

**Stakeholder Views of the Place of Technology in the  
Flagship Programs**

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## Introduction

Some of the primary goals of the recently established Language Flagship Technology Innovation Center (LFTIC) involve identifying, developing, and promoting ways to effectively integrate technology into The Language Flagship program. Such endeavors can only begin with a clear sense of what the current practices are in relation to technology use, both in terms of how it is implemented and how it is perceived by those stakeholders involved in the program including at least students, instructors, and program administrators.

This report is meant to provide a first look at how technology is viewed within The Language Flagship program, and it is part of the first step in a strategic plan towards identifying and establishing new innovations in technology and technology use for language learning purposes. This report is therefore designed to provide a broad look at stakeholder perceptions in order to open up a larger dialogue on avenues in technology to pursue that meet the needs and goals of The Language Flagship, and in particular the development of tools for advising, teaching, assessing, and preparing students for their Capstone Year. Furthermore, the development of technology-based materials and resources is seen as a way to better ensure that learners are able to maintain their foreign language skills throughout their Flagship experiences and beyond.

Through acquiring knowledge and building awareness of the available and effective technologies that stakeholders identify in this report, the LFTIC will be better prepared to engage researchers, practitioners, and educational technology developers in matching the needs of The Language Flagship with both existing tools, as well as those innovations yet to be fully realized. In particular, it is hoped that this report can help the LFTIC move towards the adoption and creation of adaptive technologies for language learning and maintenance purposes.

To that end, this report will present the findings of a series of surveys distributed to stakeholders within The Language Flagship, including Flagship directors, instructors, and students, as well as a small sample of Language Learning Center Directors, the latter of which typically interact with The Language Flagship through providing technology-based resources and professional development opportunities. Prior to that, however, we will provide a brief discussion of how technology and language learning is represented in recent research.

### ***Technology in Research Contexts***

The use of technology for language learning purposes has been well documented in recent literature, with several peer-reviewed journals dedicated to discussions of the applications, benefits, and issues involved in the use of technology in language learning and teaching contexts. Among these, the ones with highest circulations are *Language Learning and Technology*, *Computer Assisted Language Learning*, *ReCALL*, and the *CALICO Journal*. A survey of recent publications on technology in language learning finds numerous studies related but not limited to the development and use of: (a) web-based technology (e.g., Lee, Cheung, Wong, & Lee, 2013; Zhao, 2013); (b) software-based technology (e.g., Cowan, Choo, & Lee, 2014); (c) blogging platforms (e.g., King, 2015; Li & Zhu, 2013; Vurdien, 2013; Wang, 2014); (d) mobile-based technology (e.g., Amer, 2014; Burston, 2014; Hwang & Chen, 2013; Kukulska-Hulme, 2009); (e) corpus-based technology (e.g., Chen, Wu, Yang, & Pan, 2014; Lee, Lee, & Sert, 2015); (f) synchronous video/audio chatting platforms (e.g., Payne & Whitney, 2013; Sykes, 2013); (g) social networking (e.g., Jin, 2015; Wang & Camilla, 2014); (h) instant-messaging or chat platforms (e.g., Qian & McCormick, 2014; Zhang, 2014); (i) course-management platforms (e.g., Tsai, 2015; Tsai & Talley, 2014); and (j) digital and massively-multiplayer games (e.g., Thorne, 2008; Bytheway, 2015; Chik, 2014; Godwin-Jones, 2014). It is also worth mentioning that groups of researchers in the field have contributed to our understanding of technology integration into language learning and its potential by directing their efforts to specific areas, such as adaptive technologies, mobile language learning, and teacher development. Work focusing in adaptive technologies for language learning, sometimes referred to in the literature as intelligent computer assisted language learning (ICALL), can be found as early as in the mid-80's (Larson & Madsen, 1985). Much of the early research appears to focus on the ways in which a computer can automatically and receptively provide meaningful corrective feedback to a language learner based on their individual performance (e.g., Heift, 2002; Heift & Shulze, 2003). In this early body of work, the specific term "adaptive technology" also appears frequently in association with language assessment (e.g., Brown, 1997; Dunkel, 1991; Dunkel, 1999; Laufer & Goldstein, 2004). Computer Adaptive Testing (CAT) received much attention in iCALL initially and continues to inform work in this area, which has evolved considerably in the last decade. Researchers have approached the complexity of adaptivity in language learning contexts by

looking at various pieces of the puzzle, such as learner variability (Heift, 2008; Amaral & Meurers, & Ziai, 2011), learner output (Amaral, Meurers, & Ziai, 2011), input (Vajjala & Meurers, 2014), pedagogical tasks (Quixal & Meurers, 2016), and so forth. More recently, work in Automated Writing Evaluation (AWE) has contributed to this expanding knowledge base (e.g., Liao, 2015; Hegelheimer, Dursun, & Li, 2016).

