In order to ensure objectivity and yet comply with our research goals, we decided to assess the handwriting competence, more precisely, we assessed the accuracy in strokes (笔画 bǐhuà) and components (部件 piānpáng) handwriting of target lemmas by comparing the number of miswritten target sinographs and the total number of target sinographs used in the composition. To do so, we only considered sinographs which had not been provided elsewhere in the test, hence we could track the real efficiency of visual memory processes. This decision made our work tougher than expected for two reasons: firstly because the number of sinographs to analyse varied from student to student; secondly because on average over 50% of the characters used in compositions by both groups were drawn from the other two tasks of the test. The analysis showed two main tendencies: A) students preferred to use sinographs with a simple structure or a low number of strokes. For instance, to translate the word 'patient', students preferred the lemma 病人 bìngrén (10+2 strokes) rather than the lemma 患 huànzǐ (11+8 strokes). B) Students tended to use target lemmas containing at least a frequent sinograph already acquired in their past. For example, students preferred using the lemma 生病 shēngbìng (to fall ill) than 发病 fābìng, as the sinograph 生 shēng is among the most structurally simple and frequently occurrent in modern Chinese, students in fact start to familiarize with it in first year, in words like 学生 xuéshēng (student), 生日 shēngrì (birthday), 出生 chūshēng (to be born). According to the assessment principles we adopted, the results from the two groups showed quite a wide discrepancy in error rate. Almost half the students (11) from class A miswrote 55% to 58% target sinographs, while the remaining half of the group registered an error rate ranging from 17% to 24%, which resulted in an average error rate in written accuracy of 38,5%. As for group B, nearly one third of students (7) miswrote 38% to 45% target sinographs, while the remaining two thirds miswritten sinographs only ranged from 11% to 14%, which resulted in an overall error rate of 27%. The 11,5% gap between the two groups pushed us to think that, once more, training on flashcards in classroom and playing on sinographs at home gave learners many more chances to train visual memory on specific graphs, probably because the exposure time to sinographs randomly shown up on digital app was much longer than the one spent on paper exercises by students from group A. This methodology enabled

group B to watch closer and longer components, radicals and the overall shape of characters, with the result of a higher degree of accuracy in handwriting performance. The analysis of results from task three has revealed what we believe to be a key response to our research questions: a learning strategy where conventional exercise is integrated with practice on digital app and web platform, under certain conditions of target and time, has proved to train learners' passive abilities (mere sinograph recognition) into active abilities (sinograph reproduction with no reference or support tools). We have drawn this conclusion also on the basis of the typologies of errors: in group A most errors involved lacking components missing sinographs in compound lemmas and wrong radicals; while in group B no lacking or missing components were registered, errors mostly consisted in the mere inversion of components.

In addition to the objective results collected from the tasks, we also did some observation during the test so we had the chance to analyze students' attitudes to the test. We noticed that, once handed over the exam sheet, 16 students from group A (69,6%) chose to start from task two, then moved to task one, and finally went through task three. Group B instead acted differently, 17 students (85%) started from task three, then moved to task one and finally completed task two. We have to add that, although teachers were carefully monitoring the classroom dynamics so as to prevent from cheating, students from each class might have found a way to communicate and make a common decision on which task to do first. Regardless of what might have happened, the different choices made by the two groups may reveal different scales of priority as well as different ways to perceive the difficulty of one task or another. Task one and two mostly involve the application of passive abilities, such as translation of single lemmas from L2 to native language and sequencing of given statements with clear syntax markers. On the contrary, in task three students have to perform active abilities, in this case written production, which stands for a definitely tougher challenge in L2 acquisition process (Laufer, 1998). In fact, being able to produce some written or oral utterance in L2 brings up quite a wide range of linguistic abilities (accuracy in morphology, interiorization of syntax, mastery of lexicon and semantics, knowledge of fundamentals of pragmatics) as well as some wider and transversal competences, like text writing style, paragraph management and communication abilities in written form. Our interviews revealed that students from both groups found it quite hard to perform such a wide range of skills on a topic-based short essay, firstly because writing tasks normally take a longer time and threaten the overall time management, secondly because students could not benefit from any paper or digital support devices which would have ensured more self-confidence, and finally because they feared the possibility to forget or miswrite sinographs. The evidence shows that, regardless the perceived difficulty, most students from group B decided to start just from task three. We tried thus to interpret the two attitudes in relation to our research questions and, this led us to think that probably the two groups had a different perception of their strengths and weaknesses about test they were going to take. Since most students from group A chose to start from the first two tasks, we presumed they felt to be better trained in performing passive abilities (vocabulary recognition and sequencing); conversely, most students from group B decided to begin with task three, which made us suppose they felt much more confident than group A in performing active abilities (vocabulary and speech production). This divergence in students' perception and confidence, we believe, might be the result of the different teaching strategies addressed to the two groups. In other words, we inferred that the two digital platforms integrated with individual, pair and collective training sessions did not only promote learning motivation in group B, but also facilitated the transition from passive to active along the acquisition process, making most students feel so familiar with the target vocabulary to actively apply it on a topic-based essay with no much concern.

