

Did We Forget Someone? Students' Computer Access and Literacy for CALL

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ABSTRACT

Students' computer access and literacy in the context of CALL has seen very little empirical investigation. This study surveyed 911 students in basic college foreign language programs to estimate their readiness for hybrid language instruction. The questions on the survey covered issues concerning students' ownership and accessibility of technology tools, their level of ability to perform computer-based tasks, their personal and academic/professional use of multimedia tools, and their interests in hybrid language instruction. We found that students tend not to have adequate access to or literacy in using specialized tools that are often necessary for CALL, tools that students normally do not use or need access to in their daily personal and/or academic computer use. Training is needed not because students do not have computer access or literacy or because they are unable to transfer their computer skills that they have acquired in their personal lives—as other CALL researchers have reported—but because of the specialized nature of CALL tasks. We conclude the article by discussing how administrators and teachers need to consider their own students' computer access and literacy before implementing fully online or hybrid language learning programs.

KEYWORDS

Computer Access, Computer Literacy, CALL, Student Perceptions of CALL, Basic Language Program

INTRODUCTION

Over the past 25 years, technology and language learning has become established in theory, practice, and research. Many language programs now use technology as an integral part of their language curricula (Bañados, 2006; Blake, 2005; Chenoweth, Ushida, & Murday, 2006; Sanders, 2005; Strambi & Bouvet, 2003). How the field developed to this point is well documented in over 25 years worth of CALICO and other computer-assisted language learning (CALL) journal articles. The field has matured to such a state because technology has become more reliable and robust (Kern, 2006; Warschauer, 2004), technology is viewed more positively by teachers (Amiri, 2000; Blake, 2001; Egbert, Paulus, & Nakamichi, 2002; Hanson-Smith, 2003; Jones, 2001; Meskill, Anthony, Hilliker-Vanstrander, Tseng, & You, 2006; Yule, 2006; Zena, 2006) and students (Barr, 2004; Biesenbach-Lucas, 2007; Blin, 2004; Daud & Husin, 2004; Lee, 2004; Nikolova, 2002; Shin, 2006), and because technology has become more ubiquitous in the language learning classroom (Bax, 2003; Chambers & Bax, 2006; Chun, 2007). CALL research today tends to focus on whether or not language-learning tasks or activities presented via the computer can support the same type of linguistic interactions and promote language learning as well as (or even better than) tasks or activities conducted in the regular language classroom (Blake, 2008). Other CALL research focuses on how learners create identity in online environments (Huffaker & Calvert, 2005; Kern, Ware, &

Warschauer, 2004; Spiliotopoulos & Carey, 2005; White, 2007) and how computer-mediated-communication (CMC) can promote inter-cultural and/or pragmatic development (Abrams, 2002; Belz, 2005; Osuna, 2000; Zeiss & Isabelli-Garcia, 2005; Zena, 2006). Current research is also concerned with the behaviors of learners (Barile & Durso, 2002; Chun & Payne, 2004; Koch, Mueller, Kruse, & Zumbach, 2005; Smith, Alvarez-Torres, & Zhao, 2003; Tanskanen, 2001), the effectiveness of multimedia tools for language learning (Al-Hamly, 2003; Goertler & Winke, 2008; Grgurović & Chapelle, 2007; Harker & Koutsantoni, 2005; Heift, 2003; Kern, 2006; Salaberry, 2001), and learners' attitudes toward CALL and technology in the language classroom in general (Al-Hamly, 2003; Ayres, 2002; Barr, 2004; Chen, Belkada, & Okamoto, 2004; Lee, 2004; Stracke, 2007).

Yet, one piece of the story on the development and use of CALL for language learning appears to be missing from the literature: information on students' computer access and literacy. One might assume that due to their age, students have computer access, are computer literate, and enjoy using computers. The next logical jump many of us take is that based on these assumptions, students will readily adapt to and accept language instruction that involves CALL (Barrette, 2001). However, with the exception of Barrette, who investigated her students' preparedness for using CALL tasks in the foreign language classroom, there is a clear dearth of empirical research in the CALL field that directly addresses these notions. Knowing about students' computer access and their computer literacy is extremely important, especially for language programs that are turning to CALL to implement hybrid (or blended)¹ language learning curricula to address logistical language program administration problems, such as teacher shortages, increases in enrollments, and the desire to meet the language education needs of nontraditional students (Goertler & Winke, 2008). Before embarking on a language curriculum program overhaul, that is, creating hybrid or fully online courses either from scratch or to replace classes previously taught solely (or mostly) face to face in the language classroom, the targeted language learning population needs to be surveyed in terms of their computer access and literacy to understand the potential buy-in and feasibility of the project and to ascertain what types of supplemental access and training need to be provided.

Computer Access and Literacy

Computer access denotes access to both hardware and the internet. For example, the last US Census found that 51% of all households had access to computers and 42% had access to the internet (US Census Bureau, 2001). The 2001 report by the Bureau indicated that technological resources increased with income. Of the households with an income less than \$25,000 only 28% had computer access and 19% internet access. Households with children more often had computers than households without children. Fifty-seven percent of children were reported as having access to a computer at home and at school, 23% only at school, 10% only at home, and 10% had no access, according to the census report. The US Department of Commerce (2004) reported similar statistics. It found that overall household internet access is at 54.6%, computer access is at 61.8%, and broadband internet accessibility is at 19.9%.

Computer literacy, on the other hand, is defined as "computer skills and the ability to use computers and other technology to improve learning, productivity, and performance" (US Department of Education, 1996, as cited by Barrette, 2001, p. 6). The term "other technology" includes the internet. Some studies have also differentiated personal computer literacy from educational or professional computer literacy. One study that viewed computer literacy in terms of internet savvy was reported in Foster (2006), who defined computer literacy as "the ability to analyze and communicate information available online" (p. 1). Foster reported