Some of the issues and problems that arise from the notion of adaptability in learning contexts overlap with the ones encountered in the use of digital games in support of language acquisition processes, since both areas take advantage of similar mechanisms and core technologies (e.g., feedback systems, natural language processing, etc.). Work in the area of gaming appears to offer new opportunities to enhance language learning by capitalizing on the possibilities that gaming technology offers to mediate human communication (Sykes & Reinhardt, 2013; Thorne, 2008) and on the affordances that mobility may present in terms of taking advantage of an immediate location to contextualize gaming and learning (Holden & Sykes, 2011).

Mobile technologies in turn have opened up a myriad of possibilities by enabling the use of these systems, adaptive or not, anytime and almost anywhere. Interest in this area, also known as Mobile Assisted Language Learning (MALL), has grown exponentially and researchers have explored MALL affordances in relation to instructed SLA and informal learning contexts (Burston, 2013; Chen, 2013; Ducate & Lomicka, 2013; Holden & Sykes, 2011; Lai, Shum, & Tian, 2016; Li & Hegelheimer, 2013).

A substantial body of research has also addressed technology in language teacher development. While some researchers have looked at how technology can be used as a development tool for teachers (e.g., Kitade, 2015; O'Dowd, 2015; Tour, 2015; Tseng, Lien, & Chen, 2014; Zou, 2013), these are primarily focused on technology use to shape the teacher education experience, that is, technology as the medium of professional development, rather than on the impact of those experiences in the integration of technology into the design of language learning tasks or their execution.

This raises questions about the efficacy of technology from a practical perspective, and, in particular, what technology use looks like in the classroom. Egbert, Paulus, and Nakamichi (2002) examined this issue in part more than a decade ago, though even here the focus was more on the factors that influenced whether or not teachers used technology rather than a strict report

of how that technology was actually implemented. Like other studies (e.g., Hubbard, 2013; Lam, 2000; Liu, Moore, Graham, & Lee, 2002; Luke & Britten, 2013), they note that issues of time and resource availability, as well as a lack of training and support make the adoption of technology a challenge for teachers, but little is said about the actual usage of technology.

Clearly, technology use as a whole remains an ongoing issue for language teachers and researchers, and the breadth of areas that are encompassed by this field would seem to indicate a high degree of availability and flexibility for administrators, instructors, and students who want to take advantage of technology. However, despite the variety of research on technology, much of this tends to be focused on the development and outcomes—potential or observed—of the different innovations afforded by technology. What is perhaps missing, however, is the degree to which the different stakeholders within a language program are familiar with these different options, how able they are to access them, and how much they actually work towards implementing them into the classroom.

In addition to the above, much of the research related to technology in language learning contexts has typically been in the context of technology resources for learners of English, while resources specific to other languages have been more limited. This does appear to be changing, and recent articles have highlighted tools or technology-enriched instructional contexts for learners of other languages such as Spanish (e.g., de la Fuente, 2014; Sykes, 2013), Portuguese (e.g., Melo-Pfiefer, 2015), French (e.g., Liakin, Cardoso, & Liakina, 2015), Japanese (e.g., Hitosugi, Schmidt, & Hayashi, 2014; Nagata, 2013), Korean (e.g., Cowan et al., 2014), and Chinese (e.g., Chen et al., 2014; Tseng et al., 2015; Qian & McCormick, 2014; Wang & Camilla, 2014; Zhang, 2014), the last of which seems to be the most covered outside of English. While there are many resources available for non-English based second language learning, such as applications like *Duolingo* or *HelloTalk*, from a research perspective, this area still appears to be somewhat underdeveloped.

