



# **European Association for Computer Assisted Language Learning**

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## ***THE EUROCALL REVIEW***

**Volume 22, Number 1, March 2014**

Editor: Ana Gimeno

ISSN: 1695-2618

<http://www.eurocall-languages.org/publications/review>

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## Article:

### ***Developing students' listening metacognitive strategies using online videotext self-dictation-generation learning activity***

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#### **Abstract**

The study is based on the use of a flexible learning framework to help students improve information processes underlying strategy instruction in EFL listening. By exploiting the online videotext self-dictation-generation (video-SDG) learning activity implemented on the YouTube caption manager platform, the learning cycle was emphasized to promote metacognitive listening development. Two theories were used to guide the online video-SDG learning activity: a student question-generation method and a metacognitive listening training model in a second language (L2). The study investigated how college students in the online video-SDG activity enhanced the use of listening strategies by developing metacognitive listening skills. With emphasis on the metacognitive instructional process, students could promote their listening comprehension of advertisement videos (AVs). Forty-eight students were recruited to participate in the study. Through data collected from the online learning platform, questionnaires, a focus-group interview, and pre- and post- achievement tests, the results revealed that the online video-SDG learning activity could effectively engage students in reflecting upon their perceptions of specific problems countered, listening strategy usages, and strategic knowledge exploited in the metacognitive instructional process. The importance of employing cost-effective online video-SGD learning activities is worthy of consideration in developing students' metacognitive listening knowledge for enhancing EFL listening strategy instruction.

**Keywords:** Listening strategy, metacognitive learning, listening strategy instruction, student question generation, metacognitive listening training model.

#### **1. Introduction**

Among language strategies, strategy instructions in listening comprehension play a critical role as language learners need to internalize the rules of language and process meanings from continuous incoming speech flow. It is hard work for students to acquire these skills, and as such, these areas deserve more support (Vandergrift, 1997, 1999). Nowadays, CALL gives learners and listeners the flexibility they require to deal with connected speech. The student question-generation approach has been considered by many to be an effective alternative to strategy training instruction (Koch & Echstein, 1991; Rosenshine et al., 1996; Yu & Chan, 2005; Yu, 2005, 2009). Yu (2005, 2009) attempts to develop a question-posing learning system to support cognitive development for processing incoming information and describes its effect on metacognitive development. She sees many advantages in providing students with the question-generation approach in academic performance or other strategy training instruction, such as encouraging a learning climate with active participation and

empowering students to see themselves as active thinkers and problem-solvers. We see another important interest in following the student question-generation approach that could potentially be applied to foreign language acquisition and, of particular interest to the current study, enhance student listening comprehension by developing student awareness of metacognitive strategy in listening to captioned videos with a web-based, student question-generation platform. Captioned videos are effective and useful in second language learning (Leveridge & Yang, 2013; Montero Perez, Peters, & Desmet, 2014). They shift learners from viewing listening as a passive activity to a complex, active process in which they diagnose their problems, examine their thinking processes, and observe their perceptions. The listening strategy instruction in metacognitive awareness is an important aspect of the listening 'intake' strategy. As students work on authentic listening material from the web-based learning platform, they are able to control what information they might input or intake.

A review of past studies by Sarani and Jabbari (2010) and Singer and Donlan (1982) on question-generation strategies in EFL learning support students' reading comprehension and engagement in reading texts with story recall and plot comprehension. However, these studies do not focus specifically on training in listening strategies. When listening strategies are highlighted, most of them in strategy instruction (Birjand & Rahimi, 2012; Rasouli et al., 2013; Coskun, 2010), emphasize a systematic instructional model with intensive implementation whereby teachers play a crucial role in imparting knowledge of learning strategies and orchestrate teaching activities to meet anticipated learning goals. In this study, we believe language learning is a complex skill that needs to move through certain stages from controlled to automatic processing via practice (Chamot & O'Malley, 1987). The focus is anything but learning itself. The role of teachers should not merely focus on explicit instruction but should devote more instructional time to offer students opportunities for practicing strategy.

In the present study, the online video-SDG activity was carried out and EFL learners were expected to listen to advertisement videos on the YouTube platform. While listening, a group of students generated their dictation tests and reported on their thinking process by noting down the reasons on the YouTube learning platform. The study analysed these reflections by adopting Vandergrift's model (1997), as we think videotext dictation generation is indicative of metacognitive activity by learners (i.e., planning, monitoring and evaluation).

The purpose of the study was to examine if the online video-SDG strategy helped students raise awareness of their learning status and use of listening strategy. We aimed to know (1) what knowledge of metacognitive listening did students use when participating in the online video-SDG learning approach? By distributing the questionnaire, it enabled us to know (2) the metacognitive strategy used by the learners, and finally, (3) whether the use of the metacognitive strategy in listening influenced performance in comprehension. Before analysing the effectiveness of the metacognitive strategy training for the listening course, it is beneficial to explore relevant theories of metacognitive strategies and student question-generation.

## **2. Literature Review**

### *2.1. Metacognitive strategies in L2 listening*

Flavell (1979: 906) views the term metacognition as "cognition about cognitive phenomena," or "thinking about thinking". He defines metacognition as a combination of two components: knowledge and regulation. Each element has a specific value and point. Metacognitive knowledge consists of three components: knowledge of (1) oneself as a learner and the factors that might influence performance, (2) strategies, and (3) knowing when, where, how and why to use particular learning strategies (Cross & Paris,

1988; Kuhn & Dean, 2004). Metacognitive regulation is about one regulating one's cognition and gaining awareness of one's comprehension, and many researchers have proposed activities like planning, monitoring, and evaluating (Schraw et al., 2006; Whitebread et al., 2009). More specifically, rather than sitting isolated because of a breakdown in comprehension or passively waiting for teachers to give answers, learners are trained to know what to do and how to carry out strategies to solve their problems when they come across difficulties or further elaborate their condition to set short- and long-term goals to check their comprehension during listening tasks (Oxford, 1990).

Wenden (1998) lists eight points about learners' metacognitive ability which encourage and guide students' metacognitive development in EFL learning. He states that learners could (1) be more skilled learners, (2) be faster in the progress as well as the quality of their engagement, thereby resulting in the higher motivation level, (3) be persistent in their abilities to pursue goals, (4) gain help from peers, teachers, or family if required, (5) understand how to be successful learners, (6) be active thinkers about obstacles, inaccuracies or failures that occur during the learning process, (7) manage their learning to match it with learning tactics and adjust themselves to reflect changing circumstances, and (8) remind themselves that they are continual learners who can successfully adapt to new situations or rules.

Many researchers view these strategies as conducive to learning and conduct research on exploring students' use of metacognition (Birjandi and Rahimi, 2012; Bozorgian, 2013). Many findings reflect the awareness in language learning that students could, and are required to, instruct knowledge of metacognitive strategies to develop tools that facilitate them in becoming more autonomous language learners. (Chamot & O'Malley, 1994; Vandergrift, 1997; Smidt & Hegelheimer, 2004). Listening comprehension skills are also significantly advanced by introducing metacognitive strategies into teaching. Two salient models of a learning cycle have emerged from the works of Chamot and O'Malley (1994) and Vandergrift (1997). Chamot and O'Malley (1994) have developed five phases of the learning cycle including preparation, presentation, practice, evaluation, and expansion. In general, two major principles in the five steps could be highlighted. The first guideline engages students to reflect on their prior knowledge of strategy use, which diagnoses individual learning problems and encourages the evolution of new concepts about listening. The second principle emphasizes ways of experiencing listening strategy deployment and evaluating the appropriateness of these deployments. Vandergrift's perspective on the learning cycle (1997) adapts Flavell's (1979) framework on metacognitive knowledge, which creates a theoretical model of metacognition in L2 listening (see Table 1). Vandergrift (1997) lists four strategic categories including planning, monitoring, evaluation, and problem identification to illustrate a learning cycle of engaging learners with creating or checking students' predictions, stating gaps in their understanding, and monitoring and reflecting on their learning.

| Metacognitive knowledge | Examples from listening   |
|-------------------------|---|
| Personal knowledge      | Self-concepts and self-efficacy about listening, specific listening problems, causes, and possible solutions  |
| Task knowledge          | <ol style="list-style-type: none"> <li>1. Mental, affective and social processes involved in listening skills (e.g., listening for details, gist) needed for completing listening tasks.</li> <li>2. Factors that might influence listening (e.g., videotexts, speakers).</li> <li>3. Ways of enhancing listening outside the class.</li> </ol> |

|                     |   |
|---------------------|---|
| Strategic knowledge | <ol style="list-style-type: none"> <li>1. General and specific strategies for facilitating comprehension and coping with difficulties.</li> <li>2. Appropriate strategies for specific types of listening; ineffective strategies.</li> </ol> |
|---------------------|---|

Table 1. Vandergrift's (1997) metacognition model in L2 listening.

Chamot and O'Malley's (1994) model creates a carefully planned linear lesson combining language, content, and strategy training, while Vandergrift (1997) focuses on eliciting student awareness of metacognitive strategy deployment through the complex listening process. The current study adapts Vandergrift's (1997) model as a theoretical basis to analyse students' metacognitive strategy usages.

### 2.2. Student question-generation approach

One of the growing areas of interest in generative learning strategies aimed at processing learning materials is the student question-generation approach in which learners ask themselves questions about various aspects of texts and generate answers. Rather than treating teachers as dominant figures in classroom-based learning, student question generation involves reciprocal teaching leading students not only towards deep information processing but also towards strategy training (Soonthornmanee, 2002). The student question-posing strategy has been explored in many different learning contexts and shows significantly positive learning outcomes in relation to instructional targets (domain knowledge and learning strategy). For example, Rosenshine et al. (1996) study L1 settings in connection with reading comprehension in which a group of students receiving procedural prompts (generic question stems and signal word prompts) scored better than the unprompted control group. The results concluded that generic question stems were more helpful for students than signal word prompts. In a similar vein, King's (1994) strategy instruction uses strategy prompt cards to provide prompt discussion in which pairs of students, guided by questions designed to utilize prior knowledge or experience, were more successful in comprehension than students guided by questions designed to prompt connections between ideas in a lesson. These analyses focus exclusively on the evaluation of metacognitive strategy pertaining to the transition of students from teacher-led learning to student-directed learning during the learning process.

On the other hand, Yu's (2009) research supports pre-service teachers' shift to more sophisticated learning through guidance to deploy various types of student question-generation activities (e.g., matching, multiple-choice, fill-in-the-blank, short answer and essay) for learners by using online customizable peer-assessment systems. In this research, the foci are on learners' development of domain knowledge, metacognitive strategies, and positive attitudes towards learning activities, all of which report positive results. A friendly online group discussion board has also been created by Choi, Land, and Turgeon (2005) to facilitate learners' ability to raise thoughtful questions and responses to challenging questions. Composing questions not only requires learners to pay attention to the main content, monitoring and to check their current state of understanding; it also involves utilizing learners' metacognitive learning strategies.

### 2.3. A self-dictation-generation question as a student question-generation approach

One type of exercise for foreign language learning is dictation. It is widely used in listening activities where a worksheet has a gap-filling exercise requiring learners to note down missing words or phrases spoken by the teacher. Dictation is often treated as a gap filling-in exercise that develops learners' listening ability in words, spelling, and punctuation. Cross (2009:152) criticizes "this type of task utilization as it does little to promote 'real work' listening skills" germane to comprehension and thinks it is an unrealistic listening activity because it is purely and mechanically based on listening to

sounds without considering context or actual meanings of words. However, we argue that dictation is not merely the above shallow view led by teacher-centred instructions but can be effective when used as an instructional method to enhance students' learning.

#### *2.4. The study*

Drawing on the above pedagogical background, this particular self-dictation-generation exercise was adapted as a significant tool for developing the online video-SDG activity to raise students' awareness of their listening skills. The activity is grounded in the central tenets of the student question-generation approach requiring students to design their self-dictation-generation questions from the listening texts and think of the reasons (reflections) why a particular statement or keyword was left blank. While conducting the activity, students constantly reconstructed meanings from what they listened to on AVs. They could have a preference for examining their understanding of the listening content, clarifying confusing words or meanings, and thinking about their reasons for noting down these particular blanks. During group work, students needed to justify their choices and selections with peers to confirm known and unknown meanings or adjust interpretations after reaching agreement on specific items. Thus, the research questions for this study are:

- What is the students' awareness of metacognitive knowledge in listening as they participate in the online video-SDG learning activity?
- What is the students' awareness of metacognitive strategies regarding the online video-SDG learning activity?
- Do students make progress in the listening achievement test while implementing the online video-SDG learning activity?

### **3. Method**

#### *3.1 Participants*

The online video-SDG learning activity was implemented in an undergraduate-level course, Advertising English, at a technical university located in the southern part of Taiwan. The course was open to freshman university night students who majored in the Department of Applied Linguistics. The course aimed to provide EFL learners with experience of authentic listening material and the development of listening strategies by exploiting metacognitive strategies. The course met for a weekly two-hour session over 18 weeks. Forty-eight EFL college students signed up to participate in the course, and none of them had attended special listening strategies programs. Their English language proficiency upon entry was at the pre-intermediate level.

#### *3.2. Learning content*

We chose 10 advertising videos with short (1-2 minutes), daily life topics related to the learning content such as education, sports, living environment, diet, fashion design, and finances. The YouTube video-sharing platform was employed to reinforce strategy training according to the pre-chosen topics. Three key top-down strategies (listening for main ideas, prediction, and drawing inferences) were first introduced by presenting a piece of video to the students, while bottom-up strategies (including vocabulary, sound patterns, and syntactic patterns) were chosen to gauge listening comprehension after understanding the general idea behind the subject's topics.

#### *3.3 Implementation*

The 18-week course was divided into two stages with eight weeks before the mid-term test, one week for the mid-term break, and one week for final exams. Table 2 describes the detailed procedures of the online video-SDG learning activity.

| Stage   | Learning activity  |
|---|--|
| I. Present & practice- strategy instruction (weeks 1-8)                   | Understanding what listening strategies are; experiencing and practicing strategy usages   |
| II. Evaluation –implementation of metacognitive development (weeks 10-17) | Processing listening strategy by incorporating the development of metacognitive listening. |

Table 2. Procedures for implementing the online video-SDG learning activity.

### 3.3.1. Stage I. Presentation and practice of listening strategy instruction

In the first eight weeks, students were introduced to listening strategies, including top-down and bottom-up skills. While they gained an understanding of listening skills, they were encouraged to practice the strategies learnt, taking turns in playing the reciprocal roles of 'teacher' and 'student' in sharing the use of the listening strategies. They formed groups of four to five to allow for efficient peer interaction and knowledge sharing. For example, group members shared thoughts on how to apply listening comprehension strategies. Also, correct meanings of the video content were brainstormed and students' experiences of the listening strategies learning process were discussed. Then, the teacher led a class discussion about the meanings and correct captions of the AV and shared how the thought process worked to deal with incoming speech and comprehension breakdown.

### 3.3.2. Stage II. Evaluation–metacognitive development

In this stage, students were required to carry out the online video-SDG activity. While choosing a specific blank as the main task of filling-in-the-blanks, students needed to note down the reasons for (1) what the strategies made them understand from certain words or phrases they highlighted (the reasons for this) if they understood the meanings, and (2) why they could not figure out words or phrases they left blank or whether they had trouble understanding them (problems encountered). Two types of questions were adapted from Ogle's (1986) KWL chart where the "K element" stood for "what I know", the "W component" concerned "what I want to know", and the "L factor" concerned "what I learnt". These three concepts were suitable for application in the study, although Ogle's study mainly trained students to develop active reading from expository texts. Students collaborated to complete the activity and created their group-based self-dictation generation exercises.

### 3.4. Instruments

Learning achievement tests, questionnaires and a focus group interview were included as the instruments for the current study. After completing strategy instruction in the first stage, the pre-test and post-test were respectively administered in the ninth and last weeks of the study. This was followed by the Strategy of Inventory for Language Learning (SILL) questionnaires (Oxford, 1990). A focus-group interview was conducted with the participants to gain a more in-depth and comprehensive understanding of how they navigated the learning activity during a given period of the metacognitive listening training activity.

The achievement test sheets were developed by two experienced teachers. The pre-test consisted of questions about the learning content in the previous eight weeks to measure students' listening comprehension. It was made up of twenty multiple-choice items for examining listening comprehension with a perfect score of 100 in a mid-term English exam. The post-test also contained twenty multiple-choice items for evaluating



the students' listening comprehension of the lesson learning content from the pre-selected AVs. The perfect score of each of the pre-tests and the post-test was 100. Each test mirrored the learning content completed in lessons. Both tests were audio broadcasted and students were asked to answer the questions on the sheet.

The Strategy of Inventory for Language Learning (SILL) was developed by Oxford (1990) based on the learners' language learning strategy. The original SILL measure consisted of six dimensions (i.e., memory strategies, cognitive strategies, compensation strategies, metacognitive strategies, affective strategies, and social strategies), each of which contained different items. In the current study, the "metacognitive strategy" dimension was adapted to measure learners' metacognitive listening strategies. The measurement of metacognitive strategies consisted of nine items with a Cronbach alpha value of 0.78 (Park, 2011). The researcher conducted a focus-group interview with each group of students (see Appendix 1 for interview questions).

### 3.5. YouTube platform support

The learning pace was controlled by the learners themselves, in that, online-SDG activities asked not simply to create a dictation test but also to encourage participation, which could be practiced on the YouTube discussion board. The YouTube comment area presented written metacognitive reflections underlying students' strategy usages over time. Students were offered an environment (space) within the listening strategy training room and given an opportunity (time) to work on their own beyond the teacher-demonstrated strategy instructions. This encouraged them to be more thoughtful and responsible as they thought about what they learned and what they wanted to learn. Students first logged onto the YouTube webpage and filled in the blanks while recalling what strategies they had used during the time block from the previous two stages. They created dictation tests and reflected on the reasons why they had created a particular blank post on the YouTube public comment area (see Figure 1).

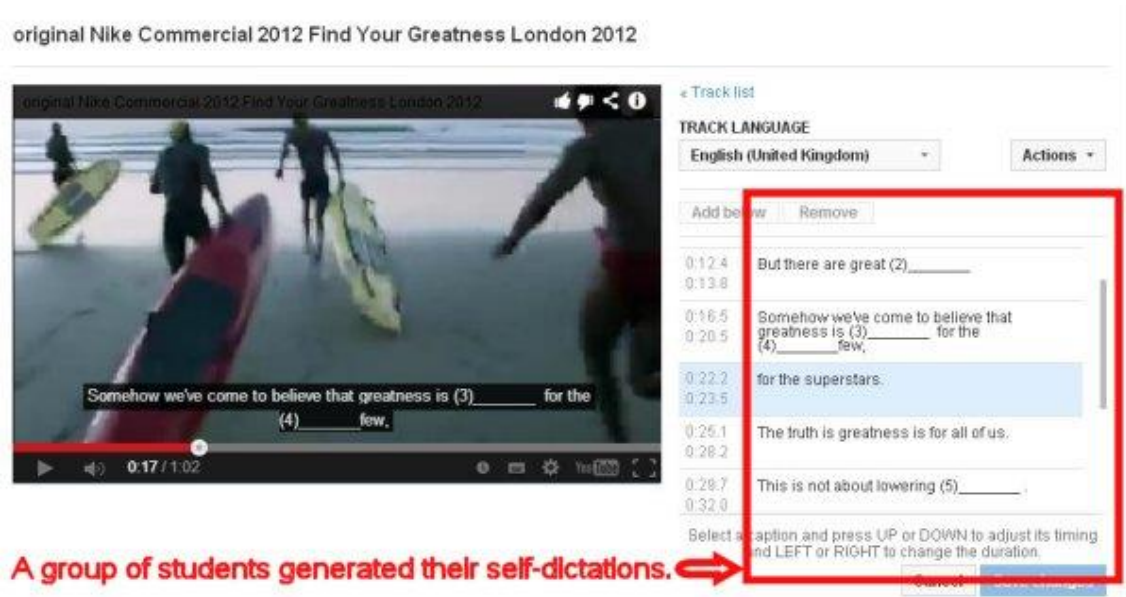


Figure 1. Students generated their self-dictation questions.

An example, based on a short TV commercial entitled "Find Your Greatness", was given by one group, which noted words such as 'athletic', 'reserved', 'greatness' and 'expectation'. They posted their perceptions of listening problems as spoken sounds that were difficult for them to predict, such as 'athletic' and 'reserved,' because the British accents and speaking speed made them difficult to follow (see Figure 2). Meanwhile, they chose 'greatness' as an option, since they had first predicted it in the first listening

and had made inferences about it from a previous video segment on greatness. They thus proposed using a prediction from a previous video segment to assist them with guessing the correct word and inferring the main topic of the video context. Throughout the monitoring processes, self-regulated learning was expected to elicit information on whether students were using appropriate listening strategies to accomplish the activity. The implementation of the online-SDG learning activity from the YouTube platform was expected to activate a dynamic and mixed practice of metacognition strategy at different stages during the activity.



Figure 2. An example of group reflections in the YouTube comments area.