discussions from an information literacy conference. According to Foster, participants at the conference recommended including information literacy in the No Child Left Behind Act. This recommendation was based in part on results reported at the conference by the Educational Testing Service (ETS). By having 3,000 college students and 800 high-school students take ETS's Information and Communication Technology Literacy Assessment (now called the iSkills assessment),² ETS, according to Foster, found that only 13% of the participants achieved a score that qualifies them as computer/information literate. Some of the skills tested were whether the students could limit a search to only include relevant materials, whether they were able to identify biased sources, and whether they were able to identify the authority of the source. Likewise, Messineo and DeOllos (2005) from the field of sociology administered a survey to 233 Midwestern college students to investigate the students' perceptions of their own computer skills. The purpose of the study was to assess students' readiness for technology-enhanced teaching and make departmental recommendations. Almost all students (99.6%), who ranged from freshmen to graduate students in college, claimed to be familiar with computers; 97% reported they knew how to use a computer by the time they started college. The majority of the students (74%) reported enjoying working with computers and reported using computers for classes, getting things done, and for social networking. Most students (69.5%) reported being introduced to computers in a school setting rather than at home. Ninety-eight percent of the students had access to a computer where they lived. In terms of their experience, more than 90% of the students both experienced and felt comfortable with private internet use, private email use, word processing and internet use for a course, email use for a course, and web-based grade books. Three quarters or more were both comfortable and had experienced web-based course support, online library resources, and presentation software. Seventy-six percent had had experience data processing, but only 51% felt comfortable with it. Fifty-nine percent reported that they felt comfortable with completing tests online, while only 50.2% had taken online tests. Additionally, 41.8% reported being comfortable submitting homework online, while only 27% had done so. Finally, 35.2% said they would feel comfortable with an online course, but only 22.3% had completed one. Comparing students, Messineo and DeOllos found that sophomores felt the most computer savvy and juniors the least, with freshmen, seniors, and graduate students falling in between. Minority students had less prior experience with technology and continued to use technology less often. However, minority students identified themselves as more skilled with computers than Caucasians. Female students in general reported less experience, less comfort, and less use of technology.

If students in classes with a CALL component are similar in composition to those described by the demographics above in terms of computer access, there is cause for concern. Such access is hardly sufficient for hybrid or online learning courses that include video streaming, especially if the intent of such courses is to reach more nontraditional students in remote locations (Blake, 2008) or to increase the access of undergraduate foreign language classes to more students in general (Goertler & Winke, 2008). However, there is reason to believe that traditional, undergraduate-level college students are not similar to the population at large in terms of computer access and literacy. First of all, many on-campus college students are required to own computers (see Gates, 1998). Yet, we still do not have a comprehensive picture of the computer access and literacy of our target demographic—those learning foreign languages on US campuses.

The only CALL article that specifically addressed students' computer access and literacy was a study of students' preparedness for CALL conducted by Barrette (2001). In her classroom-based study, Barrette found that out of 34 students, 31 were familiar and comfortable with word processing, 19 with CD-ROMs, 13 with email, 12 with printing from the web, 9 with searching the web, 5 with downloading from the web, and only 1 with developing a

home page. After providing the students with 90 minutes of training and practice in conducting several CALL activities, students exhibited an increase in computer literacy and comfort in using CALL techniques. However, Barrette also pointed out that students' comfort and familiarity with multimedia tools decreased if they did not use them. She suggested that in order to improve students' computer literacy, teachers need to offer training and continuously have students apply the learned skills.

The results from Barrette's (2001) study have been echoed in other research papers. Researchers in the CALL field have long recognized that CALL teachers must be computer literate (Daetsch, 1990; Kolaitis, 1990) and trained in using CALL materials (Burston, 1991; Hoch, 1985; Lontas, 2002). Others have advised that students must also be adequately trained on CALL materials (Hoven, 2006; Kabata & Wiebe, 2005). Student training may need to be mandatory, both because not all students will attend voluntary training sessions (Burston, 1991) and because students often do not use help functions built into CALL technology (Liou, 1997). Some studies have recommended that students receive basic computer training (Johnson & Brine, 2000; Kornum, 1993). Lee (2005), however, reported that even after training, some students in a CALL program struggled with the technology. Finally, access to tech support is also an important part of CALL (Chapelle, 2005; Kabata & Wiebe, 2005). Without tech support, students may rely too much on teachers to provide such support, which may overburden the already complex roles of the CALL teacher (Sánchez-Serrano, 2008). What is unique about Barrette's study is that she explained why the training and support is needed; the students from the onset were lacking in some of the fundamental computer skills that were necessary for the language course which was integrated with CALL materials. However, Barrette's study was small in that it was classroom based and included only 34 participants. Messineo and DeOllos (2005) study was larger, but was not specific to students learning a foreign language. Thus, the field is in need of a larger scale study that investigates foreign language learners' computer access and literacy.

THE STUDY

Context and Research Aims

In this article, which is a partial replication of Barrette (2001), we attempt to fill this gap by investigating CALL readiness at Michigan State University (MSU). We are also interested in conducting this type of research because we want to know the feasibility of implementing hybrid language learning classes on our campus. We investigated this possibility by adhering to Barone and Hagner's (2001) and Donaldson and Haggstrom's (2006) suggestions to survey targeted students before implementation to assess student preparedness, to estimate potential buy-in, and to guide the implementation plan. The results reported here are from 911 students in first- and second-year undergraduate French, German, and Spanish classes. We also qualitatively discuss the students' preparedness for CALL and their views on hybrid language-learning environments.

The study was conducted at MSU as part of a larger project to improve language instruction on campus. The university has no college-wide foreign language requirement, though some colleges within the university have a language requirement. Most undergraduate students at the institution are from within the state (in Fall 2007, 88% were from Michigan). The majority of the students are Caucasian (73.9%), female (54%), and under 24 (80.6%). Since Fall 2007, the university has required entering freshman to have a computer. In a study conducted earlier (Goertler & Winke, 2008), we found that the use of technology in the language classroom at MSU was lower than at other Midwestern universities, even though MSU's

Spanish program offers a hybrid course and the German program offers an experimental, third-year German hybrid class.³ Additionally, our prior research found that class sizes at MSU were larger than at other Big Ten universities, with most classes at MSU filled at or beyond capacity, which at MSU is normally capped at 30 students. A possible solution to the class size problem is the implementation of a hybrid curriculum in some of the larger language programs, which would increase enrollment potential while decreasing class size (Sanders, 2005). Thus, part of our study's aims was to assess students' readiness for hybrid courses.

Participants

The survey sample included 911 students from intact classes who were taking basic-level French ($n = 200$), German ($n = 134$) or Spanish ($n = 577$) at MSU. At MSU, the basic level is the first two years of study within a four-year language program. Courses in the French, German, and Spanish basic language programs at MSU focus on all four skills with an emphasis on culture and tend to be language focused rather than content based. The average age of the participants was 19.83; 95% ($n = 862$) were between the ages of 18 and 22. All but 10 were under the age of 30⁴. Of those who identified their gender (25 did not), 319 were male, and 567 were female. Most of the participants identified themselves as native speakers of English ($n = 845$)⁵. Of the 911 participants, 442 were in their first year of language study, and 302 were in their second. Most of the students in the sample (59%) were underclassmen (freshmen = 261; sophomores = 276; juniors = 187; seniors = 162). Tables 1, 2, and 3 provide summaries of the participants by target language and (a) level of study, (b) gender, and (c) academic level, respectively.