### ***Purpose***

The overall purpose of this project was to gather information from different groups of stakeholders within the Language Flagship program about: (a) their use of technology, especially adaptive technologies; (b) any professional development, collaboration, and development of technology-based tools that they provide; (c) specifically about any technology they use before

and during the Capstone Year of their students; as well as (d) any technology that they use to promote language maintenance for their students after they graduate. To those ends the following research questions were posed:

1. What are the types and common uses of technology that The Language Flagship directors, instructors, and students are familiar with for second language learning purposes?
2. To what degree are the views of the directors, instructors, and students on the use and usefulness of various technology tools correlated?
3. In what ways is technology used for training, collaboration, and professional development purposes in The Language Flagship?
4. In what ways might technology be used to enhance second language learning and teaching before, during, and after the students' Capstone Year in The Language Flagship?

## **Method**

This section will describe the participants, materials, and procedures used in conducting this study. Each of those topics will account for a different subsection in detail below.

### ***Participants***

Initially, we intended to study four groups of stakeholders: (a) language center (LC) directors; (b) Flagship directors; (c) Flagship instructors; and (d) Flagship students. We will discuss each group in turn and their involvement in this study.

***LC directors.*** The LC directors that we approached were faculty or staff who ran the language centers (also sometimes known as language labs, language resource centers, or language learning centers) in the institutions of higher education that house a Language Flagship program. These individuals are typically in charge of securing and managing technologies or resources that are specifically used for the purpose of language learning. Because we received a grand total of only four responses from this group (three of whom were current directors and one a former director), and because such a small non-random sample was not likely to be representative, statistically stable, or credible, we decided not to include the data from this group in our study (see **Appendix A** for those results).

**Flagship directors.** Flagship directors are by definition the people running the Flagship programs. We had better luck in receiving fourteen sets of questionnaire responses from them. According to these respondents, the languages taught in their Flagship programs included: Chinese (8), Russian (2), and one each for Swahili, Turkish, Hindi, and Korean. The average numbers of years of teaching experience that these people had were considerable with averages of 22.54 years (with 14 responses) for face-to-face teaching, 5 years (with only one response) for fully online teaching, and 5.50 years (with six responses) for hybrid teaching. All 14 Flagship Directors rated their own technology familiarity on a four-point scale (with 1 = very unfamiliar to 4 = very familiar) to be high with an average of 2.93 ( $SD = 0.80$ ; ranging from 1 to 4). The 14 Flagship Directors also reported that the average class size was 14.07 students ( $SD = 5.57$  ranging from 7 to 25 for 14 respondents). Three of the directors reported being on a quarter system and 11 on a semester schedule.

**Flagship instructors.** We had even better luck getting 34 sets of questionnaire responses from Flagship instructors, who were by definition people teaching within a Flagship program. According to these respondents, they were teaching the following languages in Flagship programs: Arabic (5), Chinese (15), Korean (7), Russian (4), Swahili (2), and Turkish (2). The average numbers of years of teaching experience that these 34 people had were also reasonably high with averages of 9.42 years (with 34 responses) for face-to-face teaching, only 0.89 years (with only seven responses) for fully online teaching, and 2.11 years (with 16 responses) for hybrid teaching. All 34 Flagship Instructors rated their own technology familiarity on a four-point scale (with 1 = very unfamiliar to 4 = very familiar) to be high with an average of 2.91 ( $SD = 0.74$ ; ranging from 1 to 4), which is very similar to what the Flagship directors reported. Average class sizes reported by all 34 of these instructors averaged 11.87 students (with  $SD = 4.93$ ; ranging from 1 to 22). Only three instructors reported being on a quarter system and 31 reported using a semester system.

**Flagship students.** The largest group of respondents in this study were Flagship students (with 100 sets of questionnaires), who were by definition people learning foreign languages within a Flagship program. The average age of these students was 21.57 years old ( $SD = 5.04$ ; ranging from 17 to 58 years). In terms of gender, there were 45 females and 49 males (with six not answering). In terms of academic status, there were 95 undergraduates and only five reported something else (post-bac, alumni, adult special, graduate student, and future graduate student). A

total of 96 students reported being currently in a Flagship program, while 4 were not. Student self-reported levels of ACTFL proficiency in each of the four skills are summarized in Table 1. Notice that six ACTFL proficiency levels are labeled down the left side (ranging from Advanced High to Intermediate Low) and that the four skills (Reading, Writing, Listening, and Speaking) are labeled across the top. The numbers in the table are frequencies, indicating how many students rated themselves at each level in each skill. For example, in the upper left corner of the numbers, it is clear that 11 students rated themselves as Advanced High in Reading.