Another important consideration mitigates in favor of our assumptions. Given the same test to be completed in the same unit of time, we observed that only 11 students from group A (48%) completed and handed back the test before the time was over, while 6 students (26%) did not manage to complete task three in the given time. In group B, 16 students (80%) had already handed the completed test back to the teacher 10 minutes before the whole hour was up, the remaining 4 students handed it back at the scheduled time. A closer analysis showed that all students having handed the test before the time was up generally got satisfactory results. Time management is a crucial element when taking tests, students often

learn to manage time on their own. Especially in writing tasks, the teachers explained during the interview, students tend to run out of time quite often and ask for additional minutes. In our test, this unexpectedly did not happen in group B. This evidence reinforces the assumption that integrating the conventional learning practice with digital platforms and devices specifically designed for vocabulary acquisition facilitates memory processes and promotes active vocabulary abilities in L2 on one side, on the other it increases students' confidence and awareness of their strengths, and has a significantly positive impact on performance levels and time management.

8. Conclusions

We believe that the results of our study may represent a relevant contribution in the field of L2 acquisition in secondary education. At a time when there is a constant increase of demand and supply of CFL courses in Italy and across Europe, it is even more urgent to explore some innovative and effective pedagogical practices able to facilitate and support the acquisition process of Chinese characters. From our analysis, it appears that a hybrid pedagogical practice integrating conventional techniques with web learning platforms (Kahoot) and digital devices (Quizlet) can lead to significant improvements in both passive and active abilities in vocabulary and sinograph acquisition.

The results of the first two tasks showed that the number of learners exposed to digital and web devices having had an excellent performance is, on average, 27,5% higher than the number of students only subject to conventional techniques. This means that, given a limited lexical scope and a definite learning time, the progressive integration of traditional techniques with specific digital tools can positively impact on learners' memory strategies, increasing the effectiveness in sinograph/word recognition and inference, as well as in sentence interpretation. Moreover, the figures of the third task showed that learners having practised on digital app proved a 11,5% higher writing accuracy in target sinographs, compared to students subject to conventional pedagogical techniques. Our study suggests the existence of an evident relationship between digital-based learning resources and the more efficient acquisition of two complementary abilities in written Chinese: passive and active vocabulary. We believe that the progressive introduction of digital-based pedagogical tools in secondary school practice can support and facilitate CFL students along their acquisition process. Our research has revealed that the most relevant benefits concern the passive acquisition of Chinese lemmas and in the accuracy of sinograph handwriting skill, two among the biggest challenges Chinese learners have to face in secondary school. Moreover, being digital tools essential components of young students' daily life, such a hybrid pedagogical methodology may help them feel much more motivated to practice on dynamic user-friendly devices than on static workbooks, with the result that they may also gain more confidence in Chinese script and get to optimize their learning time.