#### 4. Data analysis

Students' mental activities in the online video-SDG activity were collected for investigation of their 'personal knowledge' (identifying specific problems) and 'task knowledge' (strategic knowledge) in terms of examining their constructive understanding of AVs. While reviewing the data with another qualified TESOL researcher, codes with relevant themes were generated and served as an effective means to help researchers describe them and make inferences about the collected data. We adapted the metacognitive scale from the SILL questionnaires to fit the listening development on the basis of the listening strategies introduced. The nine items measured the perceived use of strategies and processes underlying listening comprehension as well as self-evaluating individual progress. Descriptive statistics were applied to examine whether there were significant results in the learners' use of metacognitive listening strategies. Listening achievement was examined by pre- and post- learning achievement tests in listening comprehension. The listening texts were all based on the part of the materials presented by the class. The paired samples t-test was adopted to analyse students' progress in listening ability.

## 5. Results

### 5.1. Students' awareness of metacognitive listening knowledge

Student statements from the public YouTube comments revealed (1) their self-perceptions and experiences of listening and explanations as to why their comprehension might fail, and (2) their task knowledge on how they deployed effective meaning-making strategies to gain meaningful understanding. Via the focus-group interview, they illustrated (3) how they viewed strategic knowledge as a way of enabling them to adjust their learning attitudes and manage their learning methods. From the data collected, research question one can be answered. First, in the YouTube comments area, students maintained that the speaking rate was the main problem blocking their comprehension because AV speeds were too fast and that they could not afford a moment's delay (Table 3, theme 1, frequency 145). Moreover, limited vocabulary kept them from understanding meanings (Table 3, frequency 156). Syntactic patterns and sentence constituents became a slight obstacle to listening comprehension (Table 3, theme 3, frequency 32).

| Theme 1: Sound problems    |  |           |
|----------------------------|--|-----------|
| Code                       | Statements   | Frequency |
| Speaking speed             | The spoken discourse went by fast that I could not afford a moment's delay.  | 145       |
| Intonation contours        | I wanted to figure out the meanings but the sounds I heard seemed to lose a syllable; the precise meanings were confusing.   | 119       |
| Stress & rhythmic patterns | Understanding words on the basis of sounds according to the sounds but my interpretation could not fit the context.  | 123       |
| Tone patterns              | <ul style="list-style-type: none"> <li>British AVs are difficult to understand since we were familiar with the American tone.</li> <li>When watching AVs from non-English speaking countries, such as French AVs presented in English, the tone of voice was difficult to understand.</li> </ul> | 86        |
| Theme 2: words             |  |           |
| Code                       | Statements   | Frequency |
| New vocabulary             | I could not figure out the exact word shown on the CF although I knew it and heard the sound very clearly.   | 156       |

| Word boundaries         | It is difficult to determine the actual words used although you were aware that certain words were missing.   | 143       |
|-------------------------|---|-----------|
| Keywords                | I did not know which specific word could identify this AV since so many words seemed to fit.  | 25        |
| <b>Theme 3: grammar</b> |   |           |
| Code                    | Statements  | Frequency |
| Syntax                  | <ul style="list-style-type: none"> <li>• The sentence appeared illogical although we tried to brainstorm meanings by combining words into sentences.</li> <li>• Tenses changed confused us; for example, when they appeared, we didn't notice from sounds.</li> </ul> | 32        |

Table 3. Students' perceptions of personal knowledge of metacognitive listening development.

In addition to personal knowledge, students explained the task knowledge they understood as a way of appreciating their understanding of the authentic listening material. Prediction was the skill most frequently cited among the top-down strategies (Table 4, theme 1, frequency 231), while selecting specific keywords became the first priority of skills usages in the top-down strategies (Table 4, theme 2, frequency 208).

| <b>Theme 1: Top-down skills</b> |   |           |
|---------------------------------|---|-----------|
| Code                            | Statements  | Frequency |
| Prediction                      | AVs situations and contexts made me guess the meanings of the videos.<br>When watching CF, we liked to guess unknown words.<br>We guessed the meaning and matched it according to the video context from the sound we heard.  | 231       |
| Drawing inferences              | I looked carefully at the segment of films, including music, sounds and conversation video shown, to help me make inferences about the ideology the AVs wanted to express and its operations in attracting customers to buy it.<br>The screen showed slogans or other capitalized words while watching the film; I tried to make inferences about what products they were going to sell.<br>Our group liked to draw inferences about its attractiveness for target groups and evaluated its acceptance. | 86        |

| Theme 2:bottom-up skills |   |           |
|--------------------------|---|-----------|
| Code                     | Statements  | Frequency |
| Keywords                 | While generating a dictation blank, it made me concentrate on which specific keyword would identify the main meaning.   | 208       |
| Looked up the dictionary | We learned many new words and understood their use through the video plot presented by looking up meanings in an online dictionary.   | 243       |
| Syntax                   | I noticed that the tense changed in different situations. This blanket was an adjective word, but it was not a key point in gaining comprehension. The blanket was about a position since the previous word indicated this. | 63        |
| Word-order patterns      | We tried to think about word-order patterns and verified our prediction by looking up meanings in the dictionary.   | 62        |
| Distinguishing sound     | The tone here was very different from what I had leaned. Here, a syllable was deleted and was shown as a linking sound there. I recognized the assimilation in this part.   | 56        |

Table 4. Students' perceptions of task knowledge of metacognitive listening development.

As presented in Tables 3 and 4, students were able to use their abilities in ways that diagnosed their individual listening problems and helped them adapt listening strategies for listening comprehension as shown in the Table 3. For example, they found it difficult to choose correct words while listening to the materials, despite being familiar with their possible meanings, a fact that had an impact on their listening flow (Table 3, theme 2, word boundaries). However, after they understood where/why their comprehension broke down, they recognized the importance of the deployment of listening skills and began making inferences about key word meanings in the video segment (Table 4, theme 1, and drawing inferences). Some students noticed the change in syntax and predicted a specific word as an adjective style, but they also distinguished its importance by saying "The blank here was an adjective format, but it was not a key point in gaining comprehension". The metacognitive reflections displayed in Tables 2-4 made students actively involved in evaluating their self-concept of the listening process and becoming active thinkers.

Students expressed their conceptions about strategic knowledge and how they perceived strategy usage in facilitating their learning and handling their ineffective strategies from the focus-group interview and open questions. For example, in Table 5 (statement 1), students stated that the online video-SDG learning activity helped them learn by doing and actually trained them to check the thinking process such as writing down the strategies they used, the strategies they wanted to use, and the ones they did. Some students also indicated their poor previous experiences of learning authentic listening texts, such as looking up every word in the dictionary, which caused frustration in terms of learning listening skills (Table 5, statements 2-3). One student stated: "I tended to pause the video to look up word meanings in the dictionary without listening to the entire film. And I had no idea what top-down and bottom-up listening strategies were until I joined the online video-SDG learning activity. Now, I try to combine both ways to help me understand the meanings." In addition, other students mentioned that group work contributed to their learning in identifying, applying and examining their strategy usage: "group work is really good especially in terms of listening to other

classmates' opinions on how they solved their listening problems and their specific tactics of prediction and inference. "In this case, through an engagement in the online video-SDG activity and working with peers in sharing experiences about the strategies and tactics used, participants' further developed their metacognitive listening strategies.

| Statements |  | Frequency |
|------------|--|-----------|
| 1          | The online video-SDG activity training offered me an opportunity in terms of the thinking process of managing listening learning, such as what strategies I used, I can use and what other strategies might be able to lead to comprehension; the non-SDG activity provided an opportunity to take control of the listening practice without thinking about the whole process of learning. | 16        |
| 2          | I checked every word I did not know once I encountered them during listening. I paused to look up dictionary meanings without listening to the entire film. I had no idea of top-down and bottom-up listening strategies until I joined the online video-SDG activity. I tried to combine both ways to help me understand the meanings.  | 15        |
| 3          | When I saw an AV, I was very nervous to follow the plot. But, after the class, I realized I needed to relax myself because the video could reveal clues. I then listened carefully to break in the stream of information coming from the video in order to prepare myself for what clues might come next; I could then sort the important content as I went along.                         | 12        |
| 4          | When I was trying to watch the AV, I thought firstly about the purpose of the video. After understanding its purpose, I then worked on the comprehension of the AV.  | 12        |
| 5          | I tended to reduce or ignore the redundancy of words appearing on the AV such as adjectives or adverbs used to describe nouns or verbs. I could then gain a general idea of what the video was about.  | 12        |
| 6          | Group working was really good as a medium to listen to other classmates' opinions on how they solved their listening problems and their specific tactics in terms of prediction and inference.   | 10        |

Table 5. Students' perceptions of strategic knowledge of metacognitive listening development.

### 5.2. Students' awareness of metacognitive strategies

Table 6 shows the mean and standard deviation of each metacognitive strategy questionnaire item that could answer research question two. Apart from items 8-9, most of the means were high (between 4.21 and 3.52). We can conclude that developing students' metacognitive listening awareness by using the student self-dictation-generation approach was successful. For items 8-9, one participant stated "After studying the video content, I tend to look for people with whom I can converse in English". This implies (or it is known) that many of the night students work part- or full-time during the day and use these opportunities to practice English. From the focus interview, students also expressed their limitations in terms of time to revise the learning content and practice listening skills regarding the strategies introduced by the class. As such, due to night time study, they had very little time to plan their study and sought people with whom they could practice English. Therefore, training them to be self-directed learners was fundamental. Metacognitive awareness in this stage played a crucial role in activating their management in terms of controlling and monitoring their study.

| Metacognition skills |  | Mean | SD   |
|----------------------|--|------|------|
| 1                    | I notice my English mistakes and use this information to help me do better.                        | 4.21 | .645 |
| 2                    | I pay attention by listening when someone is speaking English in the advertisement videos.         | 4.14 | .683 |
| 3                    | I look for opportunities to read and listen as much as possible in English.                        | 4.02 | .780 |
| 4                    | I think about my progress in learning English listening.   | 4.00 | .870 |
| 5                    | I try to be a better learner of English by listening.  | 3.93 | .778 |
| 6                    | I have clear goals for improving my English listening skills.                                      | 3.52 | .833 |
| 7                    | I try to find as many ways as I can to use the English that I have learned from the video content. | 3.50 | .919 |
| 8                    | I plan my schedule so that I can have enough time to study English listening.                      | 3.39 | .891 |
| 9                    | After studying the video content, I tend to look for people with whom I can converse in English.   | 3.12 | .739 |

Table 6. Descriptive statistics of each metacognitive strategy questionnaire item.

### 5.3. Learning achievement

In order to answer the third and final research question, we examined students' listening progress through the implementation of metacognitive strategies. To do so, differences between the pre- and post-test scores in listening comprehension were investigated. A paired samples t-test was employed to decide whether there was a significant difference between both tests. The results presented in Table 7 below indicate that the mean score of the post-test in the online video-SDG activity (M=58.98) was greater than that of the pre-test without the video-SDG activity (M=41.94). In addition, there were significant differences between pre-test and post-test scores ( $t=4.418$ ,  $P < 0.001$ ). The students improved and performed better on the listening achievement test when they participated in the online video-SDG activity.

| Learning achievement | Mean         | SD     | t        |
|----------------------|--------------|--------|----------|
| Post test            | <b>58.98</b> | 11.832 | 4.418*** |
| Pre-test             | <b>41.94</b> | 8.995  |          |

\*\*\*  $P < .001$

Table 7. Paired-samples t-test for pre-test and post-test listening comprehension.

## 6. Discussion and conclusion

By incorporating student online-SDG learning activities, the study presented an effective way of training students to develop metacognitive strategies in L2 listening. Students involved in the online video-SDG activity performed significantly better on listening comprehension tests. They not only created their dictation questions, thereby

reinforcing their practice in listening strategies, they also learned to monitor and evaluate their strategies by recalling their strategy usages and reflecting on their listening problems. This differs from other studies that analysed teachers' strategies or demonstrated a particular strategy without decently manipulating strategic training activities in the learning process during a regular listening teaching program (Ratebi & Amirian, 2013). The limited instructional time was dedicated solely to strategy training and practice, and specific tasks were addressed, which students were asked to complete (McGruddy, 1998; O'Malley & Chamot, 1990). In other words, allowing students to deploy and freely practice strategic knowledge in a friendly and flexible learning environment is crucial to the development of their metacognitive classroom-based learning.

In the present study, stressing retrospection on strategy usages, students had opportunities to assess their self-perceptions of the application of metacognitive listening. By stressing the metacognitive instructional process, students perceived the conceptions and methods of learning listening and evaluated their listening strategy methods that could be applied in other listening learning settings. The study was in line with the development of metacognitive knowledge and strategies, which devised a free platform for developing students' self-concepts of and approaches to listening. We found three significant factors to help students improve metacognitive awareness while they were involved in the metacognitive learning activity. These factors are as follows:

First, it is highly possible that students were not aware of the strategies that could support their comprehension (awareness of strategic knowledge) and how to handle these strategies to help them when comprehension broke down (control of strategies). The designed activity required an active use of the above concepts; otherwise, listening strategies introduced by the instructors might have faded. Similar to Lai and Gu (2011:331), it is essential to develop learners' metacognitive awareness and 'to use technology actively' to aid language learning when engaging them in a technology-supported learning environment. The current activity offered students an opportunity to examine their learning. Rather than generating a perfect test or mastering question-generation skills, students were situated in the process of retrospection on self-concept in metacognitive strategy knowledge in L2 listening. This follows O'Malley, Chamot, Stewner-Mazaneres, Russo, and Kupper (1985:561) that "students without metacognitive approaches are essentially learners without direction or opportunity to review their progress, accomplishments, and future directions."

Second, providing students with sufficient time to practice listening strategies in classroom-based learning is vital in order to allow them to learn at their own pace. The materials chosen for the listening class were elicited from the YouTube website. Students benefitted by clicking on the AV from the internet with the possibility of mastering their listening strategies anytime and anywhere. Students, after practicing their listening strategies, could be consciously aware of what they learned, further examining and evaluating their progress with the use of these strategies. In other words, learner autonomy and self-directed learning can be developed for future listening activities so that one can plan, manage, monitor and evaluate one's listening time, approaches, and strategies to accomplish listening goals.

Lastly, arranging group work contributes to the learning of metacognitive listening skills since social interaction is beneficial for students to discuss and share what strategies they have used or when to carry out these strategies when problems arise. Students could brainstorm to think about tough questions and solve problems. Group discussion is a platform of knowledge sharing and group members could discuss strategic knowledge, task knowledge, and evaluate the strategies of other classmates, providing that they are aware of such strategies.



## Acknowledgements

The research reported in this paper has been supported by the Ministry of Science and Technology in Taiwan under research project numbers NSC 100-2628-S-024-001-MY3 and NSC 101-2511-S-024-007-MY2, supervised by Chih-Kai Chang.

## References

- Birjandi, P. & Rahimi, A. H. (2011). The effect of metacognitive strategy instruction on the listening performance of EFL Students. *International Journal of Linguistics*, 4(2), 495-517.
- Bozorgian, H. (2013). Metacognitive instruction does improve listening comprehension. *International Scholarly Research Network*. ISRN Education, 1-6.
- Chamot, A.U. & O'Malley, J.M. (1987). The cognitive academic language learning approach: A bridge to the mainstream. *TESOL Quarterly*, 21, 227-249.
- Chamot, A.U. & O'Malley, J.M. (1994). *The CALLA handbook: Implementing the cognitive academic language learning approach*. White Plains, NY: Addison Wesley Longman.
- Coşkun, A. (2010). The effect of metacognitive strategy training on the listening performance of beginner students. *Research on Youth and Language*, 4(1), 35-50.
- Choi, I., Land, S.M. & Turgeon, A.Y. (2005). Scaffolding peer-questioning strategies to facilitate metacognition during online small group discussion. *Instructional science*, 33(5-6), 483-511.
- Cross, D.R. & Paris, S.G. (1988). Developmental and instructional analyses of children's metacognition and reading comprehension. *Journal of Educational Psychology*, 80(2), 131-142.
- Cross, J. (2009). Effects of listening strategy instruction on news videotext comprehension. *Language Teaching Research*, 13(2), 151-176.
- Flavell, J. H. (1979). Metacognition and cognitive monitoring: A new area of cognitive developmental inquiry. *American Psychologist*, 34, 906- 911.
- King, A. (1994). Guiding knowledge construction in the classroom: effects of teaching children how to question and how to explain. *American Educational Research Journal*, 31(2), 338-368.
- Koch, A. & Echstein, S.G. (1991). Improvement of reading comprehension of physics texts by students' question formulation. *International Journal of Science Education*, 13, 473-485.
- Kuhn, D. & Dean, D. (2004). A bridge between cognitive psychology and educational practice. *Theory into Practice*, 43(4), 268-273.
- Lai, C. & Gu, M. (2011). Self-regulated out-of-class language learning with technology. *Computer Assisted Language Learning*, 21(4), 317-335.
- Leveridge, A.N. & Yang, J.C. (2013). Testing learner reliance on caption supports in second language listening comprehension multimedia environments. *ReCALL*, 25(2), 199-214.
- McGruddy, R. (1998). The effect of listening comprehension strategy training with advanced level ESL students. *Dissertation Abstracts International*, 59 (12), 4416. (UMI No. 9916234).

- Montero Pérez, M., Peters, E. & Desmet, P. (2014). Is less more? Effectiveness and perceived usefulness of keyword and full captioned video for L2 listening comprehension. *ReCALL: Journal of Eurocall*.
- O'Malley, J.M. & Chamot, A.U. (1990). *Learning strategies in second language acquisition*. NY: Cambridge University Press.
- O'Malley, J.M., Chamot, A.U., Stewner-Manzanares, G., Russo, R.P. & Kupper, L. (1985). Learning strategy applications with students of English as a second language. *TESOL Quarterly*, 19(3), 557-584.
- Oxford, R. (1990). *Language learning strategies: What every teacher should know*. New York: Newbury House.
- Ogle, D.M. (1986). K-W-L: A teaching model that develops active reading of expository text. *Reading Teacher*, 39, 564-570.
- Park, G.P. (2011). The validation process of the SILL: a Confirmatory factor analysis. *English Language Teaching*. 4(4), 21-27.
- Rasouli, M. Mollakhan, K. and Karbalaeei, A. (2013).The effect of metacognitive listening strategy training on listening comprehension in Iranian EFL context. *European Online Journal of Natural and Social Science*, 2(1),115-128.
- Ratebi, Z. & Amirian, Z. (2013). Use of metacognitive strategies in listening comprehension by Iranian university students majoring in English: a comparison between high and low Proficient listeners. *Journal of Studies in Education*, 3(1), 140-154.
- Rosenshine, B. Meister, C. & Chapman, S. (1996). Teaching students to generate questions: A review of the intervention studies. *Review of Educational Research*, 66, 181-221.
- Smidt, E. & Hegelheimer, V. (2004). Effects of online academic lectures on ESL listening comprehension, incidental vocabulary Acquisition, and strategy use, *Computer Assisted Language Learning*. 17(5), 517-556.
- Wenden, A.L. (1998). Metacognitive knowledge and language learning. *Applied Linguistics*, 19, 515-37.
- Whitebread, D., Coltman, P., Pasternak, D.P., Sangster, C., Grau, V., Bingham, S., Almeqdad, Q. & Demetriou, D. (2009). The development of two observational tools for assessing metacognition and self-regulated learning in young children. *Metacognition and Learning*, 4(1), 63-85.
- Sarani, A. and Jabbari, A. (2010). The effect of generative study strategies on EFL learners' reading comprehension and recall of short stories. *Proceedings of the3rd international conference of ICT for Language Learning. Italy: Florence*.
- Schraw, G., Crippen, K. J. & Hartley, K. (2006). Promoting self-regulation in science education: Metacognition as part of a broader perspective on learning. *Research in Science Education*, 36, 111-139.
- Singer, H. & Donlan, D. (1982). Active comprehension: Problem-solving schema with question generation for comprehension of complex short stories. *Reading Research Quarterly*, 17, 166-18.
- Soonthornmanee, R. (2002). The effect of the reciprocal teaching approach: on the reading comprehension of EFL students. *RELC Journal*, 33(2), 125-141.
- Vandergrift, L. (1997). The comprehension strategies of second language listeners: A descriptive study. *Foreign Language Annals*, 30, 387-409.

Vandergrift, L. (1999). Facilitating second language listening comprehension: acquiring successful strategies. *English Language Teaching*, 53(3), 168-176.

Yu, F. Y. (2005). Promoting metacognitive strategy development through online question-generation instructional approach. *Proceeding of International Conference on Computers in Education*, 564-571. Singapore: Nanyang Technological University.

Yu, F.Y., Liu, Y.H. & Chan, T.W. (2005). A Web-based learning system for question-posing and peer assessment. *Innovations in Education and Teaching International*, 42 (4), 337-348.

Yu, F.Y. (2009). Scaffolding student-generated questions: design and development of a customizable online learning system. *Computers in Human Behaviour*, 25(5), 1129-1138.