Table 1
Participants by Target Language and Level of Study

Year	Class level	Language			Total	Percent
		French	German	Spanish		
1	100	143	24	275	442	49
2	200	57	110	302	469	51
Total		200	134	577	911	100

Table 2
Participants by Target Language and Gender

Gender	Language			Total	Percent
	French	German	Spanish		
Unidentified	3	3	19	25	3
Male	59	59	201	319	35
Female	138	72	357	567	62
Total	200	134	577	911	100

Table 3
Participants by Target Language and Academic Level

Academic level	Language			Total	Percent
	French	German	Spanish		
Unidentified	4		10	14	2
Freshmen	40	45	176	261	29
Sophomore	62	39	175	276	30
Junior	56	25	106	187	21
Senior	36	21	105	162	18
MA/MS	1	0	0	1	0
Ph.D.	1	1	1	3	0
Other	0	3	4	7	1
Total	200	134	577	911	100

Materials

The data for this study were collected via a paper-based survey compiled at MSU by the researchers and a team of three second language studies Ph.D. students.⁶ The questions on computer literacy and preparedness for using technology in the foreign language classroom were based on a survey constructed by Davies (2007). We presented the survey on paper to avoid any biases an online survey may have generated; we feared an online survey would engender more responses from those familiar with technology or comfortable working online. Additionally, the paper-based survey allowed us to present the survey to intact classes, regardless of whether the class was in a computer lab or not. The questions that appeared on the survey and which were used for this paper are presented in the appendix.

Procedure

The survey was piloted in October 2007 on 28 third-year students in an intact German class at MSU. The students were asked after taking the survey to provide feedback to the researchers. The survey was amended according to the students' oral and written feedback. Questions the students felt were redundant were eliminated, some wording was changed, and the survey was shortened considerably. Two weeks after pilot testing, the survey was printed and sent via campus mail to all first- and second-year French, German, and Spanish instructors on the MSU campus.⁷ Each instructor received one packet of surveys for each class he or she was teaching. Each packet contained one survey for each student in the class, the number having been supplied by the MSU Registrar's Office. The instructors were emailed with information about the surveys and provided with a duplicate information sheet within each packet of surveys. The instructors were asked to give the surveys out to the students during class time, to collect the surveys during class, and return them to the researchers via campus mail within 2 to 3 weeks. The first page of each survey was an informed consent form. Students were instructed to read the informed consent. If they agreed to take the survey, they provided their consent by tearing off the consent form, filling out the survey anonymously, and returning only the survey to their instructor. Instructors gathered all the completed surveys and returned them via campus mail to the researchers. In total 1,886 surveys were sent to first- and second-year teachers of French, German, and Spanish. The return rate was therefore 48.30%. Data were

entered into an Excel spreadsheet by batch scanning the survey forms and using Office Remark to record the answers automatically. Data were then imported into SPSS for analyses.

RESULTS

Additional Demographic Information

The survey allowed us to find out a bit more about the 911 participants in our sample. Question 6 on the survey asked whether the participants were learning the language as a requirement or as an elective. The demographic information supplied by the participants revealed that 438 (48%) were taking the language as a requirement for their major. Ninety (10%) indicated they were majoring in the language, and 88 (10%) indicated they were taking the language as a minor. Three-hundred and fifty-three (39%) were taking the language as an elective. Seventy-two (8%) indicated that they were taking the language for "other" reasons, such as for fun or to read/understand music better.⁸

In response to question 7 (Why are you learning this language?), 629 (69%) stated that they were learning the language because they were interested in the culture and/or wanted to use the language for travel. Four-hundred and sixty-seven (51%) indicated they thought the language would be important for future employment. Sixty-three (7%) indicated that they want to teach the language. Three-hundred and fifty (38%) indicated that they wanted to use the language to communicate with native speakers.

Ownership and Accessibility of Technology Tools

Question 8 on the survey asked the participants about their ownership and/or access to the following technology tools: computers, laptops, computer speakers, headphones, microphones, printers, the internet, webcams, digital cameras, and video cameras—technology tools that may be used to access online or CALL materials.

The self-report data indicated that almost all students own a computer. Out of the 899 participants who answered this part of the survey, only 14 (2%) indicated that they did not own a computer. (Twelve participants did not report on their ownership of a computer.) Out of the 14 who reported that they did not own a computer, 11 marked that they can gain access to one for use easily (either by borrowing one or using one in a lab). Two of the 14 indicated that they could only find or borrow a computer with difficulty (participant 975,⁹ a 20-year old female, native English speaker learning Spanish and participant 59, a 21-year old female native English speaker learning French), and one stated that she could not gain access to a computer (participant 928, a 19-year old female native English speaker learning Spanish). Of the 885 who indicated that they owned a computer, 229 (25% of 899) owned two or more. The most common combination of more than one computer was a desktop and a laptop ($n = 208$; 171 owned a PC desktop/laptop combination, 16 owned a Mac desktop/laptop combination, 18 owned a PC desktop and a Mac laptop, 3 owned a Mac desktop and a PC laptop). Seventeen indicated that they owned two laptops (a PC and a Mac). Four indicated they owned two desktops (a PC and a Mac).

The data revealed that most students owned or could get access to computer speakers or headphones. On the other hand, ownership of a computer microphone was at 35%, and 12% reported they could not gain access to one. Everyone indicated that they could gain access to the internet, with 95% reporting that they had internet connection either at home or in their dorm. Webcam ownership was reported at 37%. Most (72%) indicated that they owned

digital cameras, while 21% stated that they owned video cameras. Twelve percent noted that they could not gain access to either a webcam or a video camera, and 3% stated they could not gain access to a digital camera. The data generated by the survey in relation to question 8 is summarized in Table 4.