Table 1

*Flagship Students' Self-Reported ACTFL Proficiency Levels for the Four Skills*

Level	Reading	Writing	Listening	Speaking
Advanced High	11	7	9	11
Advanced Mid	19	20	15	18
Advanced Low	23	20	30	27
Intermediate High	20	21	19	17
Intermediate Mid	21	26	21	23
Intermediate Low	6	6	6	4

In addition, only six students responded that they had taken a fully online course in the last two years for an average of 1.33 years ( $SD = 0.47$ ; ranging from 1 to 2 years). Seventeen answered that they had taken a hybrid course in the last two years for an average of 2.18 years ( $SD = 1.50$ ; ranging from 1 to 6 years). All 100 students rated their technology familiarity on a four-point scale (with 1 = very unfamiliar to 4 = very familiar) to be fairly high with an average of 2.74 ( $SD = 0.89$ ; ranging from 1 to 4), which is a little lower but similar to what the Flagship directors and instructors reported.

### **Materials**

Four questionnaires were developed for this project, one for each of the four groups: (a) Language Center directors; (b) Language Flagship directors; (c) Language Flagship instructors; and (d) Language Flagship students. All four questionnaires contained sections for: (a) technology-based teaching and learning tools; (b) open-ended questions related to the challenges



and availability of using technology; and (c) demographic questions. However, the questionnaires for the groups also contained unique sections aimed at each of the specific populations. For example, Language Flagship directors were asked about collaborations with other institutions, as well as about the use of technology during the Capstone Year. Flagship instructors were also asked about how they used technology in their classrooms, while Flagship students were asked about their technology use both within and outside of the classroom.

After an initial meeting with a Language Flagship Technology Innovation Center staff member and the Director of the Center for Language & Technology (CLT) at the University of Hawai‘i at Mānoa (UHM), where they provided input and guidance, the four questionnaires were created by two experts in second language survey research design and analysis. These tentative forms of the questionnaires were uploaded to *Google Docs* and then revised in several rounds based on feedback from three CLT faculty, the CLT Director, and the Chinese Flagship Program director at UHM.

From a technical standpoint, the Likert scale items on these questionnaires turned out to be reasonably reliable. The Cronbach alpha coefficient provides an estimate of the internal consistency reliability of any scale ranging from 0.00 (for a totally unreliable scale) to 1.00 (for a completely reliable scale). Since reliability can be affected by the number of items involved, we will report both here. The Cronbach alpha coefficients (and number of items, or  $k$ ) for each of the Likert scale subsets of items turned out to be as follows:

- Directors’ core items (Q01-Q18):  $\alpha = 0.76$  ( $k = 18$ )
- Instructors’ core items (Q01-Q18):  $\alpha = 0.79$  ( $k = 18$ )
- Students’ self-ratings (Reading, Writing, Listening, Speaking):  $\alpha = 0.95$  ( $k = 4$ )
- Students’ core items in-class (Q01-Q18):  $\alpha = 0.86$  ( $k = 18$ )
- Students’ core items outside class (Q20-Q35):  $\alpha = 0.85$  ( $k = 16$ )
- Students’ core items combined (Q01-Q18 & Q20-Q35):  $\alpha = 0.91$  ( $k = 34$ )

These reliability coefficients ranging from 0.76 to 0.95 can be interpreted as percentages of reliable variance in the scales. Thus, the percentage of reliable variance ranged from 76% to 95%, which can further be interpreted as ranging from moderately high reliability to high reliability, especially in light of the numbers of items involved and the numbers of participants who took each questionnaire.

The actual questionnaires that we used are available in PDF format from links provided in Appendices: F (for LC Directors), G (for Flagship Directors), H (for Flagship Instructors), and I (for Flagship Students).

### ***Procedures***

The study design, materials, and procedures in this study were all approved as “exempt research” by the University of Hawaii Human Studies Program internal review board (IRB). The four sets of questionnaires are available in Appendices: J (for LC directors), K (for Flagship directors), L (for Flagship instructors, and M (for Flagship students). The questionnaires were administered online using *Google Forms*. Email messages were sent out that included cover letters describing the study, a URL link to the appropriate questionnaire, and details regarding informed consent. Four different messages were sent to 23 Language Center directors and 72 Flagship directors. Different messages were also sent out to Flagship instructors and third-and fourth-year Flagship students via the Flagship program coordinators (with approval from directors), that is, the program coordinators were asked to forward the messages to instructors and students.