**Appendix 1.** Interview questions.

1. Do you encounter problems when your comprehension breaks down?
2. How do you deal with problems when your comprehension fails?
3. Do you find strategies useful to help you understand meanings? In what ways?
4. Do you find your strategy unhelpful in aiding meaning comprehension? In what ways?
5. How you deal with your negative skills?
6. Do you think that the online video-SDG learning activity can aid with your listening comprehension? If so, in what ways?
7. What do you think about the group work in the online video-SDD learning activity? Were they helpful? Why/why not?

[Top](#)

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## Article:

# ***Integrating Multimedia ICT Software in Language Curriculum: Students' Perception, Use, and Effectiveness***

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### **Abstract**

Information and Communication Technologies (ICT) constitute an integral part of the teaching and learning environment in present-day educational institutions and play an increasingly important role in the modern second language classroom. In this study, an online language learning tool Tell Me More (TMM) has been introduced as a supplementary tool in French and German first and second-year language university classes. At the end of the academic year, the students completed a questionnaire exploring their *TMM* usage behaviour and perception of the software. The survey also addressed aspects of the respondents' readiness for self-directed language learning. The data were then imported into SPSS and underwent statistical analysis. The results of the study show that 1) relatively few of today's university students are open to the idea of voluntarily using ICT for independent language practice; 2) grade, price, and availability of alternative means of language practice are the most important factors affecting the students' decision to purchase and use ICT software; 3) there is a relationship between the students' decision to buy and use ICT software and their readiness for self-directed learning.

**Keywords:** CALL, language learning software, perception, independent learning, Tell Me More, foreign language teaching.

### **1. Introduction**

Information and Communication Technologies (ICT) constitute an integral part of the teaching and learning environment in today's educational institutions that must quickly adapt to social, economic and technological changes of this century. The most recent developments in this area include the expansion of online learning in higher education, the increasing presence of blended courses in academic curricula, streaming media environments, and the Massive Open Online Course (MOOC) movement. All of them respond to global technological changes related to the introduction of mobile devices, the flourishing of social media and, first and foremost, the rapid expansion of access to an overwhelming amount of information, easily available although often difficult to validate. This rich and complex virtual environment, in which Millennials feel at home and which provides conditions favourable to self-directed learning, should be taken into consideration in course design.

Other aspects of the emerging post-secondary education environment brought about by fiscal constraints include: limited new faculty appointments, growing numbers of undergraduate students and increased student-to-faculty ratio. In fact, Ontario has the highest student-to-faculty ratio among Canadian provinces. From 2002/2003 to

2009/10, there has been a 12% increase in the average number of students per faculty member in the Ontario university system<sup>1</sup> from under 23 to more than 25 students. Class sizes in first and second year courses are currently 8-9 % higher than they were at the end of the double cohort (2006)<sup>2</sup>. This tendency is particularly worrying in the field of foreign and second language education, where one of the main objectives is learning and practicing communication skills. According to the National Council of Teachers of English in the United States, "No more than 25 students should be permitted in discussion courses in literature or language".<sup>3</sup> The American Council on the Teaching of Foreign Languages goes even further and recommends classes of no more than 15 students.<sup>4</sup> As it is well known, language-learning is a matter of regularity, constancy and perseverance. Three or four classes per week do not guarantee desired results; hence the common frustration of foreign language students at not progressing quickly enough. Conditions for self-directed learning, extended outside of the classroom, should therefore be created to support continuous building and rooting of new linguistic skills.

## **2. Context of the study and previous research**

To address the three factors discussed above, namely the increasing role of virtual environments in teaching, the fiscal constraints in academia and the importance of regular, individual practice in foreign language acquisition, an online language learning solution Tell Me More , has been introduced in French and German first and second-year language classes at McMaster University, Ontario. Tell Me More (TMM) is a language education software available online since the early 1990s. Together with Rosetta Stone, it is the most widely advertised commercially available language learning software for self-study, with clients from the corporate world, government agencies, secondary and higher education.<sup>5</sup> According to the program's website, one million people worldwide used it in 2002.<sup>6</sup> The software now exists in its 10th version. The program covers 6 levels of the Common European Framework for Languages, from beginner to expert. A license, which can be bought online, gives access to a large number of interactive, self-paced activities and exercises, images related to everyday situations and videos exploring cultural aspects of different countries. Currently, nine languages can be learned with TMM (Arabic, Chinese, Dutch, English ESL, French, German, Italian, Japanese and Spanish). Three distinctive features of the software are speech recognition technology, customizable language learning programs and the "Teacher's Portal." The latter gives access to graphs and various data that allow the instructor to monitor students' progress measured in units and exercises completed, as well as in the percentage of correct answers.

TMM has been previously reviewed in literature evaluating CALL (Computer Assisted Language Learning) programs. Godwin-Jones (2007) analysed the impact of self-directed, Web-based language learning programs, identifying TMM, ELLIS and Rosetta Stone as commercial products with powerful sets of self-instructional materials. Lafford, Lafford, and Sykes (2007), placed TMM Spanish among the most sophisticated CALL software available, emphasizing its excellent graphics, speech recognition feature and oral interaction possibilities. Empirical studies concerning actual use and perception of TMM have also been conducted. Lasagabaster and Sierra (2003) assessed student evaluations of four CALL software programs to learn English, including TMM.<sup>7</sup> Out of four programs evaluated by students, TMM was the most widely used and it was perceived as the easiest to use, but it ranked third in overall degree of satisfaction. Chen (2004) reported on a project involving TMM use in first year English classes at Providence University in Taiwan. The program was used once per week in class and as a self-directed learning tool. Questionnaires completed after two semesters showed students' positive perception of the program and satisfaction with the improvement of

pronunciation, conversation and listening abilities (Chu, 2003). The course received particularly good evaluations but according to Chen, it was not clear if they were based on the quality of the software or on the combination of CALL and live instruction. In a study linking multiple intelligence (MI) theory and CALL instruction, Kim (2009) discussed the importance of various learning styles in language learning, and praised TMM, together with English Discoveries, Triple-play Plus and ELLIS, for its interactive and collaborative qualities. He concluded that "students' MI quotients improved to some extent, depending on the type of intelligence used in instruction" (Kim, 2009: 13). According to Kim, even though considering MI in language instruction does not guarantee better academic achievement, it can help students learn languages. Nielson (2011) focused on self-directed language learning in the workplace, assessing US government employee use of Rosetta Stone and TMM for learning Spanish. She found a high drop-out rate of 93% and reported technological issues (such as system crashes and microphone problems) and unsatisfactory job-specific content as two important factors in attrition.

### **3. Purpose of the study and theoretical background**

The purpose of this study was to evaluate student perception of TMM and student readiness for self-directed language learning. Our medium-term objective was to find ways of improving students' learning experience and student satisfaction with language instruction at McMaster University, as well as to encourage students to develop self-directed learning skills.

At the end of the academic year, students completed a questionnaire based on previous studies conducted by Guglielmino (1977), Davis, Bagozzi and Warshaw (1989), Davis (1989), Hashim and Yunus (2010), and Yunus, Hashim, Jusoff, Nordin, Yasin & Rahman (2010). In the first part of the questionnaire, we adopted Davis's Technology Acceptance Model (TAM), based on Fishbein and Ajzen's (1975) and Ajzen and Fishbein's (1980) theory of reasoned action (TRA) and on previous research by Schultz and Slevin (1975, 1979), Robey (1979) and Bandura (1982). The second part of the questionnaire completed by students included a series of questions drawn from Lucy Guglielmino's self-directed learning readiness scale (SDLRS), also known as the Learning Preference Assessment.

The theory of reasoned action (TRA) is an intention model which aims to predict and explain human behaviour in different domains. It was adopted by Davis (1989) in the context of organizational performance with the purpose of predicting and explaining why people accept or reject the use of computers, which stormed offices en masse in the 1980s. Decision-making and financial commitment related to the installation of hardware and software were perceived as risky at the time, hence the interest to explain and predict end-user behaviour and cost-effectiveness of introducing computers. Adapting the theory of reasoned action, Davis proposed the technology acceptance model (TAM), within which he identified two principal beliefs: perceived usefulness, defined as "the degree to which a person believes that using a particular system would enhance his or her job performance" (Davis, 1989: 320) and perceived ease of use, defined as "the degree to which a person believes that using a particular system would be free of effort" (Davis, 1989: 320). Davis's definitions invite a relatively straightforward translation into the language-learning context. This adaptation has been carried out by Hashim and Yunus (2010) and Yunus et al. (2010) in two studies of perception of TMM, one conducted from the instructor's point of view and the second accounting for student perception of the software. A third factor, perceived suitability, has been added by these authors to address the software's efficacy in helping to improve specific language skills: listening, speaking, reading, writing, grammar and vocabulary (Hashim and Yunus, 2010: 214).<sup>8</sup> To assess students' opinion about the

teaching potential of TMM and evaluate their self-directed learning behaviour, we retained in this study the aforementioned concepts of perceived usefulness, perceived ease of use and perceived suitability. We then drew on Guglielmino's SDLRS scale, which consists of 58 Likert-type questions developed in 1977 on the basis of input provided by a panel of experts participating in a two-stage Delphi survey. The scale measures "the complex of attitudes, skills, and characteristics that comprise an individual's current level of readiness to manage his or her own learning".<sup>9</sup> Despite some criticism (Brockett, 1985, Field 1989, 1990, Straka and Hinz, 1996), it continues to be widely used.

#### **4. Method**

TMM was introduced in French and German first and second-year language classes and was used between September 2012 and April 2013. German classes at McMaster meet three times per week for 50 minutes. TMM was introduced as an alternative to a pen and paper workbook supplementing the textbook. Students were free to choose between using TMM or completing workbook activities for practicing the language. Having committed to one or the other, students had to account for the work completed, which constituted 20% of their final grade. Those who decided to use TMM followed the syllabus established by the instructor who had selected units to be studied and "collection dates" on which students' progress would be checked via the "Teachers' Portal". French classes at McMaster meet four times per week for 50 minutes. In French, TMM was introduced as an optional means of self-directed learning. To encourage students to buy and use the software, it was also used during class time, alternating weekly with the traditional syllabus of conversational French. This amounted to 5 lessons per term based on TMM's cultural videos and related exercises.

At the end of the course students were asked to complete a quantitative survey consisting of 57-items across six sections. The questionnaire was hosted online at [surveymonkey.com](http://surveymonkey.com) and was anonymous. The opening section of the survey inquired about which language course the respondents took, their level of computer proficiency, previous experience with online learning, whether the participants purchased a TMM license and how they explain their decision. Those students who did not buy the license were re-directed to the second section, where they were asked about the reasons for not buying the software as well as whether they used any alternative tools for learning their respective language. In order to distinguish between those respondents who bought the license and used the software regularly, and those who bought the license but didn't use it, two separate sections were created asking about the motivation and reasoning behind the respondents' choice. Further, those students who used TMM were asked to complete the questionnaire inquiring about their perception of the software package. In order to be consistent with the previous studies on TMM, we distributed the same survey as was used by Hashim and Yunus (2010). Finally, all participants were asked to complete the final section of the survey testing their readiness for self-directed learning. Although Guglielmino's original Learning Preference Assessment scale (1977) comprises 58 statements, in order to avoid making our own questionnaire excessively long we used a subset of 19 questions available on the Learning Preference Assessment site.<sup>10</sup> All statements in this section were to be ranked on a four-point Likert-type scale (Guglielmino 1977).

At the end of the data collection period, a total of 104 completed questionnaires were collected. The data were then imported into SPSS and underwent statistical analysis. Sections 1 to 5 were analysed using frequency counts and descriptive statistics, whereas the data in section 6 (self-directed learning readiness scale) were subject to factor analysis and independent samples t-tests.

## 5. Results

### 5.1. Data description

Of the 104 participants who completed the survey, 61 respondents were enrolled in French and 43 in German language courses. 91% of all respondents ranked themselves as being of intermediate or advanced computer literacy (45% and 46%, respectively) and the majority of all subjects (72% or 76 students) reported that they had previous experience with online learning.

The French group consisted of 61 students for whom TMM was purely a supplementary tool and the work done in TMM not assigned a grade. Of these respondents, approximately a third (20 participants or 32% of the French group) bought the software license but only 2 students from this group used it.

Of the 43 respondents who were enrolled in the German courses slightly more than half (53% of the German group or 23 students) bought the TMM license and almost all of them used it (83% or 20 participants). We believe that such difference between the behaviour of the French group and the German group can be attributed to the fact that regular work in TMM in the German courses was graded and required to complete the course.

Of special interest to us were the following two groups of respondents. The first consisted of 21 students who did buy a TMM license but did not use the software (3 from German and 20 from French courses). The second comprised 62 participants (59% of the total group) who did not buy the TMM license (of these, 42 student were taking French and 20 German language courses). As already mentioned, because the motivation behind the students' decision to use or not to use the software was central to this study, two separate sections asking students about the reasoning behind their decision were created. The results of these sections are presented and discussed below.

Of the 43 students who bought the TMM license, 21 did not use TMM activities at all (of these, 3 were German and 18 French students). The majority of these respondents (72%, or 13 of 21) reported the fact that TMM activities did not count toward the final mark as the main reason for not buying the software. Further, more than 80% of these students (16 of 21) claimed that they did not have the time to use TMM and approximately the same number of respondents (81%, or 17 of 21) believed that they would use TMM if 5% or 10% of the final grade would be assigned to this work.

Of those students who decided not to buy the TMM license, almost 92% (57 students) stated that they did not buy it because it was either optional (for German students) or did not count toward the final mark (for French students). Further, 80% of these students (50 respondents) felt that the license was too expensive, and 68% (41 students) decided to use a traditional pen and paper workbook instead.

### 5.2. Perception of TMM

As already mentioned, those students who bought the TMM license and used the software on a regular basis were required to complete a section of the survey investigating their perception of the software in three areas: perceived ease of use, usefulness, and suitability for the course.<sup>11</sup>

#### 5.2.1. Perceived Ease of Use

The first section in this part of the survey consisted of six statements to be ranked on a four-point Likert-type scale. Among the items in this section, the highest score was given to the question 'Activities are easily understood' (mean of 3.5/4) followed by 'TMM activities are interactive' (3.27/4), and the lowest scores were given to classifying TMM activities as fun (mean of 2.68/4) with almost 32% disagreeing or strongly



disagreeing with this statement. Also, 22.6% of our students did not find TMM activities interesting. The two remaining questions, whether TMM was easy to use and whether the language was clear and easy to understand both received the mean score of 3.18/4 with 95% of the respondents agreeing or strongly agreeing with this statement. Although the scores we obtained in this category were positive, all of them were somewhat lower than the ones reported by Hashim and Yunus (2010). The results of this section are presented in Table 1.

| Question   | Strongly Disagree | Disagree  | Agree      | Strongly Agree | Mean |
|--|-------------------|-----------|------------|----------------|------|
| I find Tell Me More easy to use                                    | -                 | 2 (9%)    | 14 (64%)   | 6 (27.3%)      | 3.18 |
| Tell Me More learning activities are interactive                   | -                 | 1 (4.5%)  | 14 (64%)   | 7 (31.8%)      | 3.27 |
| I find Tell Me More interesting                                    | 2 (9%)            | 3 (13.6%) | 14 (64%)   | 3 (13.6%)      | 2.81 |
| I find Tell Me More learning activities are easily understood      | -                 | 1 (4.5%)  | 9 (40.9%)  | 12 (54.5%)     | 3.5  |
| Tell Me More learning activities are fun                           | 2 (9%)            | 5 (22.7%) | 13 (59%)   | 2 (9%)         | 2.68 |
| The language used in Tell Me More is clear and easy to understand  | 1 (4.5%)          | -         | 15 (68.1%) | 6 (27.2%)      | 3.18 |
| The scores ranged from 1 (strongly disagree) to 4 (strongly agree) |                   |           |            |                |      |
| Table 1. Perceived Ease of Use of TMM.                             |                   |           |            |                |      |

### 5.2.2. Perceived Usefulness of TMM

The second part of the survey comprised 8 statements which were ranked by the respondents on a four-point Likert-type scale. A summary of the results in this section is presented in Table 2. In terms of perceived usefulness, 91% of our students felt that TMM helped them improve their language proficiency (mean = 3.05/4). The other areas that our students perceived as most useful were vocabulary enrichment (mean = 3.27/4), speaking (mean = 3.23/4), and listening (mean = 3.18/4). The lowest scores, on the other hand, were given for usefulness for writing and reading. Thus, almost 41% of the group did not find TMM to be useful for improving their writing skills and 27% felt the same way about TMM being useful for developing reading skills. These two questions received the mean scores of 2.55/4 and 2.81/4, respectively. Similar to the other two categories, our scores were overall lower than the ones in Hashim and Yunus's study (2010).

| Question   | Strongly Disagree | Disagree | Agree      | Strongly Agree | Mean |
|--|-------------------|----------|------------|----------------|------|
| Using Tell Me More helped me improve my language proficiency |                   | 2 (9%)   | 17 (77.2%) | 3 (13.6%)      | 3.05 |

|   |          |           |            |           |      |
|---|----------|-----------|------------|-----------|------|
| Using Tell Me More is useful for language learning                                |          | 4 (18.1%) | 15 (68.1%) | 3 (13.6%) | 2.95 |
| Tell Me More provides students with useful activities to improve listening skills |          | 3 (13.6%) | 12 (54.5%) | 7 (31.8%) | 3.18 |
| Tell Me More provides students with useful activities to improve speaking skills  | 1 (4.5%) |           | 14 (63.6%) | 7 (31.8%) | 3.23 |
| Tell Me More provides students with useful activities to improve reading skills   |          | 6 (27.2%) | 13 (59%)   | 2 (9%)    | 2.81 |
| Tell Me More provides students with useful activities to improve writing skills   | 1 (4.5%) | 9 (40.9%) | 11 (50%)   | 1 (4.5%)  | 2.55 |
| Tell Me More provides students with useful activities for learning grammar        | 1 (4.5%) | 2 (9%)    | 15 (68.1%) | 4 (18.1%) | 3.00 |
| Tell Me More provides students with useful activities for vocabulary enrichment   |          | 1 (4.5%)  | 14 (63.6%) | 7 (31.8%) | 3.27 |
| The scores ranged from 1 (strongly disagree) to 4 (strongly agree)                |          |           |            |           |      |
| Table 2. Perceived Usefulness of TMM.   |          |           |            |           |      |

### 5.2.3. Perceived Suitability of TMM

The final part of this section contained 12 statements regarding the perceived suitability of the software package. Similar to the previous two parts, these statements were ranked on a four-point Likert scale. The results are summarized in Table 3 and show that the majority of our students perceived TMM to be a suitable tool for learning another language (82% agreed or strongly agreed with this statement; mean = 3.18/4). Furthermore, all participants perceived TMM to be suitable for their level of proficiency (mean = 3.32/4) and more than 90% felt that TMM was a suitable tool for their course (mean = 3.18/4). Also, the vast majority of the participants found the following three elements of the software package suitable: graphics (95%, mean = 3.19/4), videos (90%, mean = 3.00/4), and audio (80.9%, mean = 3.00/4).

In terms of suitability of TMM for learning and improving linguistic skills, our students ranked them as follows (in the order from high to low scores):

1. Speaking (mean = 3.24/4). More than 95% of the respondents perceived TMM as a suitable tool for learning speaking skills.
2. Vocabulary (mean = 3.19/4). 90% agreed that TMM was useful for learning new lexical items.
3. Grammar (mean = 3.00/4). 71.4% agreed and 14.2% strongly agreed that TMM was useful for learning grammar while 14.2% disagreed with this statement.
4. Listening (mean = 3.05/4). 86% of all participants saw TMM as a suitable tool for learning listening skills whereas only 13.6% disagreed with this statement.
5. Reading (mean = 2.95/4). Although 76% considered TMM to be suitable for improving reading skills, 23.8% did not find TMM suitable to improve their reading skills.