Nevertheless, we believe that the contributions drawn from the present study should be considered as a starting point in the analysis of new didactic technology in CFL pedagogical practice. Considering the current situation of CFL learners and teachers in Italy and Europe, on the basis of our findings, we believe it is urgent to explore methodologies and pedagogical practices to help students cope with CFL big challenges. In particular, we think it would be interesting to analyse how digital and web devices can improve passive and active phonology and aural comprehension on one side, and facilitate written comprehension on the other. Moreover, to continue our research and gain a more thorough understanding of the impact of digital pedagogy on CFL vocabulary learning process, we believe it would be better to explore applications and feedbacks of some digital devices specifically designed for Chinese lexical acquisition. Finally, in the light of the debate around the controversial efficiency of word lists in L2 acquisition, in a near future we envisage to analyse the response of a web app potentially guiding learners through a more contextual and situational vocabulary acquisition rather than learning on dynamic word lists.

References

- Allen, J. R. (2008). Why learning to write Chinese is a waste of time: a modest proposal. *Foreign Language Annals*, 27, 237–251.
- Antonucci, D., & Zuccheri, S. (2010). *L'insegnamento del cinese in Italia tra passato e presente*. Rome: Edizioni Nuova Cultura.
- Asian Boss (2018). Can Chinese write their own language? Available on <https://www.youtube.com/watch?v=zxHskrqMqII>
- Balboni E. P. (2015). *Le sfide di Babele [Babele challenges]*, Torino: UTET
- Barrett, T.H. (1989). *Singular listlessness: a short history of Chinese books and British scholars*. London: Wellsweep.
- Bellassen, J. (1990). *Méthodes d'initiation à la langue et à l'écriture chinoises*. Paris: La Compagnie.
- Bellassen, J. (2005). *L'enseignement du chinois aujourd'hui : état de l'art*. Available on: <http://eduscol.education.fr/cid46187>
- Bellassen, J., Lin-Zucher M. (2011). La didactique sinographique à l'épreuve des profils individuels, in: Lin-Zucker M., Suzuki E., Takahashi N., Martinez P. eds. *Compétences d'enseignant à l'épreuve des profils d'apprenant*, INALCO PLIDAM, Paris, France.
- Brockey, L. (2007). *Journey to the East: The Jesuit mission to China*. Cambridge: The Belknap Press of Harvard University Press.
- Bulfoni, C., & Pozzi, S. (2014). *Atti del XIII Convegno dell'Associazione Italiana Studi Cinesi*, Milano: FrancoAngeli.
- Cai, J., Chen, J., & Wang, C. (2010). *Teaching and learning Chinese. Issues and perspectives*. North Carolina: Information Age Publishing.
- Cenoz, J. (2003). Cross-linguistic influence in third language acquisition: implications for the organization of multilingual mental lexicon. *Bulletin suisse de linguistique appliquée*, 78, 7-9.
- Chao, D. (2001). Pedagogical issues raised and discussed in the Chinese repository. *Journal of the Chinese Language Teachers Association*, 36.3, 81–107.
- Chen, W. (2013). Learning tones cooperatively in the CFL classroom: a proposal. In I. Kecskes (cur.), *Research in Chinese as a Second Language (65-77)*. Berlin: Mouton de Gruyter.
- Cook, V. (2013). *Second language learning and language teaching*, London: Routledge.
- Cook, V., & Bassetti B. (2005a). *Second language writing systems*. Toronto: Multilingual Matters.
- Corder, S.P. (1981). *Error analysis and Interlanguage*, Oxford: Oxford University Press.
- Corder, S.P. (1967). *The significance of learner's errors*, Berlin: DeGruyter Mouton.

