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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[1] 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)[2]. 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".[3] The American Council on the Teaching of Foreign Languages goes even further and recommends classes of no more than 15 students.[4] 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.[5] According to the program's website, one million people worldwide used it in 2002.[6] 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.[7] 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).[8] 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".[9] 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 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.[10] 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.[11]

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
Factor 1: Thirsty learning	.737	4.09	15.26
Q39: I'm looking forward to learning as long as I'm living.	.717		
Q43: I love to learn.	.648		
Q55: There are so many things I want to learn that I wish there were more hours in a day.	.561		
Q57: Understanding what I read in English is a problem for me.			
Factor 2: Independent learning	.775	1.79	12.22
Q42: If there is something I want to learn, I can figure out a way to learn it.	.652		
Q48: If I discover a need for information that I don't have, I know where to go to get it.	.613		
Q49: I can learn things on my own better than most people.			
Factor 3: Dependent learning	.732	1.34	12.18
Q44: It takes me a while to get started on new projects.	.685		
Q47: I don't work very well on my own.	.648		
Q50: Even if I have a great idea, I can't seem to develop a plan for making it work.			
Factor 4: Determined learning	.654	1.28	10.90
Q40: I know what I want to learn.	.642		
Q41: When I see something that I don't understand, I stay away from it.	-.548		
Q56: If there is something I have decided to learn, I can find time for it, no matter how busy I am.			
Factor 5: Active learning	-.670	1.10	9.42
Q45: In a classroom situation, I expect the instructor to tell all class members exactly what to do at all times.	.619		
Q51: In a learning experience, I prefer to take part in deciding what will be learned and how.	.595		
Q52: Difficult study doesn't bother me if I'm interested in something.			
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 (ps < 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 ps > 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".[12]

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. 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.
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			

	1	2	3	4	5
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.
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.
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.
Rotation Method: Varimax with Kaiser Normalization.

* Rotation converged in 30 iterations.

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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

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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

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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.

Top