6. Writing (mean = 2.62/4). TMM was perceived to be the least suitable for training writing in the target language by almost half the group (47.6%).

| Question   | Strongly Disagree | Disagree   | Agree       | Strongly Agree | Mean |
|--|-------------------|------------|-------------|----------------|------|
| Tell Me More is a suitable tool for learning another language                |                   | 4 (18.1%)  | 10 (45.4%)  | 8 (36.6%)      | 3.18 |
| Tell Me More is a suitable for my level of proficiency                       |                   |            | 15 (68.1%)  | 7 (31.8%)      | 3.32 |
| Tell Me More learning activities are suitable for my course                  |                   | 2 (9%)     | 14 (63.6%)  | 6 (27.2%)      | 3.18 |
| Tell Me More is a suitable tool for learning listening skills                |                   | 3 (13.6%)  | 15 (68.1%)  | 4 (18.1%)      | 3.05 |
| Tell Me More is a suitable tool for learning speaking skills                 |                   | 1 (4.7%)   | 14 (66.6%)  | 6 (28.5%)      | 3.24 |
| Tell Me More is a suitable tool for learning reading skills                  |                   | 5 (23.8%)  | 12 (57.1%)  | 4 (19%)        | 2.95 |
| Tell Me More is a suitable tool for learning writing skills                  |                   | 10 (47.6%) | 9 (42.8%)   | 2 (9.5%)       | 2.62 |
| Tell Me More is a suitable tool for learning grammar                         |                   | 3 (14.2%)  | 15 (71.4%)  | 3 (14.2%)      | 3.00 |
| Tell Me More is a suitable tool for vocabulary enrichment                    |                   | 2 (9.5%)   | 13 (61.9%)  | 6 (28.5%)      | 3.19 |
| The graphics, such as photographs, used in Tell Me More are suitable         |                   | 1 (4.7%)   | 15 (71.4%)  | 5 (23.8%)      | 3.19 |
| The videos used in Tell Me More are suitable                                 | 1 (4.7%)          | 1 (4.7%)   | 16 (76.19%) | 3 (14.28%)     | 3.00 |
| Native speaker speech used in the audio is suitable                          |                   | 4 (19%)    | 13 (61.9%)  | 4 (19%)        | 3.00 |
| The mean scores could range from 1 (strongly disagree) to 4 (strongly agree) |                   |            |             |                |      |
| Table 3: Perceived suitability of TMM.                                       |                   |            |             |                |      |

### 5.3. Self-directed learning readiness scale (SDLRS)

In the final part of the questionnaire, the respondents were presented 19 learning preference statements that were to be ranked on four-point Likert-type scale ranging from (1) strongly disagree to (4) strongly agree. These data were then subjected to factor analysis in order to reduce a large number of variables to a smaller set of

underlying factors. The final factors were labelled based on the main themes of learning preference statements contained in the survey. These are summarized in Table 4:

| Factors & Items   | Factor loadings              | Eigenvalue | Explained Variance |
|---|------------------------------|------------|--------------------|
| <p>Factor 1: Thirsty learning</p> <p>Q39: I'm looking forward to learning as long as I'm living.</p> <p>Q43: I love to learn.</p> <p>Q55: There are so many things I want to learn that I wish there were more hours in a day.</p> <p>Q57: Understanding what I read in English is a problem for me.</p>                                      | .737<br>.717<br>.648<br>.561 | 4.09       | 15.26              |
| <p>Factor 2: Independent learning</p> <p>Q42: If there is something I want to learn, I can figure out a way to learn it.</p> <p>Q48: If I discover a need for information that I don't have, I know where to go to get it.</p> <p>Q49: I can learn things on my own better than most people.</p>  | .775<br>.652<br>.613         | 1.79       | 12.22              |
| <p>Factor 3: Dependent learning</p> <p>Q44: It takes me a while to get started on new projects.</p> <p>Q47: I don't work very well on my own.</p> <p>Q50: Even if I have a great idea, I can't seem to develop a plan for making it work.</p>   | .732<br>.685<br>.648         | 1.34       | 12.18              |
| <p>Factor 4: Determined learning</p> <p>Q40: I know what I want to learn.</p> <p>Q41: When I see something that I don't understand, I stay away from it.</p> <p>Q56: If there is something I have decided to learn, I can find time for it, no matter how busy I am.</p>  | .654<br>.642<br>-.548        | 1.28       | 10.90              |
| <p>Factor 5: Active learning</p> <p>Q45: In a classroom situation, I expect the instructor to tell all class members exactly what to do at all times.</p> <p>Q51: In a learning experience, I prefer to take part in deciding what will be learned and how.</p> <p>Q52: Difficult study doesn't bother me if I'm interested in something.</p> | -.670<br>.619<br>.595        | 1.10       | 9.42               |
| Total variance explainer 60%  |                              |            |                    |
| Table 4. Factor analysis of self-directed learning readiness scale.   |                              |            |                    |

Further, in order to identify whether there is a sufficient evidence to suggest that students who bought TMM and students who did not buy are significantly different in terms of their reported learning preferences, an independent sample t-test was used. The results indicated that there significant differences between two sample groups in two learning preference factors. Thus, the students who chose to buy TMM showed

significantly higher mean scores on the Thirsty Learning & Determined Learning factors as compared to those who decided not to buy the program ( $p_s < 0.02$ ). No statistically significant differences were found between the two groups of students in relation to the other 3 factors of learning preferences. (all  $p_s > 0.1$ ). The results of the t-test are summarized in Table 5.

| Factor               | Bought TMM (n=41) |        | Didn't buy TMM (n=62) |       | t      | P     |
|----------------------|-------------------|--------|-----------------------|-------|--------|-------|
|                      | Mean              | SD     | Mean                  | SD    |        |       |
| Independent learning | 3.06              | 0.4777 | 3.03                  | 0.388 | 0.351  | 0.726 |
| Dependent learning   | 2.02              | 2.182  | 2.18                  | 0.532 | -1.653 | 0.103 |
| Determined learning  | 3.06              | 0.488  | 2.83                  | 0.430 | 2.506  | 0.014 |
| Active learning      | 2.92              | 0.504  | 2.81                  | 0.429 | 1.211  | 0.229 |
| Thirsty learning     | 3.60              | 0.411  | 3.35                  | 0.429 | 2.992  | 0.003 |

Table 5. Learning preferences factor comparison based on Purchase of TMM license (Q4).

Another independent samples t-test was utilized to determine whether respondents' TMM usage had an effect on their reported learning preferences. It was found that the students who bought and used TMM had significantly higher mean scores on Independent Learning factor as compared to those who bought but didn't use TMM ( $t = -2.148$ ,  $p = 0.038$ ). At the same time, students who bought and didn't use TMM had significantly higher scores on the Dependent Learning factor ( $t = 2.186$ ,  $p = 0.035$ ). Table 6 presents the results of this t-test:

| Factor                         | Bought but didn't use TMM (n=20) |       | Bought and used TMM (n=21) |       | t      | p     |
|--------------------------------|----------------------------------|-------|----------------------------|-------|--------|-------|
|                                | Mean                             | SD    | Mean                       | SD    |        |       |
| Factor 1: Thirsty learning     | 3.61                             | 0.476 | 3.59                       | 0.876 | 0.133  | 0.895 |
| Factor 2: Independent learning | 2.90                             | 0.406 | 3.21                       | 0.500 | -2.148 | 0.038 |
| Factor 3: Dependent learning   | 2.15                             | 0.275 | 1.90                       | 0.424 | +2.186 | 0.035 |
| Factor 4: Determined learning  | 2.85                             | 0.465 | 2.98                       | 0.542 | -0.848 | 0.401 |
| Factor 5: Active learning      | 2.97                             | 0.373 | 3.14                       | 0.573 | -1.160 | 0.253 |

Level of significance  $p < 0.05$

Table 6. Learning preferences factor comparison based on Decision to use TMM after purchase (Q8).

## **6. Discussion and conclusions**

The results of our study are threefold. First, we have shown that although the majority of present-day university students are highly computer literate and are familiar with online learning, only about a third of them are open to the idea of voluntarily using ICT for independent language practice. Thus, although approximately one third of our participants in the French courses voluntarily purchased the TMM license with the intention to use the software for additional self-directed language practice, this intention alone was not enough to motivate the students to regularly engage in unsupervised online language learning. Understandably, there are many reasons for this, such as overall heavy academic load as well as the natural desire of the students taking languages as electives, which is the case of all German students, to concentrate the most on the primary fields of their studies.

At the same time we found that the main motivating factor to use the ICT software was receiving the grade assigned to this work. Even when a grade was assigned but a more traditional alternative for language practice was offered (pen and paper workbook), approximately half of the participants elected to engage in TMM activities. Further, we observed that in addition to the grade, price was a highly important factor affecting the decision whether to purchase the software package or to choose a cheaper but more traditional option. This in fact may be an indicator of the prevailing traditional mentality in language learning among students which is quite surprising to find in today's highly computerized society. Therefore, presence or absence of a grade assigned, price, and availability of a more traditional means of language practice were three most important factors in explaining students' behaviour in this respect.

Second, we have discovered that those students who decided to use TMM online activities for language practice with a grade assigned for this work had a highly positive perception of the software. In this respect, the results of our study are consistent with those of Lasagabaster and Sierra (2003) as well as Hashim and Yunus (2010). Thus, the overwhelming majority of the respondents reported TMM activities to be interactive, easy to use and understand. At the same time, a considerable number of participants did not classify TMM activities as 'fun' or 'interesting'. Further, almost all subjects felt that TMM was helpful in improving their language skills with vocabulary, speaking, and listening being among the highest rated, whereas writing was perceived to be among the lowest ranked skills. Finally, TMM software package was perceived to be a highly suitable tool for foreign language learning in general as well as for their level of proficiency and the course by the vast majority of the respondents. In addition, the three most important technological aspects of TMM, i.e. graphics, video, and audio were also considered suitable by almost all respondents.

Thirdly, and finally, we discovered a relationship between the students' decision to buy and use the TMM license and their scores on several groups of statement from the Learning Preference Assessment by Lucy Guglielmino (1977). More specifically, we have found that students with high on groups of statement labelled Thirsty, Determined, and Independent Learning while students who bought the TMM license but did not use it had low mean scores on the Independent Learning factor and high mean scores on the Dependent learning. This suggests that the decision to buy and use the online learning software was affected by the already existing learning behaviour. This behaviour corresponds to the definition of a highly self-directed learner formulated by Guglielmino according to the results obtained from her Delphi survey: "one who exhibits initiative, independence, persistence in learning; one who accepts responsibility for his or her own learning and views problems as challenges, not obstacles; one who is capable of self-discipline and has a high degree of curiosity; one who has a strong desire to learn or change and is self-confident; one who is able to use basic study skills, organize his or

her time and set an appropriate pace for learning, and to develop a plan for completing work; one who enjoys learning and has a tendency to be goal-oriented".<sup>12</sup>

Most results of our study are hardly surprising, yet we hope that our project has contributed to a better understanding of students' choices in regards to using ICT for language learning and, more importantly, to exploring and understanding students' readiness for self-directed learning at university level. We have shown that language instructors will certainly benefit from incorporating online learning activities into the course curriculum. The results of our study will also have implications on language learning software developers and will hopefully be considered for further improvement of the existing software in the future.

## Appendix

| Rotated Component Matrix*   |           |      |      |   |   |   |
|---|-----------|------|------|---|---|---|
|   | Component |      |      |   |   |   |
|   | 1         | 2    | 3    | 4 | 5 | 6 |
| Tell Me More provides students with useful activities for learning grammar      | .859      |      |      |   |   |   |
| Tell Me More is a suitable tool for learning grammar                            | .849      |      |      |   |   |   |
| I find Tell Me More learning activities are easily understood                   | .847      |      |      |   |   |   |
| Tell Me More learning activities are fun  | .734      |      |      |   |   |   |
| The language used in Tell Me More is clear and easy to understand               | .717      |      |      |   |   |   |
| Tell Me More is a suitable tool for vocabulary enrichment                       |           | .901 |      |   |   |   |
| Tell Me More provides students with useful activities for vocabulary enrichment |           | .767 |      |   |   |   |
| Tell Me More is a suitable tool for learning reading skills                     |           | .724 |      |   |   |   |
| Tell Me More provides students with useful activities to improve reading skills |           | .642 |      |   |   |   |
| I find Tell Me More interesting   | .531      | .553 |      |   |   |   |
| Tell Me More is a suitable tool for learning listening skills                   |           | .502 |      |   |   |   |
| Tell Me More provides students with useful activities to improve writing skills |           |      | .916 |   |   |   |
| Tell Me More is a suitable tool for learning writing skills                     |           |      | .835 |   |   |   |

|   |  |  |      |      |       |      |
|---|--|--|------|------|-------|------|
| Using Tell Me More helped me improve my language proficiency  |  |  | .735 |      |       |      |
| Using Tell Me More is useful for language learning  |  |  | .666 |      |       |      |
| Tell Me More is a suitable tool for learning another language   |  |  | .515 |      |       |      |
| Native speaker speech used in the audio is suitable   |  |  |      | .767 |       |      |
| The videos used in Tell Me More are suitable  |  |  |      | .727 |       |      |
| The graphics, such as photographs, used in Tell Me More are suitable                                    |  |  |      | .700 |       |      |
| I find Tell Me More easy to use   |  |  |      | .510 |       |      |
| Tell Me More learning activities are interactive  |  |  |      |      | .814  |      |
| Tell Me More provides students with useful activities to improve speaking skills                        |  |  |      |      | .719  |      |
| Tell Me More is a suitable tool for learning speaking skills  |  |  |      |      | .708  |      |
| Tell Me More provides students with useful activities to improve listening skills                       |  |  |      |      | -.636 |      |
| Tell Me More is a suitable for my level of proficiency  |  |  |      |      |       | .870 |
| Tell Me More learning activities are suitable for my course   |  |  |      |      |       | .864 |
| Extraction Method: Principal Component Analysis.<br>Rotation Method: Varimax with Kaiser Normalization. |  |  |      |      |       |      |
| *Rotation converged in 12 iterations.   |  |  |      |      |       |      |

| Rotated Component Matrix*   |           |      |   |   |   |
|---|-----------|------|---|---|---|
|   | Component |      |   |   |   |
|   | 1         | 2    | 3 | 4 | 5 |
| I'm looking forward to learning as long as I'm living.                                | .794      |      |   |   |   |
| I love to learn.  | .770      |      |   |   |   |
| There are so many things I want to learn that I wish there were more hours in a day.  | .690      |      |   |   |   |
| If I discover a need for information that I don't have, I know where to go to get it. |           | .768 |   |   |   |



|  |      |       |      |      |       |
|--|------|-------|------|------|-------|
| If there is something I want to learn, I can figure out a way to learn it.                                   |      | .700  |      |      |       |
| When I see something that I don't understand, I stay away from it.   |      | -.520 | .502 |      |       |
| I can learn things on my own better than most people.  |      | .493  |      |      | .417  |
| It takes me a while to get started on new projects.  |      |       | .766 |      |       |
| Even if I have a great idea, I can't seem to develop a plan for making it work.                              |      |       | .604 |      |       |
| In a classroom situation, I expect the instructor to tell all class members exactly what to do at all times. |      |       | .573 |      |       |
| I don't work very well on my own.  |      |       | .552 |      | -.434 |
| In a learning experience, I prefer to take part in deciding what will be learned and how.                    |      |       |      | .764 |       |
| Difficult study doesn't bother me if I'm interested in something.  | .487 |       |      | .630 |       |
| I can tell whether I'm learning something well or not.   |      |       |      |      | .690  |
| Understanding what I read in English is a problem for me.  |      |       |      |      | -.679 |
| Extraction Method: Principal Component Analysis.<br>Rotation Method: Varimax with Kaiser Normalization.      |      |       |      |      |       |
| * Rotation converged in 10 iterations.   |      |       |      |      |       |

| Rotated Component Matrix*  |           |   |   |   |
|--|-----------|---|---|---|
|  | Component |   |   |   |
|  | 1         | 2 | 3 | 4 |
| I'm looking forward to learning as long as I'm living.                               | .746      |   |   |   |
| I love to learn.   | .742      |   |   |   |
| There are so many things I want to learn that I wish there were more hours in a day. | .666      |   |   |   |
| Understanding what I read in English is a problem for me.                            | -.616     |   |   |   |

|   |      |      |       |       |
|---|------|------|-------|-------|
| Difficult study doesn't bother me if I'm interested in something.   | .588 |      |       | .523  |
| It takes me a while to get started on new projects.   |      | .728 |       |       |
| Even if I have a great idea, I can't seem to develop a plan for making it work.   |      | .642 |       |       |
| I don't work very well on my own.   |      | .596 |       |       |
| In a classroom situation, I expect the instructor to tell all class members exactly what to do at all times.                          |      | .542 |       | -.404 |
| When I see something that I don't understand, I stay away from it.  |      | .530 | -.412 |       |
| If I discover a need for information that I don't have, I know where to go to get it.   |      |      | .751  |       |
| If there is something I want to learn, I can figure out a way to learn it.  |      |      | .676  |       |
| I believe that thinking about who you are, where you are, and where you are going should be a major part of every person's education. |      |      | .572  |       |
| I can tell whether I'm learning something well or not.  |      |      |       | -.657 |
| In a learning experience, I prefer to take part in deciding what will be learned and how.   |      |      | .421  | .543  |
| Extraction Method: Principal Component Analysis.<br>Rotation Method: Varimax with Kaiser Normalization.                               |      |      |       |       |
| * Rotation converged in 8 iterations.   |      |      |       |       |

| Rotated Component Matrix*  |           |   |   |   |   |
|--|-----------|---|---|---|---|
|  | Component |   |   |   |   |
|  | 1         | 2 | 3 | 4 | 5 |
| There are so many things I want to learn that I wish there were more hours in a day. | .735      |   |   |   |   |
| I'm looking forward to learning as long as I'm living.                               | .712      |   |   |   |   |
| Difficult study doesn't bother me if I'm interested in something.                    | .701      |   |   |   |   |

|   |       |      |      |      |  |       |
|---|-------|------|------|------|--|-------|
| I love to learn.  | .673  |      |      |      |  |       |
| Understanding what I read in English is a problem for me.   | -.521 |      |      |      |  |       |
| It takes me a while to get started on new projects.   |       | .813 |      |      |  |       |
| Even if I have a great idea, I can't seem to develop a plan for making it work.   |       | .640 |      |      |  |       |
| When I see something that I don't understand, I stay away from it.  |       | .551 |      |      |  |       |
| I don't work very well on my own.   |       | .535 |      |      |  |       |
| If I discover a need for information that I don't have, I know where to go to get it.   |       |      | .811 |      |  |       |
| If there is something I want to learn, I can figure out a way to learn it.  |       |      | .717 |      |  |       |
| I believe that thinking about who you are, where you are, and where you are going should be a major part of every person's education. |       |      |      | .664 |  |       |
| In a classroom situation, I expect the instructor to tell all class members exactly what to do at all times.                          |       |      |      | .589 |  |       |
| If there is something I have decided to learn, I can find time for it, no matter how busy I am.                                       |       |      |      | .524 |  |       |
| I can tell whether I'm learning something well or not.  |       |      |      |      |  | -.709 |
| In a learning experience, I prefer to take part in deciding what will be learned and how.   |       |      |      |      |  | .554  |
| Extraction Method: Principal Component Analysis.<br>Rotation Method: Varimax with Kaiser Normalization.                               |       |      |      |      |  |       |
| *Rotation converged in 8 iterations.  |       |      |      |      |  |       |

| Rotated Component Matrix*                              |           |   |   |   |   |   |   |
|--|-----------|---|---|---|---|---|---|
|  | Component |   |   |   |   |   |   |
|  | 1         | 2 | 3 | 4 | 5 | 6 | 7 |
| I'm looking forward to learning as long as I'm living. | .833      |   |   |   |   |   |   |

|   |      |      |       |       |       |      |      |
|---|------|------|-------|-------|-------|------|------|
| I love to learn.  | .722 |      |       |       |       |      |      |
| There are so many things I want to learn that I wish there were more hours in a day.  | .604 |      |       |       |       |      |      |
| I know what I want to learn.  | .532 |      |       |       |       |      |      |
| It takes me a while to get started on new projects.   |      | .809 |       |       |       |      |      |
| Even if I have a great idea, I can't seem to develop a plan for making it work.   |      | .730 |       |       |       |      |      |
| I don't work very well on my own.   |      | .543 |       |       |       |      |      |
| If I discover a need for information that I don't have, I know where to go to get it.   |      |      | .765  |       |       |      |      |
| If there is something I want to learn, I can figure out a way to learn it.  |      |      | .762  |       |       |      |      |
| When I see something that I don't understand, I stay away from it.  |      |      | -.578 |       |       |      |      |
| Understanding what I read in English is a problem for me.   |      |      |       | -.722 |       |      |      |
| I can learn things on my own better than most people.   |      |      |       | .491  |       |      |      |
| In a classroom situation, I expect the instructor to tell all class members exactly what to do at all times.                          |      |      |       |       | .699  |      |      |
| I believe that thinking about who you are, where you are, and where you are going should be a major part of every person's education. |      |      |       |       | .557  |      |      |
| Difficult study doesn't bother me if I'm interested in something.   |      |      |       |       | -.457 |      |      |
| In a learning experience, I prefer to take part in deciding what will be learned and how.   |      |      |       |       |       | .887 |      |
| If there is something I have decided to learn, I can find time for it, no matter how busy I am.                                       |      |      |       |       |       | .437 | .313 |
| No one but me is truly responsible for what I learn.  |      |      |       |       |       |      | .880 |
| I can tell whether I'm learning something well or not.  |      |      |       |       |       |      | .451 |
| Extraction Method: Principal Component Analysis.<br>Rotation Method: Varimax with Kaiser Normalization.                               |      |      |       |       |       |      |      |

\* Rotation converged in 30 iterations.