## **Quantitative Results**

We will begin the discussion of the survey results by examining the quantitative results derived from the Likert scale items. Because there were differences in the items on the various questionnaires, we will present three sets of results separately including those for Language Flagship directors, Language Flagship instructors, and Language Flagship students.

### ***Language Flagship Directors***

Table 2 shows the Likert scale results for the 14 Flagship directors’ responses about the technology tools that their programs use in classes. The items are presented in item number order in order to illustrate the order in which the items were administered. Notice that each item is described in terms of the number of people who answered it (*N*), its mean (*M*), its standard deviation (*SD*), and the percentage of people who selected Never, Sometimes, or Often for how

often each technology tool was used. To make reading these results easier, this table and the subsequent tables of quantitative results are all laid out in this same way.

Table 2

*Flagship Directors' Responses on Technology Tools in Language Flagship Classes (in Item Order)*

How often do you use the following technology-based tools and resources in your language classes in a typical academic year?							
<i>Item</i>	<i>Description</i>	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Never</i>	<i>Sometimes</i>	<i>Often</i>
Q01	Course Management System (CMS)	14	2.64	0.61	7.10	21.40	71.40
Q02	Class Website	14	1.43	0.73	71.40	14.30	14.30
Q03	Online Resources	14	2.86	0.35	0.00	14.30	85.70
Q04	Audio/Video Conferencing	14	2.14	0.64	14.30	57.10	28.60
Q05	Chat/Messaging	14	1.43	0.49	57.10	42.90	0.00
Q06	Discussion Boards	14	1.50	0.50	50.00	50.00	0.00
Q07	Corpus Resources	14	1.50	0.63	57.10	35.70	7.10
Q08	Blogs	14	1.57	0.62	50.00	42.90	7.10
Q09	Social Networking	14	1.79	0.77	42.90	35.70	21.40
Q10	General Websites	14	2.93	0.26	0.00	7.10	92.90
Q11	Language Websites	14	2.29	0.70	14.30	42.90	42.90
Q12	Language Exchange	14	1.36	0.48	64.30	35.70	0.00
Q13	Language Software	14	1.43	0.49	57.10	42.90	0.00
Q14	Mobile Apps	14	1.43	0.49	57.10	42.90	0.00
Q15	Role-Play Games	14	1.14	0.35	85.70	14.30	0.00
Q16	Vocab Tools	14	2.21	0.56	7.10	64.30	28.60
Q17	Assessment Tools	14	1.79	0.67	35.70	50.00	14.30
Q18	Media Editing	14	2.07	0.70	21.40	50.00	28.60

Table 3 is presented in mean order (i.e., they are sorted from the items with the highest to lowest means). Notice that all of the technology tools had an average of 1.14 or higher and that they ranged up as high as 2.93. Three technology tools (General Websites, Online Resources, and CMS) had the highest means (2.93, 2.86, and 2.64, respectively) and were selected as being used often by large percentages of the directors. Conversely, other technology tools (Class Websites, Chat/Messaging, Language Software, Mobile Apps, Language Exchanges, and Role-

Play Games) had means of 1.43 or lower, with relatively large proportions of directors reporting that they *never* use them.

Table 3

*Flagship Directors' Responses on Technology Tools in Language Flagship Classes (in Mean Order)*

How often do you use the following technology-based tools and resources in your language classes in a typical academic year?							
<i>Item</i>	<i>Description</i>	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Never</i>	<i>Sometimes</i>	<i>Often</i>
Q10	General Websites	14	2.93	0.26	0.00	7.10	92.90
Q03	Online Resources	14	2.86	0.35	0.00	14.30	85.70
Q01	Course Manager	14	2.64	0.61	7.10	21.40	71.40
Q11	Language Websites	14	2.29	0.70	14.30	42.90	42.90
Q16	Vocab Tools	14	2.21	0.56	7.10	64.30	28.60
Q04	Audio/Video Conferencing	14	2.14	0.64	14.30	57.10	28.60
Q18	Media Editing	14	2.07	0.70	21.40	50.00	28.60
Q09	Social Networking	14	1.79	0.77	42.90	35.70	21.40
Q17	Assessment Tools	14	1.79	0.67	35.70	50.00	14.30
Q08	Blogs	14	1.57	0.62	50.00	42.90	7.10
Q06	Discussion Boards	14	1.50	0.50	50.00	50.00	0.00
Q07	Corpus Resources	14	1.50	0.63	57.10	35.70	7.10
Q02	Class Website	14	1.43	0.73	71.40	14.30	14.30
Q05	Chat/Messaging	14	1.43	0.49	57.10	42.90	0.00
Q13	Language Software	14	1.43	0.49	57.10	42.90	0.00
Q14	Mobile Apps	14	1.43	0.49	57.10	42.90	0.00
Q12	Language Exchange	14	1.36	0.48	64.30	35.70	0.00
Q15	Role-Play Games	14	1.14	0.35	85.70	14.30	0.00