Table 4
Summary of the Participants' Ownership of and Accessibility to Technology Tools

Tool	Own/have it.		Can find it easily.		Can find it with difficulty.		Can't get it.		Total responses	Missing data
PC desktop computer	279	32%	537	62%	35	4%	19	2%	870	41
PC laptop	640	72%	174	20%	42	5%	30	3%	886	25
Mac desktop computer	38	4%	471	55%	204	24%	139	16%	852	59
Mac laptop	190	22%	357	41%	179	21%	143	16%	869	42
Computer speakers	621	70%	189	21%	62	7%	15	2%	887	24
Headphones	820	92%	59	7%	9	1%	6	1%	894	17
Microphone	308	35%	183	21%	279	32%	102	12%	872	39
Printer	736	83%	134	15%	19	2%	2	0%	891	20
Internet access	848	95%	40	4%	4	0%	0	0%	892	19
Webcam	327	37%	240	27%	208	24%	103	12%	878	33
Digital camera	635	72%	168	19%	55	6%	25	3%	883	28
Video camera	185	21%	319	37%	259	30%	106	12%	869	42

Level of Ability to Perform Computer-based Tasks

Question 9 on the survey asked the participants to indicate their level of ability to complete a series of computer-based tasks, such as typing in non-English language characters (e.g., 'ë' or 'é'), inserting pictures and graphs in documents, and making sound recordings and saving them to a disc or hard drive. The self-report data revealed that more than 90% of the participants who answered these questions could very easily send and open email with attachments, navigate the internet, and post messages online. Over 80% stated that they very easily save and download files from the internet, create a new, free email account, play video and audio files, and start or install new programs. Between 71% and 75% of the students who answered these questions indicated that they could easily insert pictures and graphics in their documents, create audio CDs, copy files onto a CD or DVD, create tables, or copy a track from an audio CD onto a computer and store it as an MP3 file. Just over half (51%) indicated they could manage compressed files. More difficult tasks (which less than 40% indicated they could easily do) were the following: inserting audio or video into documents, typing in non-English characters, making sound recordings, uploading a video recording, and editing video. The most difficult task was developing and maintaining a website (17% said they could do it easily, and 25% indicated they could not do it at all). A summary of the data from question 9 is presented in Table 5.

Table 5
Participants' Abilities to Perform Certain Computer-based Tasks (Organized from the Easiest to the Most Difficult)

Computer task	<i>Not at all</i>		<i>With difficulty</i>		<i>With very little difficulty</i>		<i>Easily</i>		Total responses	Missing data
17. Send emails with attachments and open emails with attachments	3	0%	5	1%	53	6%	832	93%	893	18
7. Navigate the internet	5	1%	10	1%	56	6%	821	92%	892	19
13. Post messages on an online bulletin board (<i>Facebook, Craigslist, etc.</i>)	6	1%	17	2%	48	5%	820	92%	891	20
8. Save and download files from the internet	2	0%	16	2%	82	9%	791	89%	891	20
18. Create a new free email account online	5	1%	26	3%	75	8%	784	88%	890	21
11. Play a video on a web site on my computer or stored on a DVD	5	1%	21	2%	91	10%	773	87%	890	21
10. Play audio files from the web and from my computer	4	0%	14	2%	106	12%	768	86%	892	19
19. Start or install a program directly from a DVD or CD	6	1%	30	3%	99	11%	756	85%	891	20
4. Insert pictures and graphs in my documents	5	1%	32	4%	184	21%	673	75%	894	17
12. Create an audio CD from a set of MP3 files stored on my computer's hard drive	24	3%	55	6%	147	17%	661	75%	887	24
20. Copy files from my computer's hard drive to a CD or DVD and vice versa	18	2%	63	7%	162	18%	640	72%	883	28
9. Create tables in my documents	10	1%	59	7%	180	20%	641	72%	890	21
21. Copy a track from an audio CD onto my computer's hard drive and store it in MP3 format	21	2%	71	8%	167	19%	630	71%	889	22
12. Download and unzip a ZIP file	77	9%	154	17%	206	23%	450	51%	887	24
5. Insert audio and video in my documents	52	6%	236	26%	255	29%	350	39%	893	18
3. Type non-English characters in my documents	43	5%	195	22%	322	36%	333	37%	893	18
23. Make a sound recording using audio editing software and save it on a disc or hard drive	95	11%	258	29%	215	24%	323	36%	891	20

24. Upload a video recording to my computer from a camcorder and to a video editing software package	109	12%	242	27%	223	25%	314	35%	888	23
25. Edit video	178	20%	298	34%	198	22%	215	24%	889	22
6. Develop and maintain a website	223	25%	314	35%	202	23%	151	17%	890	21

Multimedia Tools for Personal and Class Use

Question 10 on our survey asked the participants to indicate whether or not they used certain multimedia tools in three environments: (a) their personal lives, (b) their nonlanguage classes, and (c) their language classes. We also asked the participants to indicate whether or not they believed the particular tools would be useful for language learning. Most of the participants (around 80% or above) indicated that they use public websites, social networking sites (like *Facebook* and *MySpace*), and communication devices (like email, text messaging, and instant messaging) in their personal lives. Few indicated that these tools are used for instruction in their nonlanguage or language classes. Few indicated that they believed these tools, except for public websites and email, would be useful for language learning. Ipods, chat rooms, and video games were recorded as used in the personal lives of many of the participants (73%, 63%, and 58%, respectively). Between 1% and 5% of the participants indicated that such tools were used in either their nonlanguage or language classes. Between 8% and 13% believed they would be useful for foreign language learning. Similar results were obtained concerning video (on or offline), blogs, podcasts, discussion boards, and videochatting; more participants indicated that they used them in their personal lives than those who indicated that they used them in their classes, be they nonlanguage or language classes. In each case, according to the participants, nonlanguage classes used these specific tools more than language classes, and few participants (less than 25% in each case) stated that they believed they would be useful for language learning. The data from question 10 are summarized in Table 6.

Table 6
Participants' Media Use in Various Environments (Organized by Most Used to Least Used in Personal Life) and Their Beliefs on the Usefulness of the Tools for Language Learning

Media	I use this for my personal life.		We use this in my nonlanguage classes.		We use this in my language class.		I think this is/would be useful for language learning.	
1. Public websites	789	87%	346	38%	249	27%	255	28%
18. <i>Facebook/MySpace</i>	770	85%	37	4%	17	2%	36	4%
6. Email	769	84%	533	59%	556	61%	271	30%
21. Text messaging	727	80%	16	2%	5	1%	34	4%
8. Instant messenger	722	79%	27	3%	14	2%	98	11%
16. CD-ROMs/DVDs	696	76%	142	16%	186	20%	202	22%
20. Ipods	669	73%	21	2%	13	1%	77	8%
7. Chat	571	63%	38	4%	31	3%	114	13%
15. Computer games	530	58%	24	3%	19	2%	119	13%
12. Video/audio materials	517	57%	230	25%	391	43%	248	27%
13. Online digital video/audio	509	56%	179	20%	292	32%	205	23%
4. Blogs	402	44%	87	10%	18	2%	111	12%