## References

- Ajzen, I. and Fishbein, M. (1980). *Understanding attitudes and predicting social behaviour*. Englewood Cliffs, NJ: Prentice-Hall.
- American Council on the Teaching of Foreign Languages (2013, May 15). *Maximum class size*. Retrieved from <http://www.actfl.org/news/position-statements/maximum-class-size>
- Bandura, A. (1982). Self-efficacy mechanism in human agency. *American Psychologist*, 37 (2): 122-147.
- Brockett, R. G. (1985). Methodological and substantive issues in the measurement of self-directed learning readiness. *Adult Education Quarterly*, 36 (1): 15-24.
- Chen, T. L. A. (2004). The use of multiple intelligences theory in large computer-assisted EFL classes in Taiwan. *Conference Proceedings of Adult Migrant English Program*. Darwin, Australia: Charles Darwin University. Retrieved from [http://www.ameprc.mq.edu.au/docs/conferences/2004/Tsui-Lan\\_Anna\\_Chen.pdf](http://www.ameprc.mq.edu.au/docs/conferences/2004/Tsui-Lan_Anna_Chen.pdf)
- Chu, J. (2003). *An MOE project report on improving the freshman English program*. Center for research and development. Taiwan: Providence University.
- Davis F. D., Bagozzi, R. P. and Warshaw P. R., (1989). User acceptance of computer technology: a comparison of two theoretical models. *Management Science*, 35 (8): 982-1003.
- Davis F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly*, 13 (3): 319-340.
- Field, L. (1989). An investigation into the structure, validity, and reliability of Guglielmino's self-directed learning readiness scale. *Adult Education Quarterly*, 39 (3): 125-139.
- Field, L. (1990). Guglielmino's self-directed learning readiness scale: should it continue to be used? *Adult Education Quarterly*, 41 (2): 100-103.
- Fishbein, M. and Ajzen, I. (1975). *Belief, attitude, intention and Technology*, 11 (2): 10-17.
- Guglielmino, L. M. (1977). *Development of the self-directed learning readiness scale*. Doctoral dissertation, University of Georgia. Dissertation Abstract International, 38, 6467 A.
- Hashim, H. and Yunus, Md. M. (2010b). Learning via ICT : 'Tell Me More'. *The International Journal of Learning*, 17 (3): 211-223.
- Higher Education Quality Council of Ontario (2012). The Productivity of the Ontario Public Postsecondary System. Retrieved on May 15, 2013 from <http://www.heqco.ca/SiteCollectionDocuments/HEQCO%20Productivity%20Report.pdf>
- Kim, In-Seok (2009). The relevance of multiple intelligences to CALL instruction. *The Reading Matrix*, 9 (1) <http://www.readingmatrix.com/articles/kim/article.pdf> Accessed Oct. 20, 2012.
- Lafford, B., Lafford, P. and Sykes, J. (2007). Entre dicho y hecho... : an assessment of the application of research from second language acquisition and related fields to the creation of Spanish CALL materials for lexical acquisition. *CALICO Journal*, 22 (3): 679-710.

Lasagabaster, D. and Sierra, J. M. (2003). Students' evaluation of CALL software programs. *Educational Media International*, 40 (3/4): 293-304.

Learning Preference Assessment (2013, Oct. 20). Self-directed Learning Readiness Scale. Retrieved from <http://www.lpasdlrs.com>

National Council of Teachers of English (2013, May 15). More than a number: why class size matters. Retrieved from <http://www.ncte.org/positions/statements/whyclasssizematters>

Nielson, K. B. (2011). Self-study with language learning software in the workplace: what happens? *Language Learning & Technology*, 15 (3): 110-129.

Ontario Confederation of University Faculty Associations (2013, March 6). Data check: Ontario's student-to-faculty ratio now worse than it was during the Double Cohort. Retrieved on May 15, 2013 from <http://ocufa.on.ca/2013/data-check-ontarios-student-to-faculty-ratio-now-worse-than-it-was-during-the-double-cohort/>

Robey, D. (1979). User attitudes and management information system use. *Academy of Management Journal*, 22 (3): 527-538.

Schultz, R. L. and Slevin, D. P. (1975). Implementation and management innovation. In Schultz, R. L. and Slevin, D. P. (eds.), *Implementing operations research and management science*. New York: Elsevier, 3-20.

Schultz, R. L. and Slevin, D. P. (1979). Introduction: the implementation problem. In Doktor, R., Schultz, R. L. and Slevin, D. P. (eds.), *The implementation of management science*. New York: North-Holland, 1-15.

Straka, G. A. and Hinz, I. M. (1996). The original SDLRS (Self-directed learning readiness scale) reconsidered. In: Bos, W. and Tarnai, C. (eds.), *Ergebnisse qualitativer und quantitativer empirischer pädagogischer Forschung*. Münster: Waxman, 185-199.

Tell Me More. Auralog Inc. <http://www.tellmemore.com/homeus.aspx>

Tell Me More (May 15, 2013). The history of Tell me More. Retrieved from <http://www.tellmemore.com/history.aspx>

Tell Me More (2013, Dec. 11). Rosetta Stone to acquire leading international language company Tell Me More , bolstering position in global B2B market. Retrieved on Dec 14, 2013 from <http://www.tellmemore.com/Press-Releases/Rosetta-Stone-to-Acquire-Leading-International-Lan.aspx>

Yunus, Md. M., Hashim, H., Jusoff, K., Nordin, N. M., Yasin, R. M. and Rahman, S. (2010). ESL lecturers' voices on Tell Me More. *Studies in Literature and Language*, 1 (1): 69-84.

## Notes

1. [1] Learning Preference Assessment site: <http://www.lpasdlrs.com>. Accessed Oct. 20, 2012. Higher Education Quality Council of Ontario (2012) *The Productivity of the Ontario Public Postsecondary System*. Retrieved on May 15, 2013 from <http://www.heqco.ca/SiteCollectionDocuments/HEQCO%20Productivity%20Report.pdf>
2. Ontario Confederation of University Faculty Associations (2013, March 6) Data check: Ontario's student-to-faculty ratio now worse than it was during the Double Cohort. Retrieved on May 15, 2013 from <http://ocufa.on.ca/2013/data-check-ontarios-student-to-faculty-ratio-now-worse-than-it-was-during-the-double-cohort/>

3. National Council of Teachers of English (2013, May 15) More than a number: why class size matters. Retrieved from <http://www.ncte.org/positions/statements/whyclasssizematters>
4. American Council on the Teaching of Foreign Languages (2013, May 15) Maximum class size. Retrieved from <http://www.actfl.org/news/position-statements/maximum-class-size>
5. Interestingly, on December 11, 2013, Rosetta Stone Inc. announced the acquisition of the Tell Me More language company. Retrieved on Dec 14, 2013 from <http://www.tellmemore.com/Press-Releases/Rosetta-Stone-to-Acquire-Leading-International-Lan.aspx>
6. Tell Me More (May 15, 2013) The history of Tell Me More. Retrieved from <http://www.tellmemore.com/history.aspx>
7. This study was conducted among 59 students of the Faculty of Philology, Geography and History at the University of the Basque Country in Northern Spain. 27 students specialized in English, and 32 specialized in Basque, French, German or Spanish. It compared English Express, CD English Tutor, Interactive course in Acoustic Phonetics and Tell Me More.
8. Hashim and Yunus (2010) surveyed 85 students of English at Kota Melaka Polytechnic in Malaysia. They concluded that, with regards to perceived usefulness, all participating students strongly agreed (76.5%) or agreed (23.5%) that TMM helped them to improve their language proficiency (Hashim and Yunus, 2010: 216). All participants strongly agreed or agreed that TMM is easy to use (SA: 76.5%, A: 23.5%) and that the interface is clear and easy to understand (SA: 67.1%, A: 32.9%; Hashim and Yunus, 2010: 214). Concerning suitability, the majority of students in Hashim and Yunus's study strongly agreed (68.2%) or agreed (29.4%) that TMM is a suitable tool for learning English and that it is suitable for their level of proficiency (SA: 70.6%, A: 28.2%). 63.5% strongly agreed or agreed that the program is suitable for their course while 36.4% disagreed or strongly disagreed with this statement (Hashim and Yunus, 2010: 218). Hashim and Yunus report that TMM is perceived as most suitable for improving speaking and listening skills (2010: 219) and less useful to learn grammar, reading and writing.
9. Learning Preference Assessment site (2012, Oct. 20) <http://www.lpasdlrs.com>
10. Learning Preference Assessment site (2013, May, 20) <http://www.lpasdlrs.com>
11. Since there were only 2 French students who used TMM activities regularly, their perception cannot be compared to the German group as it would not be representative of the entire French group. These two participants were excluded from further analysis.

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## Article:

### ***Curating and nudging in virtual CLIL environments***

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#### **Abstract**

Foreign language teachers can benefit substantially from the notions of curation and nudging when scaffolding CLIL activities on the internet. This article shows how these principles can be integrated into CLILstore, a free multimedia-rich learning tool with seamless access to online dictionaries, and presents feedback from first and second year university students of Arabic as a second language to inform foreign language teachers about students' needs and preferences in virtual learning environments.

**Keywords:** Curating, nudging, Clilstore, Arabic as a second language.

#### **1. Introduction**

One of the most challenging tasks for foreign language teachers is to structure and scaffold internet based material, not only to provide their students with the best learning opportunities possible, but also to keep the students' focus on an intended learning task: The easy access to an overwhelming amount of material available on the internet easily makes students engage in other unrelated activities. And the task becomes even more challenging when working within a Content and Language Integrated Learning (CLIL) context. The dual educational focus of using a foreign language for the learning and teaching of both content and language might well be a highly motivating factor for students who soon realize that a foreign language can be used for purposes other than studying linguistic structures *per se*. But for teachers, the CLIL context is even more challenging since they will need to carefully organize and scaffold *both* content *and* language structures in order to ensure a suitable pedagogical progression for the benefit of the students (Carloni 2012, Coyle et al. 2010).

This study suggests a way of dealing with the challenges in CALL of structuring and scaffolding net-based material and making learners maintain focus on intended learning tasks by incorporating two pedagogical principles, curating and nudging, into a free multimedia-rich learning tool, CLILstore. The tool offers the possibility to create teaching units for Content and Language Integrated Learning and supports foreign language learning processes by giving seamless access to free online dictionaries and supplementary materials. In the present study, CLILstore units incorporating the principles of curation and nudging are tested on language learners of Arabic as a second language with the purpose of generating learning activities outside the classroom, but the principles could easily be applied in any foreign language supported by CLILstore (i.e. 100+ languages) and for any learning context (classroom teaching, blended learning, group work, etc.). The purpose of the study is to examine how language learners rate multimedia CLIL units with seamless access to dictionaries and supplementary material, based on the principles of curating and nudging, thus giving feedback to the profession about language learners' needs and preferences in virtual learning environments.



In what follows, I shall first define the concepts of curating and nudging. Then follows a short presentation of CLILstore to demonstrate how this tool supports foreign language learning, and how curating and nudging have been integrated into the construction of clusters of units. In the third section, I shall report on the feedback from first and second year university students of Arabic as a second language, and then, in the final section, show how this feedback can inform the profession on language learners' needs and preferences.

## 2. Curating and nudging

Hubbard (2012), Nielsen (2013) and others have suggested that foreign language teachers can benefit substantially from the notion of curation when making use of virtual learning environments. Not only has the professional focus of foreign language teachers moved "from creation to curation" when developing new teaching material - today, rather than starting from scratch, most teachers pick and choose among the overwhelming amount of materials available on the net which is then adapted to specific teaching and learning goals. Also, curation is a very useful metaphor when trying to define in more detail some of the new skills which have become central to the teaching profession in a digital postmodern world. Just as the curator in a museum is supposed to make a careful and deliberate selection of relevant material for an exhibition based on clearly defined criteria, so must language teachers design their virtual learning scenarios by carefully selecting and combining material in thematic or otherwise related units. Curating online material for foreign language learners can be divided into a number of sub-processes. First, the learning goals must be outlined; they might be based on themes, e.g. about the Arab spring - what happened in the Arab world in the spring of 2011? Who are the winners of the ongoing process and who are the losers? Or they might be designed to meet more complex learning goals where students are to reflect on causal explanations: Why did it happen? Why did it happen precisely in 2011? In other words, the learning goals of "who should learn what" must be identified, thereby establishing guidelines for the selection of materials. Such guidelines are crucial, since the process of selecting material, which is the second step in the curation process, has changed substantially in recent years, from the earlier scarcity of authentic and relevant material in foreign languages which had to be gathered carefully over time, to today's overload of net based material, where the pick and choose-approach must be followed by a rigorous selection process, so as to keep only material which is pedagogically adequate.

The third step in the curation process has cohesion as its key term: is the material to be presented chronologically or according to subthemes, or should it rather be organized according to learner experiences or learning processes? What is the nexus of cohesion across the different virtual learning rooms as well as inside the particular ones? And not least: How does the cohesion of the material match the learning goals? There are many possible principles of cohesion, but the skilful foreign language teacher should always be very conscious that not only are online materials to be curated according to content, but learning processes should also play a pivotal role.

The final step in the curation process is to provide pedagogical support in the form of tips and tools which can be used by learners if needed. Directions for use, links to meaning technology - online dictionaries, word lists, concordances, etc. - and supplementary materials as well as *links* and *likes* from other users provide flexible input which learners can draw on throughout their learning journey. With such support, the students are now ready to discover the virtual learning environment, to experiment with the challenges they meet along the way, and will hopefully learn a lot (Hubbard 2012, Nielsen 2013).

A virtual learning environment based on skilful curation does not guarantee, however, that foreign language learners will stay focused on their learning task. The fact that there is a wealth of other interesting resources next to the virtual learning room they are currently engaged in, and that it only takes a click or two to get there, provides an easy exit for students and seriously challenges even the most skilfully curated learning task. And once the students have left the virtual learning room, it often proves difficult to drag them back. For obvious reasons, foreign language teachers cannot force students to stay behind locked doors in cyberspace, but what they can do is to try to *nudge* them to stay focused. The basic definition of nudging, a term developed by researchers in marketing and decision making, is “to push mildly (...) attempting to move people in directions that will alter their behaviour and improve their lives” (Thaler and Sunstein, 2008: 5). The concept is based on the assumption that there is no such thing as neutral design, and that “small, apparently insignificant details can have major impact on people’s behaviour” (ibid.: 3). Nudging, in Thaler and Sunstein’s definition, is shaped by choice architects who analyse and organize the context in which people make decisions, and consequently, choice architects must pay a great deal of attention to graphics and layout which can push users to make suitable decisions. A nudge is hence defined as “any aspect of the choice architecture that alters people’s behaviour in a predictable way without forbidding any options” (ibid.: 6). If we translate the nudging approach into foreign language learning in virtual environments, the teacher becomes a choice architect who must design the material used in a virtual learning environment in such a way as to nudge learners to stay focused on their learning task with the aim of improving their language acquisition. How this is done in practice varies according to the actual context and the graphic and sound clues made available by the chosen software.

### **3. CLILstore**

CLILstore is a free multimedia rich website which links copy left content and language integrated teaching materials, including texts, videos, sound files and pictures, with free online dictionaries in a seamless process which allows users to click on any word in a unit and get immediate response from one or more chosen dictionaries. The CLILstore user interface is shown in fig. 1, where a learner listening to a You Tube video with the famous Egyptian singer Ramy Essam repeating “bread, freedom, social justice”, has clicked on the Arabic word for “social”. The click opens a dictionary window in the right hand side of the screen, in which the learner has already chosen the appropriate bilingual language pairing and the preferred dictionary. The green buttons in the CLILstore window (from right to left: “What is the Arab spring”, “The music revolution” and “Famous slogans”) are links to other CLILstore units and to supplementary material on the Arab spring, whereas the blue button named “CLILstore” will take the user to a repository of other CLIL units (hence the name of the website: CLIL-*store*).



Figure 1. CLILstore user interface.

Units can be created in any foreign language supported by CLILstore (100+ languages) and the creation process is quick and easy: All teachers needs to do is to register and fill in a basic template with required information (title of unit, embed codes for videos, sound files and pictures, the text to appear in the unit and tick a small number of information boxes on language levels, etc.). CLILstore has good support facilities in the form of instructional videos in different languages as well as a handbook with technical and pedagogical instructions and examples of best practice.

The integrated use of videos, audio files, pictures and texts and the seamless access to meaning technology in the form of dictionaries make CLILstore units both entertaining and time saving for learners to use. But as in most cases of CALL, the technology offered by CLILstore needs the added value of pedagogical underpinning, if its learning and teaching potential is to be fully exploited. In the present perspective, curating and nudging have been integrated into the construction of clusters of CLIL units in order to illustrate how net based material can be organized and scaffolded as a means to maintaining learner focus in virtual learning environments and thus to maximize foreign language learning.

As mentioned above, the CLILstore unit shown in fig. 1 deals with the Arab spring and has the intended learning goal of providing first and second year students of Arabic with a general understanding of this phenomenon as experienced by Egyptian youth, and consequently to learn basic key vocabulary in Arabic on this subject. The unit is one of six dealing with same issue. Based on the learning goals, a number of different videos, texts and pictures were selected to support different learning styles, the main linguistic goals being basic syntax and relevant and transparent vocabulary which should be recycled frequently. This resulted in a collection of several videos of demonstrations from different Arab countries where people are shouting slightly different slogans, two revolutionary songs with catchy refrains, cartoons with symbolic use of objects and people, and a short simplified text on the Arab spring from the Arabic Wikipedia as well as a supplementary text in English on the musical revolution in Egypt. The selected material was then transformed into CLILstore units so as to give seamless access to online dictionaries, and units were subsequently sequenced by the use of one-way linking from one unit to two or three new ones. Based on the idea of nudging, it was decided not to refer users to a list of units which would provide them with an overview of units and themes to be explored, but rather to nudge them to new units by means of

CLILstore’s green buttons so as to create a feeling of exploring a “universe of the Arab spring”. This cluster of units was then linked, again through the use of green buttons, to another cluster of CLIL units, at slightly higher language level, dealing with Egyptian music. The clusters, however, were linked in a two- way fashion so as to allow students to immediately click back to earlier units if they found the new ones too difficult. The graphics in fig. 2 show how units were linked in thematic clusters at different language levels, and how consequently students were nudged around in the CLILstore universe, hence imitating how users explore new issues on the net, while still keeping them focused on the intended learning task inside the CLILstore framework.

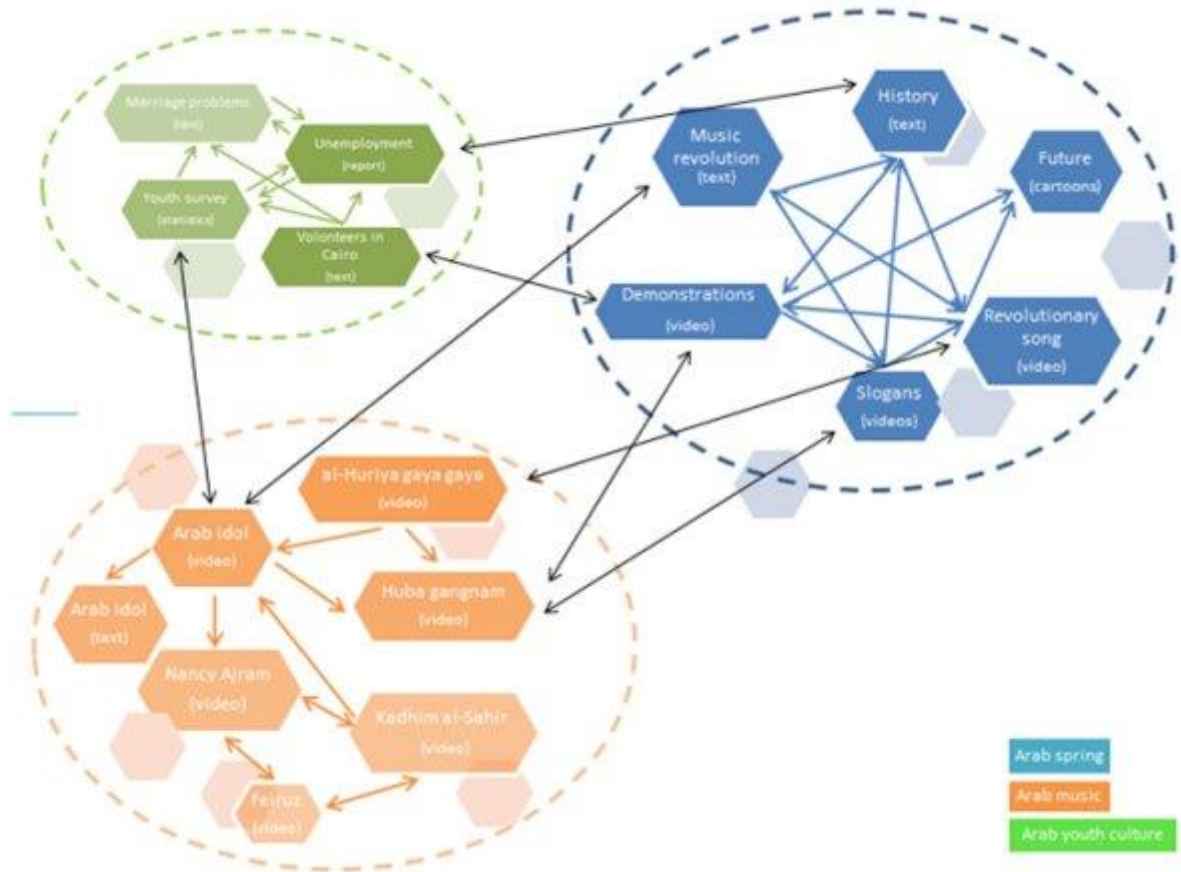


Figure 2. Thematic clusters of CLIL units at different language levels.