- Council of Europe (2001). Common European framework of reference for languages: learning, teaching, assessment. Available on: <https://www.coe.int/en/web/language-policy/home>
- D'Annunzio, B. (2009). La didattica tra lingue tipologicamente distanti. Un caso: la didattica del cinese LS per italofoeni. (PhD thesis, Ca' Foscari University, Venice, Italy).
- Dew, J.E. (1997). The frequency factor in graded vocabulary for textbooks. *Journal of the Chinese Language Teachers Association*, 32.2, 83–106.
- Duff, P. (2017). *Learning Chinese: linguistic, sociocultural and narrative perspectives*. Berlin: DeGruyter Mouton.
- Erbaugh, M.S. (2002). *Difficult characters: interdisciplinary studies of Chinese and Japanese writing*. Columbus, Ohio: National East Asian Language Resource Center.
- Feng, T. (2010). Zhào Yuánrèn Hànyǔ guójiā jiàoyù sīxǐng yǔ shíjiān yánjiū [Research on Yuan Ren Chao's thinking and practice in the international teaching of Chinese]. MA thesis, Shǎnxī Shīfàn Dàxué, Shaanxi, China.
- Gardner, R.C., & Lambert, W.E. (1972). *Attitude and motivation in second-language learning*. Michigan: Newbury House Publisher.
- Guo, T., Peng, D., & Liu, Y. (2005). The role of phonological activation in the visual semantic retrieval of Chinese characters. *Cognition* 98, B21–B34.
- Hallé, P., Chang, Y., & Best, C.T. (2004). Identification and Discrimination of Mandarin Chinese Tones by Mandarin Chinese vs. French Listeners. *Journal of Phonetics* 32, 395–421.
- He, L. (1998). Zhànguó gǔwén zìdǎn: Zhànguó sēnzì shēngxì [Dictionary of ancient Chinese characters of the Warring States period: The phonophorics system of the Warring States period]. Běijīng: Zhōnghuá shūjú.
- Hockett, C.F. (1958). *A Course in Modern Linguistics*, New York: Macmillan.
- HSK [=Guójiā duìwài Hànyǔ jiàoxué língdì xiàozǔ bàngōngshì Hànyǔ shuǐpíng kǎoshì bù, ed.], Hànyǔ shuǐpíng cìhuì yǔ Hànzì dēngjí dàgāng (Graded lists of HSK characters and vocabulary), (1992). Běijīng: Běijīng Yǔyán Xuéyuàn Chūbǎnshè.
- Jenkins, J. (2006). Current perspectives on teaching world Englishes and English as a lingua franca, *TESOL Quarterly*, 40/1, 157–181.
- Jiang, W. (2009). *Acquisition of word order in Chinese as a foreign language*. Berlin: Mouton de Gruyter.
- Kahoot! (2013). Make learning awesome. Available on <https://kahoot.com/>
- Kang, H. (2011). Computer-based writing and paper-based writing: a study of beginning-level and intermediate-level Chinese learners' writing. PhD thesis, Ohio State University, Ohio, USA.
- Ke, C. (1998). Effects of strategies on the learning of Chinese characters among foreign language students, *Journal of the Chinese Language Teachers Association* 33 (2), 93–112.
- Kecskes, I. (2013). *Research in Chinese as a Second Language*. Boston, Berlin: Mouton de Gruyter.

- Klötter, H. (2014). Chinese lexicography, in: Rufus H. Gouws, et al. *Dictionaries: An international encyclopedia of lexicography. Supplementary volume: Recent developments with focus on electronic and computational lexicography*, Berlin: De Gruyter Mouton, 884–893.
- Klötter, H. (2017). Chinese as a foreign language, linguistics and pedagogy, in Sybesma, R. eds. *Encyclopedia of Chinese Language and Linguistics* vol. 1, p. 410-411. Leiden, Boston: Brill.
- Kubler, C.C. (2011a). *Basic written Chinese: An introduction to reading and writing for beginners*, Tokyo, Rutland, Singapore: Tuttle Publishing.
- Kubler, C.C. (2011b). *Basic spoken Chinese: An introduction to speaking and listening for beginners*, Tokyo, Rutland, Singapore: Tuttle Publishing.
- Kubler, C.C. (2006). *NFLC guide for basic Chinese language programs*. Columbus (OH): National East Asian Language Center at The Ohio State University.
- Labov, W. (2001). *Principles of linguistic change: social factors*, vol. II, Malden: Wiley-Blackwell.
- Lafrenza, F. (1997). *Problemi glottodidattici nell'insegnamento del cinese*. Venice: Scuola e Lingue Moderne.
- Laufer, B. (1998). Developing active and passive vocabulary in a second language: same or different? *Applied Linguistics*, 19, 261-269.
- Leather, J. (1997). Interrelation of perceptual and productive learning in the initial acquisition of second-language tone. In A. Janes, & J. Leather. *Second-language speech: structure and process*. Berlin: Mouton de Gruyter.
- Lessard-Clouston, M. (2013). Word lists for vocabulary learning and teaching. *The Catesol Journal* 24:1, 287–304.
- Li, C.N., Thompson S.A. (1981). *Mandarin Chinese: A functional reference grammar*. Los Angeles: California University Press.
- Li, Q. (2006). Duiwài Hànyǔ jiàoxué yánjiū shùpíng [A review of the research on TCFL pedagogical grammar], *Běijīng: Shìjiè Hànyǔ jiàoxué*, 76.2, 110–118.
- Li, S. (2002). *The effects of input-based practice on pragmatic development of requests in FL Chinese*. Michigan: University of Michigan press.
- Selinker, L. (1972). *Interlanguage*, IRAL.
- Liu, X. (2004). *New Practical Chinese Reader*, Beijing: Beijing Language and Culture University Press.
- Liu, Y.T. (2009). Attainability of a native-like lexical processing system in adult second language acquisition: A study of advanced FL Chinese learners. *Language and Linguistics* 10/3, 489–520.
- Lo, C. (2002). *Chinese characters for beginners*. Taipei: Panda Media.
- Loke, K. (2002). Approaches to the teaching and learning of Chinese: A critical literature review and a proposal for a semantic, cognitive and metacognitive approach, *Journal of the Chinese Language Teachers Association* 37.1, 65–112.