14. Podcasts/videocasts	346	38%	71	8%	34	4%	129	14%
10. Discussion boards	316	35%	274	30%	68	7%	215	24%
9. Videochat	308	34%	14	2%	9	1%	114	13%
17. Online exercises/quizzes	275	30%	416	46%	358	39%	307	34%
2. Course websites	272	30%	561	62%	497	55%	282	31%
3. ANGEL ¹⁰	227	25%	634	70%	611	67%	287	32%
11. Listservs	204	22%	122	13%	36	4%	108	12%
19. <i>Second Life</i>	122	13%	18	2%	8	1%	46	5%
5. Wikis	12	1%	125	14%	45	5%	107	12%

Interest in Hybrid Language Instruction

One of the last questions in the survey asked the participants if they would be interested in taking a hybrid language class. The results were mixed, with 22% stating yes, 35% stating maybe, and 39% stating no. Four percent did not answer the question (see Table 7).

Table 7
Number of Participants Interested in Taking a Hybrid Language Class

Response	Frequency	
Yes	204	22%
Maybe	317	35%
No	352	39%
Missing data	38	4%
Total	911	100%

We provided the participants space in the survey to respond qualitatively to anything which appeared on the survey. Several addressed the question above (question 14 in the survey) in particular. Below are comments from 9 of the participants who we believe wrote representative answers or comments about why MSU students would or would not be interested in taking a hybrid language class. The first three indicated that yes, they would be interested in taking a hybrid language class. The next three selected maybe, and the last three chose no.

Yes, I would be interested in taking a hybrid language class because...

Example 1: I think the most important use of technology is to hear native speakers because we tend to get used to the sound of our professor's voice/ accent. (Participant 63, age 22, male, studying French)

Example 2: I think watching videos rather than reading about them would be very beneficial. (Participant 332, age 20, female, studying German)

Example 3: We do not utilize all the aspects that technology offers us today. With more options available I could see this working better. (Participant 846, age 23, female, studying Spanish)

Maybe, I would be interested in taking a hybrid language class...

Example 4: I've used technology in my Spanish class in high school and if used properly can really help but it must be used properly. (Participant 523, age 18, female, studying Spanish)

Example 5: Technology is a good complement to education but it cannot replace student-teacher interactions. Video games and online notecards make studying more fun and less time consuming. However, classrooms force students to participate in exercise while online classes let students be lazy. (Participant 378, age 18, female, studying German)

Example 6: I find certain aspects of technology useful but it in no way compares to human interaction speaking the language. (Participant 356, age 19, male, studying German)

No, I would not be interested in taking a hybrid language class because...

Example 7: Technology and independent study are no substitute for face to face speaking. This is why attendance is currently so important. Language teaching is simply not something that needs technology to be effective. (Participant 165, age 20, male, studying French)

Example 8: I don't think language classes should be technology based because then you don't have the face-to-face real person can ask questions component. I would feel lost. (Participant 66, age 18, female, studying French)

Example 9: I would strongly discourage changing language classes to online courses. I think it would be more difficult to learn and less interesting. I love coming to my language class and if it were to be changed to an online course I don't think I would take the language anymore. (Participant 450, age 19, female, studying German)

DISCUSSION

Access to Tools for CALL

Computer access for CALL must include more than just access to a computer connected to the internet. One of the major findings of this research project was that technology tools such as headphones, microphones, webcams and digital cameras lag far behind students' access to computers and the internet in general. Today's CALL classes, especially hybrid and distance learning classes, may rely heavily on oral computer-mediated-communication (CMC) and the recording of voice for the practice and testing of oral skills. Programs such as *Audio Dropboxes*¹¹ and *Audio Assignments*,¹² as well as Wimba-supported software tools, require students to use a microphone and/or webcam to participate in oral tasks, develop their oral skills, and/or assess their oral skills via the internet. Without access to the appropriate hardware, such tasks are impossible. Poor access and/or literacy in using such tools will make practice difficult or anxiety laden. Thus, students with poor access and/or literacy in using technology tools will be at a major disadvantage in hybrid or fully online CALL classes because we know that to learn a foreign language, practice (output) is crucial for development (Gass & Mackey, 2007; Swain, 2005). Colleges and universities that have CALL classes that take advantage of such technology tools for output practice will need to be sure that students are prepared to either

buy the hardware ahead of time or know where on campus the hardware can be found and borrowed (hopefully for an extended period of time—preferably for the whole semester).

Chapelle (2005) warned that there is a large, unmet need for specialized software and technical support in CALL. She noted that if technology is to be used extensively and creatively in language teaching and research, teachers and researchers have the right to technical support. Likewise, students have the right to such support and to support in buying or gaining access to the specialized tools for CALL. This support may not need to be financial, but instead informational. For example, at MSU microphones, webcams and video cameras are readily available for use in (or checked out from) the Language Learning Center on campus (which manages and maintains an extensive language learning and teaching lab); however, it appears, based on the results of our survey, that students in the foreign language classes do not know about the availability of such tools in the lab. Teachers may not be disseminating information about the hardware availability to the students, the teachers themselves may not know about these tools, or students may not know that these tools are available because the use of them is currently not required by their courses—teachers probably do not disseminate information about technology tools that are not necessary for the course. Of question at MSU is whether many teachers know about the computer lab's offerings. Nonetheless, if classes begin assigning tasks that require the use of microphones and/or cameras, information and training on access, availability, and use will be essential. Lafford and Lafford (2005) would agree; they identified several challenges to the implementation of CALL and CMC activities. Among them were costs, compatibility issues, and context and purpose-specific adaptations. Thus, teachers and language program directors may want to consider obtaining options for students to purchase discounted hardware when the students are enrolled in classes that are heavily based on oral CMC and audio assignments. The function of language labs may need to move into providing information to students on where to buy both economical and highly functional hardware for CALL (such as microphones and webcams), as well as offering training online or over the phone in how best to use them. This may be especially important for nontraditional language learners who may be accessing classes from a remote location. The implementation of hybrid or fully online classes should increase the population of this type of student (Blake, 2008). Language programs need to be prepared to offer these students the types of specialized technological support they will need.