#### 4. Student feedback and recommendations

In order to test the above theories, the following research questions were formulated: How did language learners rate the virtual learning environments of CLILstore units based on curation and nudging? Did they benefit in any way, and if so, what effects did they find CLILstore units to have on their learning outcome? To find out, a questionnaire was distributed to 53 first and second year university students of Arabic, who had been introduced to CLILstore during class time for approximately one hour and then asked to test it outside class for two consecutive days. The questionnaire contained four questions on the use of CLILstore – Was CLILstore easy to work with? Did CLILstore make it easier to read texts? Did Clilstore help to manage the time available to read texts more effectively? Did the dictionary interface work well? The students were asked to rate their responses on a scale from 1 to 5, followed by two open ended questions on what the students liked the best and what they thought could be improved. An additional space for other suggestions was added at the end.

The global average from all four questions among first year students (n=30) was 3.6 out of 5, whereas the ratings of second year students (n=23) reached an average of 3.4. From the ratings of the individual questions it was clear that both groups were most enthusiastic about the fact that they could read texts easier and faster, whereas they differed in their assessment of the use of dictionaries: First year students rated the dictionary interface almost one point higher (3.5) than second year students (2.8). The same difference was found in the answers to the open ended questions: Whereas first year students were excited about the seamless access to dictionaries and mainly suggested that these should be improved to become faster and more elaborate, second year students were much more critical of the dictionaries, complaining about wrong translations, lack of adequate definition, etc. What these students appreciated in CLILstore, on the other hand, were the possibility to read and listen to texts simultaneously, to cover subjects which were more interesting than "the boring ones used in the classroom" and to experiment with units by clicking around in CLILstore.

From the student feedback, we might conclude at least three things which can inform the profession of foreign language teachers about learners' needs and preferences in virtual learning environments. First, what seems to underlie the rather enthusiastic assessment of CLILstore units among first year students was their "quick and dirty" use of the available dictionaries: By frequently clicking on words they did not know, they managed to unwrap information, however limited, which led them, by means of Arabic, to new insights into the Arab spring. Second year students, on the other hand, were much more critical of the dictionaries and showed a raised awareness of the many pitfalls encountered in net based meaning technology. Consequently, it seems as if learners develop a healthy awareness of both opportunities and pitfalls of the available meaning technology, even without being taught about it. This gradual move from "quick and dirty" to more critical user behaviour ought to reassure many foreign language teachers who argue against students' access to free meaning technology such as e.g. google translate.

Secondly, the fact that second year students emphasized the flexibility of CLILstore, which allowed them to reflect and experiment with language learning skills according to their needs, showed that students are able to cater for their own learning, thus taking a step forward towards becoming (more) autonomous learners. And thirdly, the combination of seamless access to meaning technology and a flexible approach to acquiring language learning skills seems to make detailed scaffolding of linguistic structures less important, as long as the (carefully curated) content is of genuine interest to the students. Nobody suggested the need for a more proper scaffolding of material (by e.g. complaining that units were too difficult) which is often the case when students are to deal with new material.

By nudging language learners around in a CLILstore universe based on curated material and with seamless access to meaning technology, we were able to motivate students to stay focused on their intended learning task, while at the same time fostering flexible and independent learner behaviour and supporting reflection on learning processes. We also managed to play down the need for detailed linguistic scaffolding, thus making the task of teachers easier.

## References

Carloni, G. (2012). Online CLIL Scaffolding at University Level: Building Vocabulary Across Disciplines Through Online Learning. In L. Bradley & S. Thoušny (eds.), *CALL: Using, Learning, Knowing*. Proceedings of the EUROCALL 2012 Conference. Gothenburg, Sweden, 22-25 August 2012, p. 37-42.

Coyle, D., Hood, P. & Marsh, D. (2010): *CLIL Content and Language Integrated Learning*. Cambridge: CUP.

Hubbard, P. (2012). Curation for systemization of authentic content for autonomous learning. Paper presented at EUROCALL Conference, Gothenburg, Sweden 22-25 August 2012. <http://www.stanford.edu/~efs/eurocall2012.pdf>. Retrieved November 25th 2013.

Nielsen, H. L. (2013). Sproglæreren som curator (The Language Teacher as Curator), *Sprogforum*, Vol. 57, October 2013, pp. 83-88.

Thaler, R. H. & Sunstein, C. R. (2008). *Nudge: Improving Decisions About Health, Wealth and Happiness*. Penguin Books

### **Websites**

CLILstore, <http://multidict.net/clilstore/>

Multidict, <http://multidict.net/multidict>

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## Article:

### ***Impact of iPod Touch-Supported Repeated Reading on the English Oral Reading Fluency of L2 students with Specific Learning Difficulties***

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#### **Abstract**

In recent years the use of new technologies has been extensively explored in different aspects of language learning pedagogy. The objective of this research was to investigate the impact Repeated Reading activity, supported by iPod Touch could have on the English Oral Reading Fluency (ORF) of second language university students with Special Learning Difficulties (SpLD) at Cyprus University of Technology. As part of their university courses, students have two compulsory English courses. Due to their SpLD and low level of language competence, the eight participants enrolled in the English programme for students with SpLD. This programme is based on the phonological approach and the research done in methods dealing with dyslexia (Shaywitz et al., 2004). After being introduced to the iPod-supported Repeated Reading activity, students worked independently for 8 weeks. They listened and replicated three recorded texts performed by native speakers, using Voice Memo. Texts were based on specific phonetic rules the students had to master. Students recorded their best performance of each text reading, using DropVox. Curriculum-Based Measurement, adapted by Rasinski (2004), was used to measure students' automaticity (speed and accuracy), and an adapted version of Zutell and Rasinski's (1991) Multidimensional Framework to measure prosodic features of fluency. A phonemic accuracy scale was developed and used to assess students' performance related to specific phonemes students had difficulty with. Data analysis revealed that the independent out-of-class use of Repeated Reading, supported by iPod Touch technology helped in increasing students' automaticity, improving their prosodic features of fluency, including that of specific phonemes.

**Keywords:** Oral Reading Fluency (ORF), Special Learning Difficulties (SpLD), dyslexia, reading deficiencies, phonics, Repeated Reading, iPod Touch Technologies.

#### **1. Introduction**

In recent years the use of new technologies has been extensively explored in different aspects of language learning pedagogy. Within that context, the objective of this research was to investigate the impact Repeated Reading activity, supported by iPod Touch could have on the English Oral Reading Fluency (ORF) of second language university students with Special Learning Difficulties (SpLD) at Cyprus University of Technology.

#### **2. The problem**

During spring semester 2012, Cyprus University of Technology Language Centre realised that many English students with Special Learning Difficulties (SpLD) needed more practice in Oral Reading Fluency (ORF) and that the English for SpLD students

course lacked systematic ORF practice; therefore action needed to be taken to remedy this matter. The aim was to explore whether and in what extent the provision of after class practice through the use of repeated reading instructional technique and iPod Touch technology support could improve student ORF. Building on previous research on ORF models (The National reading Panel, 2000; Samuels, 1997), and on models based on the phonological approach and research conducted in methods dealing with dyslexia (Shaywitz et al., 2004), an autonomous learning ORF programme was developed. The *English SpLD ORF iPod Touch Programme* was designed based on Experimental Theory.

### **3. Oral Reading Fluency (ORF) and ORF improvement methods**

According to the literature, fluency is multidimensional. Reading is the ability to read orally with automaticity (Grabe, 2004; Tompkins, 2003) and expression (Dowhower, 1987; Johns & Berglund, 2002; Osborn & Lehr, 2003; Rasinski, 2003; The National Institute of Child Health and Human Development, 2000). Automaticity involves the reading speed or rate, in other words how quickly and automatically one recognises words in connected text and Accuracy, in other words the ability to read and decode / understand words Prosody or expression is the compilation of spoken language features. These include stress or emphasis, pitch variations, intonation, reading rate and pausing. All 3 are related to one another. Accurate and automatic reading creates the conditions for expressive (prosodic) reading. All are important for effective comprehension and overall good reading (Rasinski 2004; Allington, 1983; Schreiber, 1980).

Traditionally, many teachers have relied primarily on round-robin reading to develop ORF. In round- (Rasinski, Blachowicz, & Lems, 2006) reading, students take turns reading parts of a text aloud (though usually not repeatedly). Most readers may have experienced this type of reading. This reading activity is still practised in language teaching. However, there is hardly any evidence whether round-robin reading in itself increases fluency, in other words, whether fluency improves when students only read small amounts of text, usually in small portion only once, and in round-robin style.

The literature review revealed that there are also other, more recent and more effective methods to improve ORF. These are grouped mainly in two: Independent Silent Reading and Guided Repeated Oral Reading (Samuels, 1979). These methods give students the opportunity to practise and work on all areas of reading fluency, word recognition accuracy, reading speed and prosody, elements which are used as indicators of desired fluency achievement (Samuels, 2002).

Guided Repeated Oral Reading is one of the most used and most studied methods for increasing reading fluency. It emphasises practice in all areas of READING FLUENCY: Automaticity: Accuracy and rate and Prosody (Samuels, 1997, Johns & Berglund, 2002, Dowhower, 1989, Dowhower Rasinski, 2003).

### **4. Research in Reading Fluency**

Most research in Repeated Reading / Oral Reading Fluency (ORF) has been carried out for primary students, less for secondary and even less for adults. Most research in RR / ORF has been carried out for L1 (The National Reading Panel, 2000; Carver & Hoffman, 1981; Rashotte & Torgesen, 1985; Samuels, 1979; Young et al., 1996). Relatively scant attention at all levels was directed to L2 (Blum, et al., 1995; Lems, 2005; Taguchi, 1997). Some research has been carried out for SpLD students (Mastropieri & als., 1997; Chard & als., 2002; Fuchs & als., 1996; Fuchs & Fuchs, 1998; Deno, 001; Lambert, 2008), however hardly any was carried out for L2 adult SpLD students.



## **5. Repeated Reading Activities**

According to the literature, Repeated Reading activities are more successful than Student Individual Silent Reading. Therefore, we explored the four main different types of RR activities (Meyer & Felton, 1999; McKane & Greene, 1996; Tan et al., 1994).

1. An adult or peer reads with the student by modelling fluent reading and then asking the student to read the same passage aloud with encouragement and feedback by the adult or peer.
2. The student reads with a peer partner. Each partner takes a turn reading to the other. A more fluent reader can be paired with a less fluent reader to model fluent reading. The more fluent reader can provide feedback and encouragement to the less fluent reader. Students of similar reading skills can also be paired, particularly if the teacher has modelled fluent reading and the partner reading involves practice.
3. Readers' theatre can be a motivating way to improve fluency. Students read scripts and rehearse a play to prepare for a performance. The practice in reading and rereading the scripts provides an excellent opportunity to improve fluency skills.
4. Student listens to a tape of a fluent reader reading text at the student-independent level at a pace of about 80-100 words per minute. The student listens to the tape the first time and then practices reading along with the tape until the student is able to read fluently.

## **6. Technology-Enhanced literacy learning**

Researchers have also claimed that new technologies have influenced and changed the definition of literacy (Leu et al., 2004). New technologies have been integrated in students' learning as indicated in repeated reading activity 4 above. More current technologies should be explored.

For the purpose of this research project we explored the use of mobile technologies, and more specifically the iPod Touch to support the practice of repeated reading. Its use would give students the opportunity to work independently and outside the class, thus extending exposure to the target language, and practise in their own time and as much as they wish.

## **7. Research Theory and Method**

This research project was based on Appropriation Theory. This theory claims that something is foreign to us until we appropriate it. In other words, we adopt it to our own purposes and it becomes our own. In this case, it was used to find out to what extent English for Specific Purposes SpLD students' ORF improved with the use of RR and iPod Touch.

The Formative Experiment Method was used to find out to what extent the use of RR and iPod Touch has helped students gain native-like pronunciation with the use of new technologies.

## **8. Subjects**

The subjects of this experimental research project were eight SpLD English for Academic Purposes (EAP) / English for Specific Academic Purposes (ESAP): Communication and Internet Studies (CIS) students. They had an average background learning of English of about 1 to 5 years and an average level of competence of A1-A2 CEFR level, but needed to improve their ORF in general and the pronunciation of some phonemes in particular.

A pre-questionnaire was taken by all the students in order to examine their use of the Internet, the Web and a number of specific technological tools.

### 8.1 Analysis of pre-questionnaire

According to the data, all the students have an Internet connection at home and a great majority of 67% has a high-speed access. Therefore the answers in question number thirteen were predictable. All of them go online several times a day and only one student several times a week. Specifically, the majority spends that time in gaming, using social media such as Facebook, making video calls, watching videos on YouTube and surfing the net in general. Regarding the use of YouTube it seems that the answers are almost divided. The 56% uses the web tool often and the other 44% uses it 4 times a week or more.

### 8.2 Use of mobile phone and iPod - iPad

It is highly important to mention that none of the students own an iPod or iPad and only three out of nine have a Smartphone. Therefore the usage of mobile phones stays in its basic features such as texting, taking photos or videos and playing games. Only a few of them that have Internet access through their mobile download applications and use Facebook. Thus, the device that best suits them in connecting to the Internet is their laptop (see chart 1).

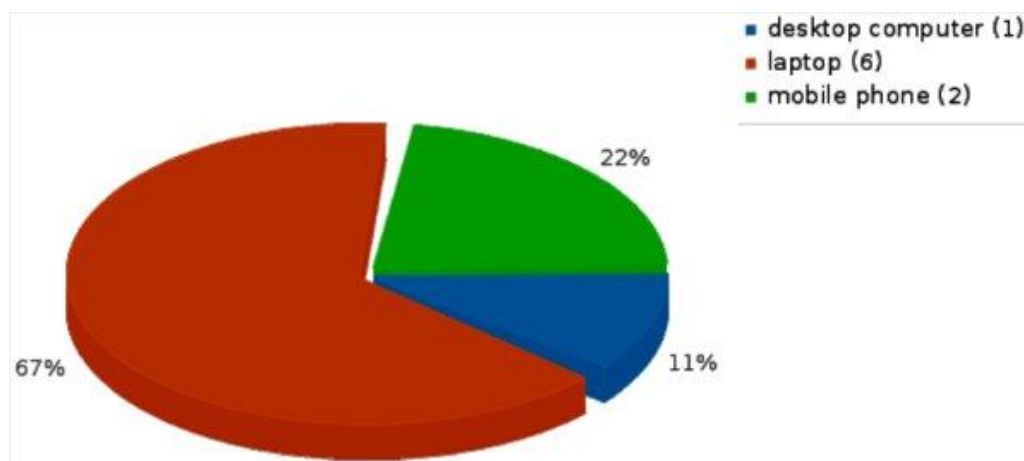


Chart 1. Q17: Which device do you use to go online MOST often?

Regarding the use of the Internet they all stated that they prefer going online at home and not at the university or in class. During a lesson they prefer taking notes by hand rather than typing. Only one student uses a technological tool to type his notes. The fact that a considerable percentage (89%) find it difficult to take notes while being active listeners highlights the reason why using a laptop or another device to type makes it even more difficult for them.

### 8.3 General skills

It is extremely important to highlight the fact that all of them find it difficult to read a text in English, something that will affect the results of this study significantly. Furthermore a skill that not everyone has is the ability to talk to the phone and pay attention to something else at the same time, such as watching TV. The greater part of our sample finds this difficult.

### 8.4 Technology use during studies

A fundamental part of someone's studies is the use of ICT as it is incorporated in their everyday workload and its use in class. A vast amount of technological tools are offered nowadays to facilitate learning and enhance the lesson. In this research the students were asked to point out the devices they use for their studies. A significant number of them use a laptop and a small amount their mobile phone and desktop computer.

However, when they had to mention which tools they would prefer to use during their studies they mentioned many more that they already use. They would like to incorporate into their studies the use of mobile phones, netbooks, iPods and iPads (see chart 2).

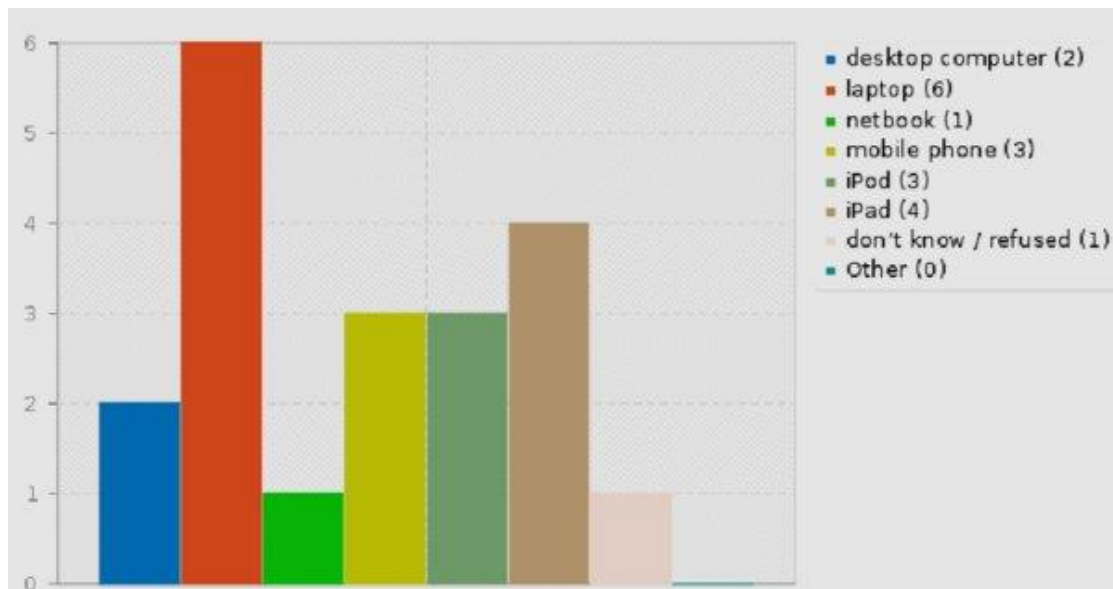


Chart 2. Q26: What devices would you like to you use for your studies?

Apart from that, the students were questioned about the technologies they would like to use during their studies, showing their opinion on what would assist their learning in general. There was a variation among the answers, but the most popular answer was "email" and Facebook. Therefore the students seem open to the use of technologies and devices that so far seemed distant from. The 3rd chart underlines the students' statements regarding these technological tools.

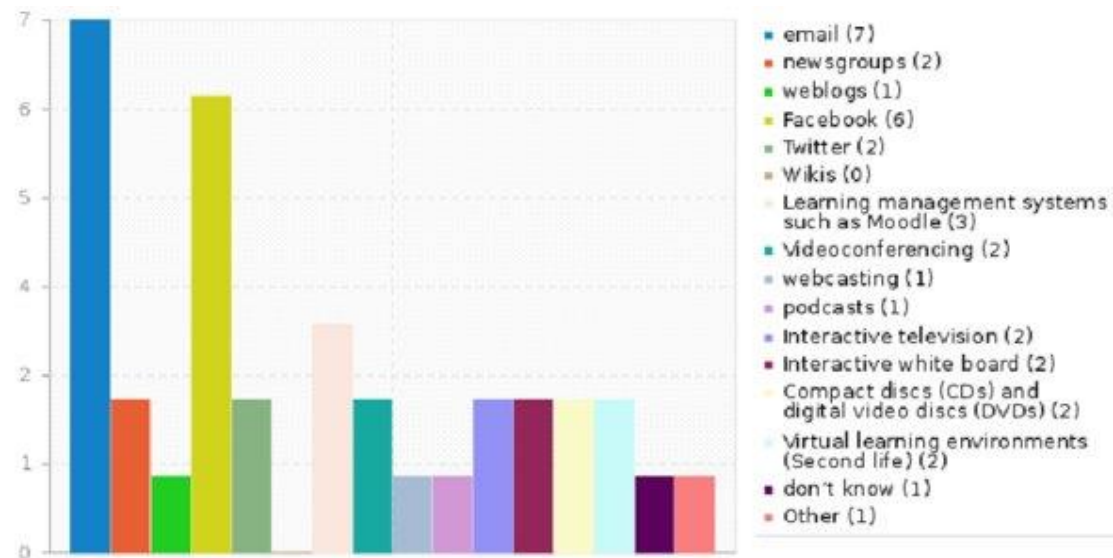


Chart 3. Q27: What technologies do you like to use for your studies? You can choose more than one option.

Apart from that, the students were questioned about the technologies they would like to use during their studies, showing their opinion on what would assist their learning in general. There was a variation among the answers, but the most popular answer was "email" and Facebook. Therefore the students seem open to the use of technologies and

devices that so far seemed distant to them. The 3rd chart underlines the students' familiarity and use regarding these technological tools.

### **9. Environment of project**

The project was carried out in a multitude of different locations mainly because the students could listen/ read/ record their texts anywhere they had Internet access using their iPods. Also the pre and post questionnaires were taken by the students online and the iPod training took place at the Language Centre.