- Longcamp, M., et al. (2008). Learning through hand- or typewriting influences visual recognition of new graphic shapes: Behavioral and functional imaging evidence, *Journal of Cognitive Neuroscience*, 20/5, 802–815.
- Matthews, A., & Matthews L. (2007). *Learning Chinese characters: A revolutionary new way to learn and remember the 800 most basic Chinese characters*. Tokyo: Tuttle.
- McDonald, E. (2011). *Learning Chinese, turning Chinese: Challenges to becoming sinophone in a globalized world*. London: Routledge.
- Mey, J. L. (2001). *Pragmatics: An introduction*. Oxford: Blackwell.
- Milton, J. (2010). The development of vocabulary breadth across the CEFR levels: a common basis for the elaboration of language syllabuses, curriculum guidelines, examinations, and textbooks across Europe. In: I. Bartning, M. Martin, & I. Vedder, *Communicative proficiency and linguistic development: Intersections between SLA and language testing research* (211-232). Available on: <http://www.eurosla.org/>
- Mystkowska-Wiertelak, A., & Pawlak, M. (2012). *Production-oriented and comprehension-based grammar teaching in the foreign language classroom*, Berlin: Springer-Verlag.
- Nassaji, H. (2003). L2 vocabulary learning from context: strategies, knowledge, sources, and their relationship with success in L2 lexical inferencing, *TESOL Quarterly*, 37(4).
- Nobuyoshi, J., Ellis, R. (1993). Focused communication tasks and language acquisition, *ELT Journal*, 47(3).
- Odlin, T. (1994). *Perspectives on pedagogical grammar*, Cambridge: Cambridge University Press.
- Orton, J. (2013). Developing Chinese oral skills: A research base for practice. In I. Kecskes (cur.), *Research in Chinese as a Second Language* (9-31). Berlin: Mouton de Gruyter.
- Ping, M. (2006). *Vocabulary acquisition in CFL contexts: a correlation of performance and strategy use*. PhD Thesis, Brigham Young University, Provo, USA.
- Quizlet. (2007). Available on <https://quizlet.com/en-gb>
- Regis, V. (2015). *Imparare il cinese come lingua straniera nella scuola superiore: la prospettiva dello studente [Learning Chinese as a foreign language in secondary school: the student perspective]*. PhD Thesis, University of Torino, Turin, Italy.
- Roehr-Backin, K. (2018). *Metalinguistic awareness and second language acquisition*. London: Routledge.
- Spinks, J., Liu, Y., Perfetti, C., & Tan, L. (2000). Reading Chinese characters for meaning: the role of phonological information. *Cognition* 76, B1–B11.
- Stern, H.H. (1986). *Fundamental concepts of language teaching*. Oxford: Oxford University Press.