Personal Versus Academic/Professional Computer Literacy

Our survey results indicate that there is a personal versus academic/professional computer literacy divide among our students, such as suggested by Foster (2006) and Messineo and DeOllos (2005). In Table 5 above, the participants' abilities to perform certain computer-based tasks are listed from high to low. As the participants reported, they can easily work with email, navigate the internet, post messages online, copy files from the internet, and create email accounts. They can play videos, audio, and upload new programs. However, they have a harder time working with multimedia graphics in word-processing programs, creating audio or video files, or working with advanced features in word-processing programs, things that may be necessary in a CALL course. Even less well known is how to work with compressed files, type diacritics, make sound recordings, or upload or edit video. These types of activities may be routine in a CALL class that asks students to (a) create video portfolios as part of formative or summative assessment, (b) perform tasks that involve writing with diacritics on the computer, (c) download and watch videos, or (d) make digital voice recordings to be critiqued by the teacher and/or other students. Least well known, as was also found by Barrette (2001), is how to create and maintain a website. However, we assume that this means students do not know HTML, which is easy to understand since students mostly use website

creation networks like *Facebook* and *MySpace*. Language classes, therefore, should not expect students to know HTML.

This study provides further evidence in support of Ushida's (2005) claim that in order for students to have a positive experience in a hybrid or fully online distance language-learning class, they must be trained before or at the very beginning of class on how to perform specific online language-learning tasks. Ushida noted that students' problems with anxiety at the beginning of distance learning courses was not a lack of computer familiarity, but rather a lack of computer skills transfer (from their personal use to their academic/professional use). However, our study seems to point out that it *is* a lack of computer familiarity in terms of access to extended computer tools (beyond the normal hardware that comes with initial computer purchase). Training is needed not because students do not have computer access or literacy or because they are unable to transfer their computer skills to the CALL domain, but because of the specialized nature of CALL and CALL tasks. Yet, we expect that as today's specialized CALL tools become integrated into computers (e.g., newer laptops and Macintosh computers have imbedded webcams in the frame of the computer monitors), access and ability to use such tools will increase. Skills that go beyond how computers are used in daily life and that involve more technology tools than are owned by the majority of students will continue to be an issue for CALL and must remain on the list for training, technical help, and continued practice throughout the semester.

The Untapped Potential of Multimedia for CALL

Our results indicated that some computer tools are underutilized in the foreign language classroom. Table 6 displays the participants' media use in various environments. The data are organized from most used to least used in the participants' personal life. We believe it is striking to note that although 87% of the participants use public websites, only 27% reported that they are used in their foreign language classes. Thus, there is a mismatch between how students use websites and how teachers use websites as part of their materials for foreign language instruction. If students are using them for day-to-day communication and information sharing, for coconstructing identities and creating discourse communities (through such websites as *Facebook* and *MySpace*), why aren't the classes? The students' ability to analyze and communicate certain information available online may be an untapped potential in our foreign language classrooms. Many researchers have discussed the importance of allowing learners to create and maintain identity in online environments (Huffaker & Calvert, 2005; Kern et al., 2004; Spiliotopoulos & Carey, 2005; White, 2007). Perhaps one way of doing this is to mirror in our language classes how the students are currently doing this in their personal online lives. Other multimedia tools commonly used by the students, yet very seldom used in language classes, include instant messaging, iPods, chat rooms, computer games, blogs, podcasts/videocasts, discussion boards, and videochat. In light of this finding, newer hybrid or distance learning classes may want to consider using such tools as part of the curriculum. To do so, teachers and curriculum developers need to find out and understand how students currently use these technologies and then use them in similar ways in the foreign language classroom. Part of this process also involves understanding the content and genre of the students' native language communication using such tools and creating authentic language-learning situations that tap into that type of language use.

Students' Buy-in in Terms of Hybrid Language Learning Classes

We asked the participants if they would be interested in taking hybrid language learning

classes on our campus. We had almost an even split between *yeses*, *nos*, and *maybes*, with slightly more indicating no than maybe, and slightly more indicating maybe than yes. The overarching fear seemed to be that a hybrid curriculum would take away face-to-face time with the teacher and other students. While almost half of our participants (48%) were learning their foreign language as a requirement for their major, many were studying the language as an elective (39%). Most (69%) indicated that they were learning the language because they were interested in the culture and/or wanted to use the language for travel. Most of our participants were freshman or sophomores, whose other classes on campus tend to be larger than the foreign language classes. This could be part of the reason why there is a slight lack of interest in online language learning. Learning in the foreign language classroom is a highly social endeavor (Byrnes & Maxim, 2004); not knowing how that socialization aspect can be or would be carried over into an online environment, or knowing that the socialization processes online are different, may cause students to pause before stating that they would take a hybrid language learning class. Part of the reported reason for taking the language as an elective was the experience of learning in a small, close knit community of students. One of the major reported drawbacks in online language learning is a lack of practice in face-to-face oral communication (Chenoweth et al., 2006; de la Fuente, 2003; Freiermuth & Jarrell, 2006; Gutierrez, 2006; Sanders, 2005). However, other researchers have found that forms of technology-mediated communication, especially synchronous chat and other forms of CMC, may supplement face-to-face communication with positive developmental results, including in the areas of vocabulary, morphology, and oral and pragmatic skills (Belz, 2001; Belz & Kinginger, 2002; Blake, 2005, 2008; Hampel, 2006; Kern, 2006; Payne & Ross, 2005; Salaberry, 2000a, 2000b, 2001; Thorne, 2003; Warschauer, 2004). Thus, getting student buy-in may depend on word of mouth after an online or hybrid course is created. Other students may resist online or hybrid courses no matter what the reputation of the course because preference and language learning style are major factors in course selection, especially when more than one option for learning is available.

CONCLUSION

In this study we surveyed 911 students of basic (first two years) college-level French, German, and Spanish to create a picture of their computer access and computer literacy in preparation for discussions on implementing more technology-enhanced language-learning classes and to understand foreign language students' computer access and literacy in broader terms. Barrette (2001) noted the importance of preparing students for a hybrid curriculum through training and discussed students' preparedness for CALL tasks. Barone and Hagner (2001) and Donaldson and Haggstrom (2006) stressed that before implementing a hybrid or online curriculum, the program directors should conduct a needs analysis that includes assessment of students' computer access and literacy. This study aimed to do that and was a partial replication of Barrette; however, our study was completely survey based and included a much larger population.

We found that students in foreign language classes today are as computer literate and computer savvy as one would expect, especially in terms of their use of computers and the internet for personal communication. Students are fluent in using the computer for day-to-day tasks such as downloading and sharing music and files, communicating via email, text messaging, and socializing and creating identity and communities via online social-networking sites. They use the internet to navigate and search for information, both personal and educational. In terms of readiness for advanced CALL tasks (e.g., creating and editing audio files, uploading audio and video to the Web, and editing websites or video), students tended overall to report that they did not have adequate access to or literacy in the appropriate tools.