### **10. Expected outcome**

One of the main goals of the project is to enhance the Oral Reading Fluency of the students as well as their vocabulary bank and their phonemic skills while improving their dexterity on the use of new technologies.

### **11. Tools and Materials**

Three authentic text types of A1 Common European Framework of Reference (CEFR) level were used. They were presented in video form. They included phonemes which students had most difficulty with during the course. According to Antunez (2002), "Phonemic awareness refers to the ability to identify and manipulate these phonemes in spoken words. It is also the understanding that the sounds of spoken language work together to make words." The texts were phonetically based on specific rules that were taught in class and thematically corresponded to the ESAP curriculum and field of study. Apple iPod Touch technology and a selection of software were used during the eight-week project. This technology allowed the eight students to have access to native-speaker models, to practise, record, and upload their readings using VoiceMemo, Dropbox and DropVox.

### **12. Measurement**

To determine whether students' ORF improved, including specific phonemes requiring additional attention by SpLD students, their reading Automaticity and Prosody had to be assessed.

Ways to measure the ORF in order to determine whether students' ORF improved were explored. After a thorough literature review on measurement tools, we decided to use Curriculum Based Measurement (CBM) and Multidimensional Fluency Scale (MFS), and come up with a phonemic accuracy scale which was used to measure students' pronunciation of specific phonemes.

### **13. Method**

At week five of the fall semester 2012 the students underwent a training session with an iPod Touch which was used to listen, read and record three different texts. On weeks 6, 8 and 10 a new text, based on new phonetic rules, was uploaded to their Dropbox account and the subjects had to record the text using the DropVox application on their iPods. During weeks 7,9 and 11 they could listen to the text being read by a native speaker and then using the application Voice Memo they could practise it as many times as they saw fit to master it and once they felt ready they could record their final reading using again Drop Box.

The Repeated Reading iPod Touch supported activity was carried out during 8 weeks. Students worked independently out of class (at home or any other place they liked). They used one text for every two weeks. During the first week, they did a first reading of the text loudly, recorded it and uploaded it in DropVox. During the second week, they listened to the text (which was in a video clip form), performed by a native speaker, and repeated after the speaker, recorded and listened again and again, using the iPod Touch software Voice Memo, for as many times as they needed to, until they felt their

oral reading fluency was as close as possible to the native speaker. Then they recorded and uploaded it using DropVox. This was repeated three times with three different texts, relevant to the students' field of study.

At the end of the recordings, students' reading fluency was evaluated: The changes in pronunciation / fluency from the first to the last recording were compared.

## 14. Discussion

### 14.1. Automaticity

Broadly accepted measure of ORF, CBM measures two aspects of automaticity:

Speed or rate of correct words per minute (CWPM) quantitatively;

Accuracy, both quantitatively, by establishing the number of correct words decoded and recognised per minute, and qualitatively by establishing the types of errors student make while reading (Rasinski, 2004).

#### 14.1.1. Rate

Participants showed moderate reading rate growth from the first (R1) to the second (R2) reading of each text in Words Per Minute (WPM) and CWPM. This was also evident from the average WPM and WCPM from R1 to R2 of all three texts:

|           | Average WPM |    | Average CWPM |    |
|-----------|-------------|----|--------------|----|
|           | R1          | R2 | R1           | R2 |
| 1st text  | 55          | 85 | 48           | 77 |
| 2nd text  | 51          | 68 | 42           | 57 |
| 3rd text  | 63          | 74 | 52           | 66 |
| All texts | 56          | 75 | 47           | 67 |

Table 1. Average Words Per Minute and Correct Words Per Minute.

#### 14.1.2. Accuracy

##### (a) CWPM

The Curriculum Based Measurement (CBM) measuring tool was used to measure Word Decoding ACCURACY quantitatively by measuring the students' reading level of performance:

According to the literature, there are three types of levels of performance, which reflect various levels of word decoding accuracy (CWPM). When the level of performance is between 97 to 100%, student ORF is at Independent level. When the level of performance is between 90 to 96%, student ORF is at Instructional level; and when the level of performance is lower than 90%, student ORF is at Frustration level (Rasinski, 2004).



Graph 1. Levels of performance for word decoding – Accuracy (all texts).

English SpLD students' level of performance for word decoding from the first to their second reading improved slightly: The percentage of English SpLD students at Frustration reading level, who found texts too challenging to read decreased; although the percentage of students at Instructional level, who were able to read texts with some assistance increased somewhat, there were no students at Independent level, able to read texts without assistance (Rasinski, 2004):

(b) Accuracy: types of errors – the CWPM quantitatively.

According to the literature, these are the main different types of errors readers make:

- Mispronunciations - count only first time the error is made
- Substitutions
- Insertions
- Omissions
- Supplied words
- Not Real Errors
- Self-corrections
- Repetitions
- Errors in word endings: -ing, -ed, -s
- Pronunciation errors in proper nouns

As we have seen, although the level of word decoding accuracy increased, we were interested in analysing qualitatively the different types of errors made. We used Curriculum Based Measurement (CBM) to measure Accuracy qualitatively.

Five different types of errors (Hasbrouck, 2005) were identified. The most common type made by the participants was mispronunciation (44%), hesitations or no attempts (25%) and word substitution (15%). There was a small percentage of omission (8%) and some word reversals (6%). It was interesting to notice that the results in the first three categories rose during the second reading instead of reducing; that is thought to be due to the high percentage of mistakes made by specific students, which affected the results of the whole group. Also, all students showed more hesitation during the second reading. This is believed to be mainly because of their strong wish to be more accurate in their second readings.

|                         | R1          | R2  | Total |
|-------------------------|-------------|-----|-------|
|                         | (All texts) |     |       |
| <b>Mispronunciation</b> | 42%         | 46% | 44%   |
| <b>Hesitation /</b>     | 17%         | 26% | 25%   |

|                      |     |     |     |
|----------------------|-----|-----|-----|
| <b>No attempts</b>   |     |     |     |
| <b>Substitution</b>  | 15% | 16% | 15% |
| <b>Omissions</b>     | 11% | 4%  | 8%  |
| <b>Word Reversal</b> | 6%  | 5%  | 6%  |

Table 2. Types of errors.

#### 14.2. Reading Prosody

Prosody, the second dimension of ORF, is the rhythmic and tonal aspect of speech: the “music” of oral language.

Prosodic features include:

- (a) Variations in pitch (intonation),
- (b) Stress patterns (syllable prominence), and
- (c) Duration of time (length of time)

These contribute to the expressive reading of a text. These elements signal question, surprise, exclamation, and other meanings beyond the semantic of the words being spoken. Correct prosody is reading that sounds like speaking. Prosodic reading provides evidence that the reader understands what is being read (Kuhn & Stahl, 2000).

The adapted version of Zutell and Rasinski’s (1991) Multidimensional Fluency Scale (MFS) of 1 to 4, with 1 being the lowest and 4 being the highest was used to measure qualitatively ESAP students’ prosodic features of fluency. On the whole, students’ prosody improved from the first to the second reading of each text: expression and volume, smoothness, and pace percentages moved from all four levels to the last three levels. However, although in some areas they reached number 4 of the scale, the percentage was not very high.

| <b>Dimensions</b>               | <b>1</b> | <b>2</b> | <b>3</b> | <b>4</b> |
|---------------------------------|----------|----------|----------|----------|
| <b>Expression and volume</b>    |          |          |          |          |
| First reading*                  | 49%      | 42%      | 9%       | -        |
| Second reading*                 | 24%      | 28%      | 36%      | 12%      |
| <b>Phrasing and information</b> |          |          |          |          |
| First reading*                  | 60%      | 36%      | 4%       | -        |
| Second reading*                 | 47%      | 33%      | 20%      | -        |
| <b>Smoothness</b>               |          |          |          |          |
| First reading*                  | 80%      | 20%      | -        | -        |
| Second reading*                 | 54%      | 36%      | -        | 10%      |

|                 |     |     |     |     |
|-----------------|-----|-----|-----|-----|
| <b>Pace</b>     |     |     |     |     |
| First reading*  | 54% | 36% | 10% | -   |
| Second reading* | 25% | 45% | 15% | 15% |

\*all texts

Table 3 Prosodic Dimension of Fluency.

### 14.3. Phonemes

In order to examine the student's phonological processing abilities based on phonetic principles taught in class, two specific phonemes (ight sound / gh sound) the students found the most difficult to master were chosen as a basis of measuring their skills. At the first reading of the third text, the number of mistakes on these phonemes was quite high (18); however the number of mistakes (6) at the second reading was significantly lower.

| Mispronunciation of <b>ght / gh</b> sounds | <b>R1</b> | <b>R2</b> |
|--|-----------|-----------|
| Text 3 (all students)                      | 18        | 6         |

Table 4. Phonemes mispronunciation.

## 15. Limitations

There were, of course, a number of limitations in this project. The factors which influenced the validity of the study were:

- a) The small number of students and
- b) The need to further develop self-management skills and responsibility of own learning

## 16. Future possible directions

Taking into account the positive and profitable findings of the ORF iPod Touch programme, it is important to work out ways of encouraging all first year students to practise their ORF. Some ways could be to:

- Incorporate ORF programme in all courses.
- Use other Technologies for ORF improvement apart from iPod Touch such as student own Smart Phones, Tablets or Laptops.
- Use iPod Touch programme with other types of students, e.g. Special Learning Difficulties (SpLD) students.

## 17. Conclusions

This research revealed that the provision of out-of-class support through the use of an iPod technology-based independent, Repeated Reading instructional technique had an impact on English SpLD students' Oral Reading Fluency. Student automaticity (speed and accuracy) increased over the period of the iPod project, the prosodic features of students' fluency, including pronunciation of specific phonemes, improved. However, this impact was less than the one on English for Specific Purposes students of the same university who were not SpLD students (Papadima-Sophocleous, et al. 2012). It is hoped that this research project has shed some light into the area of the use of Guided Repeated Reading, supported by New Technologies to improve University level English



SpLD students' ORF. Further research needs to be carried out in this area to be able to come up with more generic results.

### Acknowledgements

The authors would like to thank Mr. Yiannis Mallouris for his valuable input in this project, as well as the students who participated in the ESAP SpLD programme and the research project. Without their help, the project would not have been possible. This research was supported by the Start Up University Grant, allocated to the project during 2010-2012.

### References

- Allington, R. L. (1983). Fluency: The neglected reading goal. *The Reading Teacher*, 36: 556-561.
- Antunez, B. (2002). English Language Learners and the Five Essential Components of Reading Instruction. Reading rockets. <http://www.readingrockets.org/article/341/>
- Blum, I., Koskinen, P. A., Tennant, N., Parker, E. M., Straub, M. & Curry, C. (1995). Using audiotaped books to extend classroom literacy instruction into the homes of second-language learners. *Journal of Reading Behaviour*, 27: 535-563.
- Chard, D. J., Vaughn, S., & Tyler, B. (2002). A synthesis of research on effective interventions for building reading fluency with elementary students with learning disabilities. *Journal of Learning Disabilities*, 35, 386-406.
- Deno, S.L., Fuchs, L.S., Marston, D., & Shin, J. (2001). Using curriculum-based measurement to establish growth standards for students with learning disabilities. *School Psychology Review*, 30, 507-526.
- Fuchs, D., Roberts, P.H., Fuchs, L.S., & Bowers, J. (1996). Reintegrating students with learning disabilities into the mainstream: A two-year study. *Learning Disabilities Research and Practice*, 11, 214-229.
- Fuchs, L.S., & Fuchs, D. (1998). Treatment validity: A unifying concept for reconceptualizing the identification of learning disabilities. *Learning Disabilities Research and Practice*, 13, 204-219.
- Hasbrouck, J. (2005). *Reading Fluency: Using Oral Fluency Norms for Key Instructional Decisions*. University of California Summer Institute of Reading. <http://ebookbrowse.com/ucsir-2005-hasbrouck-color-pdf-d152071737>
- Johns, J. & Berglund, R. (2002). *Fluency: Question, answers, evidence-based strategies*. Dubuque, IO: Kendall/Hunt Publishing Company.
- Lambert, M. N. (2008). *A Guide to Reading Fluency and the Assessment of Specific Learning Disabilities in the Individuals with Disabilities Education Improvement Act of 2004*. Draft prepared for the Wisconsin Department of Public Instruction.
- Lems, K. (2005). *A study of Adult ESL Oral Reading Fluency and Silent Reading Comprehension*. National-Louis University.
- Mastropieri, M. A., & Scruggs, T. E. (1997). Best practices in promoting reading comprehension in students with learning disabilities: 1976 to 1996. *Remedial and Special Education*, 18, 197-213.
- McKane, P. F. & Greene, B. A. (1996). The use of theory-based computer-assisted instruction in correctional centers to enhance the reading skills of reading-disadvantaged adults. *Journal of Educational Computing Research*, 15: 331-344.

- McKane, P. F. & Greene, B. A. (1996). The use of theory-based computer-assisted instruction in correctional centers to enhance the reading skills of reading-disadvantaged adults. *Journal of Educational Computing Research*, 15: 331-344.
- Meyer, M. S. & Felton, R. H. (1999). Repeated reading to enhance fluency: Old approaches and new directions. *Annals of Dyslexia*, 49: 283-306.
- Papadima-Sophocleous, S. Georgiadou, O. & Mallouris, Y. (October 2012). iPod Impact on Oral Reading Fluency of University ESAP students. In *GloCALL 2012 Conference 2012 International Symposium on CALL Abstracts and Short Papers*. (CD-ROM). Beijing: China.
- Papadima-Sophocleous, S., Charalambous, P. & Mallouris, Y. (July 2013). Impact of iPod Touch-Supported Repeated Reading on the English Oral Reading Fluency of L2 students with Specific learning Difficulties in *WorldCALL 2013 Conference Proceedings. CALL Abstracts and Short Papers*. (CD-ROM). Scotland: Glasgow.
- Rashotte, C.A. & Torgesen, J.K. (1985). Repeated reading and reading fluency in learning disabled children. *Reading Research Quarterly*, 20:180-188.
- Rasinski, T. (2003). *The fluent reader: Oral reading strategies for building word recognition, fluency, and comprehension*. New York: Scholastic Professional Books.
- Rasinski, T.V. (2004, reprinted 2011). *Assessing Reading Fluency*. Honolulu, Hawai'i: Pacific Resources for Education and Learning. <http://www.prel.org/media/137837/assessing2011.pdf>
- Rasinski, T.V., Blachowicz, C., & Lems, K. (2006). *Fluency Instruction: research-Based Best Practices*. New York, NY: Guilford.
- Samuels, S.J. (1979). The method of repeated readings. *The Reading Teacher*, 32: 403-408.
- Samuels, S. J. (1997). The method of repeated reading. *The Reading Teacher*, 50(5), 376-381.
- Schreiber, P. A. (1980). On the acquisition of reading fluency. *Journal of Reading Behaviour*, 12: 177-186.
- Shaywitz, B., Shaywitz, S., Blachman, B., Pugh, K., Fulbright, R., Skudlarski, P., et al. (2004). Development of left occipito-temporal systems for skilled reading in children after a phonologically-based intervention. *Biological Psychiatry*, 55, 926-933.
- Tan, A., Moore, D.W., Dixon, R.S. & Nicholson, T. (1994). Effects of training in rapid decoding on the reading comprehension of adult ESL learners. *Journal of Behavioural Education*, 4 (2): 177-189.
- Tompkins, G.E. (2003). *Literacy for the 21st century*. Upper Saddle River, New Jersey: Merrill Prentice Hall.
- Young, A. R., Bowers, P.G. & MacKinnon, G.E. (1996). Effects of prosodic modeling and repeated reading on poor readers' fluency and comprehension. *Applied Psycholinguistics*, 17:59-84.
- Zutell, J. & Rasinski, T.V. (1991). Training teachers to attend to their students' oral reading fluency. *Theory into Practice*, 30, 3, 211-217.

Top

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## Article:

### ***Expert views on how language education may develop in the next 20 years and what CALL could contribute\****

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#### **Abstract**

The celebration of EUROCALL's twentieth anniversary provides a proper occasion to reflect on the future of language teaching and the role of CALL in these developments. In this paper we present the views of six authorities on language teaching and learning from different EU countries. All of them have a special interest in CALL and/or are CALL experts and well respected EUROCALL members, such as the late Graham Davies. We present a selection of their observations based on a summary of the Skype interviews in which they contributed to a symposium entitled 'And now for another century of modern language teaching...' organised by the Dutch national Association of Language Teachers on the occasion of its first centennial in 2011. To provide a more global (or at least European) perspective, the interviewees were asked to cover the same topics that were central to the live panel discussion delivered by six Dutch participants representing a variety of perspectives: secondary and university teachers, students, curriculum experts and teacher educators. By way of preparation, all involved had been given a number of challenging statements related to some aspects of the discussion theme: the characteristics of the future learning environment, teacher, learner, pedagogy and technology. In this audio-supported document we will focus on interesting points of view particularly related to pedagogy and technology expressed in the interviews. A video report summary of the live discussion (in Dutch) is available on the limited CD edition with recordings of the centennial festivities. For an impression of the panel discussion and other symposium activities see this [video report](#) on YouTube.

**Keywords:** CALL trends, future of MFL education, expert views, panel discussion, educational trends.

#### **1. Introduction**

The Dutch national Association of Language Teachers (Levende Talen [Living Languages]) celebrated its first centennial on May 27, 2011. Part of the festivities was a symposium with the title: '...and now for another century of modern language teaching'. The focus point of this symposium was a panel discussion. Six Dutch participants (teachers, pupils, curriculum experts and teacher educators) shared their views on the future of mainstream language learning/teaching. As food for thought they were given the following introduction and reflections to the theme. In a 100 years' time... will there still be some thirty students in three rows in a classroom with a language teacher working their way through text- and workbooks during two or three weekly, fifty-minute periods? Or will the concept of classroom and form disappear and will school be more like a social meeting place? After all, learning can take place anywhere: in social networks, virtual learning environments, with the help of intelligent agents or a private teacher at a distance. On the other hand, we should take into account that changes in

education have proven to be slow and that all our 2011 prophecies may well stand little to no chance to come true in the traditional classroom.

1. The future learning environment. What changes can be predicted about the 'learning environment'? What implications are there for schools and school buildings?
2. The future teacher. Will subject teachers (f/m) and their task load of some 26 lessons per week disappear in the next one hundred years? And if so, who or what will replace them? Will they become merely coaches assisted by robots to transfer knowledge?
3. The future student. Pupils have changed in the course of time. Nowadays they are less willing to just consume educational content. They prefer to find information themselves but distinguish between personal and school-related learning. Educational organisations may well teach students less knowledge in the future and increasingly rely on their skills to acquire knowledge and develop competences independently.
4. Future methodologies. What are the current views on how languages are taught. Will didactics in mainstream language courses still be driven by textbooks produced by educational publishers? Will there be alternative approaches to develop language skills? Will web-based and interactive materials replace the traditional means? Will there still be a place for paper-based materials?
5. Future technology. Technological developments are bound to continue the next one hundred years. How will this affect language learning and teaching? Will we be able to learn how to speak a foreign language with the help of L2 signals from external sources or a chip embedded in our brains? What other, possibly more realistic, technical developments will support future teachers and students in the second language acquisition process?

To provide a more global (or at least European) perspective Hayo Reinders (also being a native speaker of Dutch) was invited to join the live panel discussion and five more international experts were requested to be Skype interviewed individually and discuss the same topics that were central to the live panel debate.

The following colleagues from a variety of EU countries were approached by the present writer and accepted the invitation: Jozef Colpaert (Belgium), Nicolas Guichon (France), Andreas Müller-Hartmann (Germany), Andreas Lund (Norway) and Graham Davies (UK), who regrettably died a year later.

Below we summarize the key points of their views and observations about the symposium topics. The present document has links to the original audio sequences for a number of statements. Although the standard language was English, Colpaert and Guichon have been invited to use their mother tongues so as to also add a multi-lingual dimension to this venture.