Microphone and webcam access was reportedly low. The creation, editing, and uploading of audio and video were reported as troublesome or impossible for many. In this sense, training is indeed very much needed, even though students themselves are highly computer literate. It is not that they are unable to transfer their computer knowledge set to the CALL classroom; rather, they are not equipped to do the specific CALL tasks that many hybrid and distance learning classes are implementing. The tasks tend to be novel to the students; they need not only preclass training, but also technical support throughout the semester. This is not new information, but what is new is detailed and robust evidence of why the training is necessary: computer literacy for CALL entails more than general computer literacy as defined by the US Census Bureau or the Department of Commerce. Computer literacy for CALL includes having access to, and being familiar and comfortable with, tools for foreign language CMC and written and oral skills development via the computer. When learning a language with a novel script, diacritics, or alphabet, computer literacy for CALL includes skills in word processing with those functions. Thinking of CALL computer literacy in these terms will aid program developers who are embarking on the creation of fully online or hybrid language learning classes.

To answer the question we posed in the title of this paper (Did we forget someone?), we think that yes, we have. In the last 25 years of CALL research, very little attention has been paid to the computer access and computer literacy of our students. With the exception of Barrette (2001), CALL researchers and pedagogues have not directly asked students about their preparedness for CALL before implementation, even though this is highly recommended (Barone & Hagner, 2001; Donaldson & Haggstrom, 2006; Levy, 2007). Many researchers have concluded that students are in need of training and tech support to successfully participate in CALL tasks (e.g., see Hoven, 2006; Kabata & Wiebe, 2005; Murray, 2005), but adequate, specific reasons as to why have not been illuminated. We need to know what equipment our students have and what they are literate in to assess what training they will need before implementing hybrid or distance-learning classes and beginning instruction in CALL classes because CALL is specialized. Regularly surveying the students will help teachers and administrators design appropriate tasks, harness new technologies students already use in their personal lives, and generate motivation for learning online. In conclusion, knowing what our students have and can do in terms of technology will help us design appropriate classes, training, and tech support.

In our survey, we found approximately one third of the students believed they would not be interested in taking a hybrid language class, yet close to 90% of them reported that they use the web for information, entertainment, and communication. Many use the internet for the coconstruction of community and for establishing identity thorough networks like *Facebook*. Seeing these statistics, it may be puzzling to understand why so many (almost two thirds) are hesitant or resistant to taking hybrid classes until one reads the qualitative comments. Language classes on a large Midwestern college campus like MSU are, to some students, sacred ground. Language classrooms are environments in which students can learn within a relatively small group of like-minded individuals, in which they can hold face-to-face interactions with their instructors and peers on a daily basis, and in which connections are strong and community is built. Communicative classrooms are engaging, challenging, and fun. The beneficial social and integrational aspects of communicative language learning may be missing from students' (especially elective students') other classes. As illustrated by the student comment in Example 9 above, some students enjoy their language classes immensely and would be disinclined to continue taking the language if the format were to change to a hybrid one. Language programs must come to terms with this and, as we would like to suggest, offer hybrid language classes as an option alongside traditional (purely face-to-face) language classes so that students have a choice and can tailor their learning experience to their learning style preferences and educational (and university experience) goals.

While we were able to obtain good response rates to our survey and an adequate representative sample of the targeted population, there are limitations to this study. By not being present when the data was collected, we cannot rule out the idea that some students may not have taken the survey seriously or may have rushed through the survey. Furthermore, this study is based on self-reported data. The drawback here is that some participants may have reported what they thought we wanted to hear or what they thought the right answer should be, rather than the truth. Additionally, we have further questions that we have not yet answered with this data. For example, are there differences among the language groups in terms of their views on hybrid courses? Do men and women have similar computer access and computer literacy skills? Does computer access and literacy increase in relation to the number of years at the university? In the future, we hope to report on a larger study that includes language learners at all levels and in many more foreign languages, including less commonly taught languages. With a larger pool and a more varied foreign language landscape, we hope to answer some of these and other questions in a more rigorous fashion.

NOTES

¹ Hybrid or blended language classes are those that meet face to face in the language classroom part time. The other part of the time the class meets virtually and/or performs activities online. For example, a hybrid class may meet Mondays and Wednesdays for an hour in class but do online tasks and activities for an hour each day on Tuesdays and Thursdays. The ratio of in-class to online learning varies. For more information on hybrid or blended learning, see Goertler and Winke (2008). In this article, we will use the term "hybrid" to describe these kinds of classes.

² The iSkills test is a commercially-available test of academic/professional computer literacy offered by ETS. Egan and Katz (2007) reported on the development of the iSkills assessment. ETS was approached by college representatives who felt that students were only able to use technology for their personal (mostly entertainment) purposes, but not for academic purposes. The test they developed and used is based on simulations of tasks that students are likely to encounter during their college career (e.g., sending emails, conducting searches, navigating a database, etc.). More information about the test is available online at the ETS website (<http://www.ets.org>).

³ The third-year experimental German hybrid class is part of a CALL research project being conducted at MSU by Karin Wurst and Angelika Kraemer. The project is the focus of Kraemer's Ph.D. dissertation.

⁴ Two-hundred forty-three were 18; 256 were 19; 203 were 20; 119 were 21; 41 were 22; 18 were 23; 5 were 24; 16 were between 25 and 29; 6 were in their 30s; of the following ages there was one each: 43, 50, 60, 65.

⁵ Those who reported themselves as not within the category of being a native, monolingual English speaker (829 identified themselves as such) listed their native languages as follows: Arabic (2), Chinese (4), French (6), German (2), Hindi (1), Korean (7), Polish (12), Portuguese (1), Russian (4), Spanish (17), Tagalog (1), Other (17). Of the 17 in the "other" category, six wrote in their native language: Albanian (2), Bulgarian (1), Haitian Creole (1), and Kazakh (2). We do not know the native languages of the other 11 who identified their native language as "other." Seventeen listed themselves as multilingual: 15 as bilingual and 2 as trilingual. Of the bilinguals, 14 listed English as one of their native languages. Both of the trilinguals listed English as one of their native languages. The count of 845 native speakers of English thus includes the 829 who identified themselves as monolingual, native speakers of English and the 16 bi- and trilinguals who stated English was one of their native languages.

⁶ The graduate students who co-constructed the survey were Seongmee Ahn, Ching-Ni Hsieh, and Tetyana Sydorenko.

⁷ It should be recalled that this project is part of a larger study that is currently ongoing. The larger project will investigate the differences in technology preparedness among all foreign language students on the MSU campus. The survey used for this study was provided to instructors of all foreign languages on the MSU campus. Data from the larger sample are still being tabulated and will be analyzed at a later date.

⁸ These numbers do not add up to 911 because students were allowed to check more than one answer to this question (question 6) on the survey.

⁹ ID numbers were automatically generated by the data analysis program.

¹⁰ ANGEL is MSU's university-sponsored course management system (CMS). It is similar to *Desire2Learn*, *Blackboard* and *WebCT*.

¹¹ *Audio Dropboxes* is a free web-based program created by the Center for Language Education and Research (CLEAR) at Michigan State. It is a virtual dropbox for audio recordings that teachers or students can add into any website. The dropboxes allow for the uploading of audio via the Web (for more information, see <http://clear.msu.edu/teaching/online/ria>).

¹² *Audio Assignments* is web-based, educational CALL software teachers and students can use to upload and review audio files. It was developed by Dr. Dennie Hoopingarner at MSU's Language Learning Center. Teachers outside of MSU pay \$50 per year for unlimited use (for more information, see <http://www.audioassignments.com>).

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APPENDIX

Technology survey questions

- | | | | |
|---------------|--|---|--|
| 1. Age: _____ | 2. Gender:

<input type="radio"/> Male
<input type="radio"/> Female | 3. First (native) language:
<input type="radio"/> English
<input type="radio"/> Arabic
<input type="radio"/> Chinese
<input type="radio"/> French
<input type="radio"/> German
<input type="radio"/> Hebrew
<input type="radio"/> Hindi
<input type="radio"/> Italian
<input type="radio"/> Japanese
<input type="radio"/> Korean | <input type="radio"/> Malaysian
<input type="radio"/> Polish
<input type="radio"/> Portuguese
<input type="radio"/> Russian
<input type="radio"/> Spanish
<input type="radio"/> Tagalog
<input type="radio"/> Thai
<input type="radio"/> Urdu
<input type="radio"/> Vietnamese
<input type="radio"/> Other: _____ |
|---------------|--|---|--|

4. At MSU I am a...

- Freshman Sophomore Junior Senior
 MA/MS student PhD student Other: _____

5. The language class in which I am filling out this survey is (*write language, level, and section*):

Language _____ Level: _____ Section: _____

6. The language I am studying is... (check all that apply)

- my primary major my additional major part of my dual major
 my minor my elective subject required for my major
 required-Teacher's Ed required-Residential College
 Other: _____.

7. Why are you learning this language? (check all that apply)

- Interested in language and culture/travel
- Future job marketing/future employment
- To be a teacher of this language
- To communicate with native speakers
- My family/relatives speak this language
- Foreign language requirement

8. Mark if you personally own or have the items below. If you don't have one, mark if you can get it (by borrowing it or by using it in a lab) easily, with difficulty, or not at all.

	<u>Own/have it.</u>	<u>Can find it easily.</u>	<u>Can find with difficulty.</u>	<u>Can't get it.</u>
PC desktop computer	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
PC laptop	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Mac desktop computer	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Mac laptop	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Computer speakers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Headphones	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Microphone	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Printer	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Internet access	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Webcam	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Digital camera	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Video camera	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

9. Do you use the computer labs on campus for computer work?

- Often Sometimes Almost never Never

10. Do you use the computer labs on campus for printing?

- Often Sometimes Almost never Never

11. Can you type in the language you are learning?

- Yes, very well Pretty well Not very well Not at all

12. How often do you use the computer on an average day?

- 0 to 2 hours 2 to 4 hours 4 to 6 hours More than 6 hours

13. Mark your level of ability to do the following tasks on your computer.

	<u>Not at all</u>	<u>With difficulty</u>	<u>With very little difficulty</u>	<u>Easily</u>
1) cut, copy and paste in my documents	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2) change font size and color save	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3) type non-English language characters (like ë, æ) in my documents	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4) insert pictures and graphs in my documents	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5) insert audio and video files in my documents	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6) develop and maintain a web site	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7) navigate the internet	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8) save and download files from the internet	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9) create tables in my documents	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10) play audio files from the web and from my computer	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
11) play a video on a website, on my computer, or stored on DVD	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
12) download and unzip a ZIP file	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
13) post messages on an online bulletin board (Facebook, Craigslist)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
14) email to individuals and groups, including using the reply and reply-to-all functions	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
15) access email from a computer other than my own	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
16) forward email messages	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
17) send emails with attachments and open emails with attachments	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

- | | | | | |
|--|-----------------------|-----------------------|-----------------------|-----------------------|
| 18) create a new, free email account online | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 19) start/install a program directly from a DVD or CD | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 20) copy files from my computer's hard drive to CD or DVD or vice versa | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 21) copy a track from an audio CD onto my computer's hard drive and store it in MP3 format | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 22) create an audio CD from a set of MP3 files stored on my computer's hard drive | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 23) make a sound recording using audio editing software and save it to a disc or hard drive | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 24) upload a video recording to my computer from a camcorder and to a video editing software package | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 25) edit video | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

14. Would you be interested in taking a language class at MSU where half the instruction is in class, that is face-to-face with the teacher and other students, and half is independent study online?

Yes Maybe No

15. On average, how many hours per week is technology used during your language class?

less than 1 1-2 2-3 3-4 4-5 more than 5

16. How many hours per week do you use technology for your language class homework?

less than 1 1-2 2-3 3-4 4-5 more than 5

17. Mark if you use the following items in your personal life, in your non-language classes, in your language class, and if you believe they are or could be useful for language learning.

	<u>I use this for my personal life.</u>	<u>We use this in my non-language classes.</u>	<u>We use this in my language class.</u>	<u>I think this is/would be useful for language learning.</u>
1) Public websites	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2) Course websites	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3) Angel	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4) Blogs	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5) Wikis	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6) Email	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7) Chat	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8) instant messenger	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9) videochat	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10) discussion boards	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
11) listservs	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
12) video/audio materials	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
13) online digital video/audio	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
14) Podcasts/videocasts	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
15) computer games	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
16) CD-ROMs/DVDs	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
17) online exercises/quizzes	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
18) Facebook/My Space	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
19) Second Life	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
20) Ipods	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
21) Text messaging	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

18. Do you have any comments about anything on this survey? If so, please write them in the box below.

Please return this survey to your language teacher. THANK YOU!

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