## **2. The views of the international experts on the symposium topics**

### *2.1. Learning in the future learning environment*

Andreas Müller-Hartmann does not expect the learning environment to change dramatically in the short term because, for societies, schools are the spaces where the training of the future potential workforce takes place. Because of this interest, states consequently want to have as much influence and control over these institutions as possible [Müller-Hartmann, 1] This -in his view- is also testified by the relatively limited impact the 'traditional' educational renewal movements, such as Freinet, appear to have (had) on mainstream education [Müller-Hartmann, 2]. Nicolas Guichon finds it difficult, possibly even dangerous, to make predictions, but observes that technologies develop faster than the changes that take place in schools [Guichon, 1]. From his research on the integration of ICT in language teaching it appears that teachers understand the importance of ICT but it still takes them too much time to learn to use applications. It would therefore be desirable if also policymakers recognized the importance of ICT

training in the curriculum of initial teacher training [Guichon, 2]. Whether language education as we know it today, with students in a class year system led by a teacher working their way through a textbook will alter fundamentally in the future he finds difficult to answer because schools as institutions do not appear to change that quickly. He hopes, however, that a more informal organization will evolve which can accommodate a more flexible way of grouping students and support project-based activities where the teacher's role is more coaching in nature. And also that language education does not exclusively take place in designated classrooms and where technological facilitation, currently still seen as an add-on, forms a natural part of the learning environment. In this respect he can see great possibilities for the use of mobile phones [Guichon, 8]. Graham Davies observes that the technology-based learning environment in the United Kingdom (UK) is developing rapidly. In particular, the Web and the interactive whiteboard have made major contributions to the ways in which new technologies are used in teaching foreign languages. [Davies, 1]. In response to our observation that the use of the computer as a means for (oral) communication is becoming more important in language education Andreas Lund elaborates on *telecollaboration* [Lund, 1] and sketches the future development of this concept towards speech communities, in which the role of the teacher is increasingly of an organizing and coaching nature. He sees great opportunities for these types of networks because then the language itself is central and contacts with others and other communities can occur time and place independently. Regarding the implications for the curriculum he expects [Lund, 2] that learning objectives will guide planning and organizing the related online meetings. Jozef Colpaert starts off by saying that the order of the symposium propositions, with the learning environment as a starting point, is well chosen [Colpaert, 1]. It also matches well with his own views. Experience has shown that first the entire learning environment must be well designed before choices as to technological instrumentation can be made. Another aspect that he considers of great importance for the learning environment is the role of the teacher. Also to have a stimulating start of his presentations Colpaert often states that it takes a well-supported teacher to realize learner-centred education. After all, a learning environment that causes emotional and/or cognitive friction for teachers is counterproductive. Furthermore, he points out [Colpaert, 3] that the methodological approach itself is also part of the learning environment. And that consequently the local context should be analysed first before a particular method (e.g., cognitivistic) is chosen. For Colpaert a method consists of 3 parts: a teaching, a learning and an evaluation model, each defined in detail. For him the strength of a learning environment therefore is determined by the extent to which it is well matched to a specific local context [Colpaert, 4]

## 2.2. The future teacher

Davies expects that teachers will increasingly be developing their own materials thanks to the availability of software tools and the related competencies developed in teacher education [Davies, 15]. Furthermore he expects participation in Personal Learning Networks (PLN) as a form of continuing professional development to contribute to the development of skills needed to manage the "open classroom" [Davies, 16]. Although Lund expects the book as such will survive, he [Lund, 6] doubts - in contrast to Müller-Hartmann- if coursebooks, also in their hybrid form with media and Internet content supported components, are here to stay. The web offers loads of materials. At the same time this very vast supply of information makes that teachers will not become redundant: youngsters can find lots of content but the teacher is still needed to support the process of meaning making. Related new teacher competences that he [Lund, 7] mentions include the ability to design learning environments, curriculum trajectories and communication activities based on an understanding of the effects of the choice of technologies to the learning and communication process. Colpaert considers it of great

importance that teachers take pride in their work and are able to feel comfortable in their learning environment [Colpaert, 2]. He expresses the hope that future teachers – whatever the specific attributes of their role – can work in an environment where they can be themselves, experience little friction and can be proud of their work (self-efficacy) [Colpaert, 5]. In that context, he argues for a greater role for teachers themselves to contribute to the quality improvement of the learning environment in which they operate, in a systematic way (educational engineering). He invites them to actively participate in improvement of the quality of the learning environment in which they operate [Colpaert, 5.1] Müller-Hartmann also attaches great value to the teacher's comfort zone [Müller-Hartmann, 12]. He therefore calls for more attention in initial training and more time in professional development programmes for familiarisation with, both personally and professionally, innovations such as more learner- and task-oriented approaches and technology-enhanced telecollaboration [Müller-Hartmann, 14].

### *2.3. The future student*

Although Davies [7] agrees with the suggestion that extra demands are made on your motivation to learn foreign languages when English is your first language he regrets that students in the UK are no longer obliged to continue studying a foreign language beyond the age of 14, i.e. after their third year of secondary education. Attempts have been made by the Department for Education (DfE) to encourage students to continue with languages beyond the age of 14. An example is the online MYLO project, which was set up with the aid of substantial government funding. In his view it appears that MYLO is not having a major impact [Davies, 6]. Lund and Guichon see an increase in informal learning because students use social media and so called web 2.0 applications. Guichon's research shows that Facebook is popular among Lycée pupils and that its use also leads to (more) collaboration between students outside the school context (Guichon, 2012b). In his reaction to the suggestion that this type of informal learning could be integrated in formal, school-based learning, he points to the danger that "schoolification" of such Web 2.0 use could spoil its attractiveness for students [Guichon, 5]. Although also Müller-Hartmann observes that students nowadays make functional use of foreign languages (possibly English in particular) in technologically mediated contexts (SMS, blog, Facebook, gaming) it is his opinion that integration of such media in the school context only makes sense if the methodological approach is less forms and structure focused but that content and technological resources that appeal to students get a more central position [Müller-Hartmann, 13]. He also reports a growing interest in early language learning in Germany, in line with the developments globally in this respect and as also reflected by the number of registrations for the related educational master studies at the Faculty of Education at Heidelberg University of Applied Sciences [Müller-Hartmann, 5]. One of the implications is the need to improve the transition between primary and secondary education. To this end the EU project PriSECCO, coordinated by Heidelberg Faculty of Education, aiming for better conditions for the realization of a consistent learning trajectory between these sectors, developed materials (i.e. bridging tasks) to promote a better understanding of the dominant teaching approach in both sectors. In his view more specific attention for this topic is needed in initial and in-service teacher training programmes [Müller-Hartmann, 6]. And more in general Müller-Hartmann (for whom teacher training is a special interest) emphasizes that there should be a better integration of theory and practice and more emphasis on teaching skills in the teacher education curriculum, especially for first grade teachers [Müller-Hartmann, 7]. One of the essentially needed changes in language education, according to Colpaert, is more attention to the personal goals of the learners (the psychological shift). In his view there has been too much focus on standard curricular learning objectives in the past. Experiences in his projects show that the design of the learning environment must be aligned to the common features of the

personal goals of a specific group of learners. Reinders shares the view that language education needs to become much more student-centred. Referring to higher education he finds that students – although they do not necessarily know how to study languages or do so autonomously – they know perfectly well that what they are being offered is not necessarily related to reality. Neither in terms of the teaching methods being applied and the way they are expected to learn, nor in terms of the actual knowledge and skills they are developing. To illustrate this point he mentions some features differentiating developing work-related written documents from producing an essay at university: time constraints, multiple-versions, not necessarily 'perfect', produced in collaboration and with a much more practice-oriented content and structure. With a view to the increasing availability of alternative options for developing language skills he expects students to become more critical about investing their time in programmes that do not appear to fit their needs.

#### *2.4. Future language learning pedagogy*

Regarding changes in the educational field Müller-Hartmann [8] observes that the communicative, task-oriented approach is gaining ground, at least at the level of the (international) research community. In his own practice he notes that the related principles and associated teaching methods appeal to and provide practical guidance for practitioners and student teachers. In his view the task-oriented approach offers more opportunities to address heterogeneity in classrooms and he is pleased to see a growing number of studies focused on the realities of the classroom in the field of language education studies. With respect to this approach he prefers the term task-supported to task-based language teaching. As most textbooks currently in use are not grounded on task-based related design principles, initial and in-service teacher training should be in alignment with the actual working conditions that teachers currently find themselves in [Müller-Hartmann, 9]. All the more since he expects that the commercially produced textbook will be in use for some time still [Müller-Hartmann, 10]. An important consideration here is that the use of alternative methods involving technology (however interesting for language education) results in working conditions that are not safe enough for the current generation of teachers [Müller-Hartmann, 11]. This is partly due to the fact that working with a more learner- and task-oriented approach is inherently less secure than delivering a more forms-oriented curriculum. But is also related to the limited content and experiences offered to this issue in initial training. He therefore advocates [Müller-Hartmann, 12] professional development formats that provide the time and support needed for a gradual development of the required competencies. Lund [8] too observes a growing influence of the task-oriented approach, also in classroom practice and on the materials recently produced by the publishers. He can see a future for a task-oriented approach, on condition that the tasks are designed so that they cannot be completed by simply copying and pasting (Lund, 2013). Future methodology development –in his view- will also need to be based on theoretical models such as Activity Theory, which includes the study of use of cultural instruments. Regarding language teaching in the UK Davies remarks that the restrictive and prescriptive National Curriculum, especially in England, offers teachers little room for choice of content and methodological experimentation. [Davies, 2]. Many teachers are not too happy with the content of the prescribed curriculum: it is too rigid and too focused on memorisation, with inadequate provision for developing understanding of grammar and syntax. [Davies, 3]. The current methodology can be characterised as topic-based rather than task-based [Davies, 4]. The provision of early language learning in primary schools from the age of 7 years is increasing, but the situation is confused and quality varies greatly from school to school, with the result that secondary school teachers do not know what to expect from incoming students. Regarding the possible impact of innovations in the methodological domain Guichon observes a growing interest in

bilingual education or Content and Language Integrated Learning (CLIL) in a number of educational sectors and he expects the Common European Framework of Reference for Languages (CEFR) and the task-oriented approach will influence the approach of teachers and how publishers will design materials. [Guichon, 7]. Although Davies [13] would welcome this development he does not expect rapid growth of bilingual education in the UK. One reason for this, in his opinion, is the fact that language teaching is considered to be different from other school subjects. He compares it to learning to play a musical instrument as this also requires a lot of practice [Davies, 14]. Lund [9] characterizes bilingual education (CLIL) as an approach that will probably be important for future educational models where learning objectives are central and (foreign) language learning can be part of the means to realise them. Müller-Hartmann expects [3] that languages will continue to be taught as school subjects but that there will be changes in the range of languages that will be offered. On the other hand he reports that also in Germany there is a growing interest in CLIL [Müller-Hartmann, 4]. Recently, also in combination with subjects such as sports and music, because of the reduced cognitive load. And he considers the evidently motivating effect that a focus on content - one of the characteristic features of a CLIL approach has - also to be of great relevance for regular language teaching. According to Guichon language teachers should not attempt to integrate informal learning that could take place with the help of web 2.0 applications in education [Guichon, 6]. Lund, when asked about the significance of informal learning, recognises that the environment where knowledge is gained has indeed changed - school is just one part of that all- but he, too, thinks that education should not try to imitate those activities nor try to integrate the private world into school life. On the other hand, the professional community should study how images are used and what role language plays for communication in the applications that young people make use of such as games and 3D virtual worlds [Lund, 4]. Another implication, according to Lund, is that learning and communication strategies will need to have a much more central place in the curriculum because they are so important to the developing new genres where content is jointly created such as multilogues (as in dialogues but with multiple participants) and wikis (Lund, 2008) as here aspects such as turn taking are certainly as critical to the process as in face-to-face communication [Lund, 5]. In the same vein Reinders elaborates on the related concept of 'autonomous learning'. [...] 'A common misconception is that autonomous learning is restricted to learning. However recent research shows that it includes the relationships that an individual develops, the skill to learn with and from other others and the interactions that are involved'. And therefore autonomous learning, in his opinion, is about interdependence rather than just independence. And, like Lund, he advocates for more attention to the development of autonomy in the curriculum. Although currently not widely in use Guichon would like to see a (further) increase of the use of WEB 2.0 applications (Guichon, 2012a) and telecollaboration in schools, because this activity and related applications offer both interesting language practice opportunities and also a chance to address intercultural aspects [Guichon, 4]. Colpaert [7] does not expect that there will be significant changes in language teaching methodologies in the short term. The socio-constructivistic approach (e.g. in Belgium / Flanders) has not yet been fully implemented. Moreover, the choice for a specific methodology depends on contextual features and the characteristics of the target group. He illustrates this with a case from his own consultancy practice. Like Lund, Colpaert notes [8] that the insights from other scientific disciplines e.g. second language acquisition and psycholinguistics research - although they could contribute significantly - are not yet sufficiently integrated in modern foreign languages (MFL) pedagogy. Also other research themes such as (cultural) identity psychology and the influence of mother tongue (education) could, in



his opinion, [Colpaert, 9] contribute to our understanding of how contextual factors are related to the effectiveness of the learning environment.

### *2.5. Technology of the future*

Lund thinks that communicative use of language will get a much more central place in the curriculum thanks to Web 2.0 applications. Lund who, like Mary Swain convinced of the importance of language production for language acquisition, expects that technological developments that can support social networks and facilitate collaborative dialogue will allow us to organise language education so that the actual use of language gets a much more prominent place [Lund, 3].

Both Guichon [9] and Davies expect that mobile technologies will provide convenience, flexibility and interesting applications to support Mobile Assisted Language Learning (MALL) once costs have been reduced [Davies, 12]

Müller-Hartmann shares the view that recent technological developments have greatly facilitated telecollaboration and with it increased the chances to open up the classroom to the outside world. But again, as these types of project activities are relatively 'unsafe' for teachers [Müller-Hartmann,14] –certainly compared to the regular course of business in the classroom– good teacher training including practical personal experiences in this domain are of great importance. If teacher education succeeds in providing student teachers with valuable telecollaborative experiences then the related 'emotional anchors' will increase the chance that they will use the technologies required for this purpose in their future professional practices.

Guichon observes that although the ease of ICT use increases so does the speed at which technology is changing. It is anticipated that the new generation now entering the teaching profession has the basic affinity with ICT required for coping with this in a flexible way [Guichon, 3].

Although the UK has quite a good reputation in the field of innovation [Davies, 8] - see for example the activities of CILT or the blogs of individual teachers like Joe Dale and José Picardo - the poor position of foreign languages in the school curriculum is clearly not a very stimulating factor.

Davies [9] follows numerous blogs set up and maintained by language teachers who describe their practice and their use of a variety of applications. The use of ICT in teaching foreign languages is required by the National Curriculum [Davies, 5], but in addition there is a very enthusiastic group of language teachers who make creative use of ICT, e.g. to support content presentation and language production. [Davies, 10]

Other technologies mentioned are touch-screens [Davies, 11] and translation tools. Guichon [10] expects - now that tools like Google Translate are getting better- that they will have an impact on language teaching particularly because these technologies can provide an important contribution to the (acceleration of) development of intercultural understanding. Invited to comment on the topic of technology Reinders states: [...] 'I often get asked what I think will be the next 'big thing' in language education. Of course I do not know but I do see that a number of developments are starting to come together that are opening up opportunities for ways of learning and teaching as well as monitoring and supporting them, that were previously difficult to achieve. Take, for example, developments in mobile learning. We have had portable phones for many years now. We have also had access to information through the internet. We now also have mechanisms to link those two with information about you as a user, your preferences and your location, and all this is starting to connect to your social identity too. This makes forms of individualised, situated and distributed learning possible, the potential of which we have only started to scratch the surface of. So in a sense I think

the near future is more about the consolidation and integration of different technologies and a recognition of the ways in which they start to (in some ways quite naturally) appear in, or even create new learning ecologies. At the same time our understanding of these developments has grown to a point where different fields are starting to connect and form natural connections, such as those between social constructivist learning theories, second language acquisition and research into the ways which computer-mediated communication (and in particular more recently mobile learning) connect with these. So in a way I am hopeful that new developments continue to lead to new insights'. For more background information on his statement on technology, specifically on topics such as autonomy, MALL and informal learning Reinders refers to text sequences he published earlier: [...] Technology has the potential to not only provide access to resources for learning in a superficial sense, but also to offer increased affordances for autonomous learning.

Opportunities for interaction, situated learning, and support for learning outside formal contexts, have greatly improved because of technology. These affordances are not always capitalised on yet but offer the opportunity to support the learning process, in addition to simply providing the building blocks for it. At a superficial level, computers are good at monitoring students' engagement and progress, and programmes exist that use this information to guide learners and encourage them to make decisions about their own learning (Reinders, 2007). More recently, and perhaps more liberatingly, mobile technologies allow learners to have access to resources in out-of-school contexts (Kukulska-Hulme & Traxler, 2005), potentially linking affordances in the environment with immediate support. As a result, there is now a much richer appreciation of the role of learning outside the classroom (Benson & Reinders, 2011), not only in terms of the time learners spend learning, practising and of course using the language in non-formal learning environments, but also in the ways in which educators can prepare learners for, as well as guide them in such learning.

A reconceptualisation of language education as the provision of a collection of affordances that start from the learners as individuals, and include classrooms, materials, native speakers, teachers, assessment, other learners, the workplace, and so on, has been made more practically feasible, and methodologically easier to investigate, through the pervasive use of technology. We therefore gradually see a shift in our understanding of autonomy as a rather vague set of skills or attitudes, to more specific abilities to navigate different (learning) environments, with technology playing an important facilitative role. In addition, technology has revealed the extent and importance of the social networks learners engage in, and their effect on what and how people learn. This has helped researchers and practitioners to learn more about what it means to be an autonomous learner in practice. But technology also places constraints on the development of autonomy (Reinders & Hubbard, 2012). As mentioned above, access to, for example, authentic materials or native speakers can be detrimental if learners are not prepared or supported for this. Reliance on technology can, for example, discourage learners from remembering new vocabulary when they have direct access to an online dictionary. Technology can also give students a false sense of development; online games, for example, have a great deal of potential for language practice (Gee, 2003), but can be limited in terms of genre and domains and may not push learners to engage in other types of communication that are also important, such as extensive reading, or writing a longer text. Colpaert [10], finally, sees a more limited impact of technological developments on language education as choices in this domain, also in the near future, represent "only" one aspect of the whole of the learning environment. In his work in the field of design and research of Computer Assisted Language Learning (CALL) he uses as a guiding principle: "No technology inherently possesses an effect on learning". He then explains why an ecological shift in CALL is

needed: in the past, in evaluation research, the perspective was too limited, evaluating the effects of individual technologies on specific aspects such as attitude.

### 3. Conclusion

When we focus on the common aspects in the views of these six experts, a trend appears to emerge with a number of characteristics. Key elements of future modern language teaching and learning that are mentioned are the increased focus on interaction, the (oral) use of the target language for communication based on authentic contexts and content. The related school-based processes are teacher orchestrated and increasingly facilitated by information and communication technologies. The speed at which innovation will take place is expected to be largely dependent on the availability of teachers with the necessary competences and willingness to function in the related learning environment.

### Acknowledgements

We would like to thank the interviewees for their time and contribution to both the Levende Talen 2011 Centennial and the EUROCALL 2013 conference.

### References

Benson, P. & Reinders, H. (2011). (Eds.), *Beyond the Language Classroom. The Theory and Practice of Informal Language Learning and Teaching*. Basingstoke: Palgrave Macmillan.

Council of Europe (2001) Common European Framework of Reference for Languages (CEFR) [http://www.coe.int/t/dg4/linguistic/cadre1\\_en.asp](http://www.coe.int/t/dg4/linguistic/cadre1_en.asp)

European Association for Computer-Assisted Language Learning (EUROCALL) <http://www.eurocall-languages.org/wordpress>

Gee, J. P. (2003). *What Video Games Have to Teach Us about Learning and Literacy*. New York: Palgrave Macmillan.

Guichon, N. (2012a). *Vers l'intégration des TIC dans l'enseignement des langues*. Paris: Didier.

Guichon, N. (2012b). Les usages des TIC par les lycéens - déconnexion entre usages personnels et usages scolaires. *STICEF*. Vol. 19.

Kukulska-Hulme, A., & Traxler, J. (Eds.) 2005. *Mobile Learning: A Handbook for Educators and Trainers*. Routledge

Lund, A. (2008). Wikis: a collective approach to language production. *ReCALL*, 20(1), 35-54. Lund, A. (2013). Collaboration Unpacked: Tasks, Tools, and Activities. In C. Meskill (Ed.), *Online Teaching and Learning: Language and Culture*: Bloomsbury Academic.

MYLO project. MYLO is a free KS3 and KS4 language learning resource developed for the Department for Education and run by RM Education. <http://www.hellomylo.com>

Pri-Sec-Co (Primary and Secondary Continuity in Foreign Language Teaching), EU project, 2007-2009. [http://eacea.ec.europa.eu/llp/project\\_reports/documents/comenius/all/com\\_mp\\_13402\\_9\\_prisecco.pdf](http://eacea.ec.europa.eu/llp/project_reports/documents/comenius/all/com_mp_13402_9_prisecco.pdf)

Reinders, H. (2007). Big brother is helping you. Supporting self-access language learning with a student monitoring system. *System* 35,1: 93-111. Basingstoke: Palgrave Macmillan.

Reinders, H. & Cho, M. (2011). Encouraging informal language learning with mobile technology: does it work? *Journal of Second Language Teaching and Research*, pp. 3-29

Reinders, H. & Hubbard, P. (2012). 'CALL and autonomy. Affordances and constraints'. In: Thomas, M., Reinders, H., & Warschauer, M. (Eds.), *Contemporary CALL*. New York: Continuum.

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### Notes

\* This is an extended version of Koenraad, A. L. M. (2013). Expert Views on How Language Education May Develop in the Next 20 Years and What CALL Could Contribute. In L. Bradley & S. Thouésny (Eds.), *20 Years of EUROCALL: Learning from the Past, Looking to the Future. Proceedings of the 2013 EUROCALL Conference, Évora, Portugal*. Dublin/Voillans: Research Publishing, pp. 141-148.

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