Table 4 summarizes the Flagship directors' Likert scale answers to items about Language Flagship interactions with others. Table 4 is in item order to illustrate the order in which the items were administered.

Table 4

*Flagship Directors' Responses on Language Flagship Interactions with Others (in Item Order)*

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Please describe your Language Flagship program's interactions with other groups in a typical academic year.

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<i>Item</i>	<i>Description</i>	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Never</i>	<i>Sometimes</i>	<i>Often</i>
Q20	Other Flagship Programs	14	2.29	0.45	0.00	71.40	28.60
Q21	Government Programs	14	2.36	0.48	0.00	64.30	35.70
Q22	Private Programs	14	1.71	0.59	35.70	57.10	7.10
Q23	Language Centers	14	2.29	0.59	7.10	57.10	35.70

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Table 5 presents the Flagship directors' Likert scale answers to items about Language Flagship interactions with others in mean order from a high of 2.36 for Government Programs down to 1.71 for Private Programs. Notice that interactions were reported to be *sometimes* by 57% or higher for Government programs, Other Flagship Programs, Language Centers, and Private Programs (in that order from high to low means). Notice also that about one-third of the directors reported interacting *often* with Government programs, Other Flagship Programs, and Language Centers, with about one-third reporting they *never* interacted with Private programs.

Table 5

*Flagship Directors' Responses on Language Flagship Interactions with Others (in Mean Order)*

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Please describe your Language Flagship program's interactions with other groups in a typical academic year.

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<i>Item</i>	<i>Description</i>	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Never</i>	<i>Sometimes</i>	<i>Often</i>
Q21	Government Programs	14	2.36	0.48	0.00	64.30	35.70
Q20	Other Flagship Programs	14	2.29	0.45	0.00	71.40	28.60
Q23	Language Centers	14	2.29	0.59	7.10	57.10	35.70
Q22	Private Programs	14	1.71	0.59	35.70	57.10	7.10

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### *Language Flagship Instructors*

Table 6 shows the Likert scale results for the 34 Flagship instructors' responses about the technology tools they use in their classrooms. The items are presented in item number order in order to illustrate the order in which the items were administered. Notice also that, in order to make reading these results easier, this table is laid out exactly as Tables 2-5 were.

Table 6

*Flagship Instructors' Responses on Technology Tools in Language Flagship Classes (in Item Order)*

How often do you use the following technology-based tools and resources in your language classes in a typical academic year?							
Item	Description	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Never</i>	<i>Sometimes</i>	<i>Often</i>
Q01	Course Manager	34	2.68	0.53	2.90	26.50	70.60
Q02	Class Website	34	1.91	0.85	41.20	26.50	32.40
Q03	Online Resources	34	2.68	0.47	0.00	32.40	67.60
Q04	Audio/Video Conferencing	34	1.76	0.69	38.20	47.10	14.70
Q05	Chat/Messaging	34	1.53	0.61	52.90	41.20	5.90
Q06	Discussion Boards	34	1.65	0.64	44.10	47.10	8.80
Q07	Corpus Resources	34	1.62	0.64	47.10	44.10	8.80
Q08	Blogs	34	1.41	0.49	58.80	41.20	0.00
Q09	Social Networking	34	1.79	0.63	32.40	55.90	11.80
Q10	General Websites	34	2.68	0.53	2.90	26.50	70.60
Q11	Language Websites	34	2.15	0.65	14.70	55.90	29.40
Q12	Language Exchange	34	1.26	0.44	73.50	26.50	0.00
Q13	Language Software	34	1.24	0.42	76.50	23.50	0.00
Q14	Mobile Apps	34	1.47	0.55	55.90	41.20	2.90
Q15	Role-play games	34	1.26	0.44	73.50	26.50	0.00
Q16	Vocab tools	34	2.15	0.60	11.80	61.80	26.50
Q17	Assessment tools	34	1.71	0.57	35.30	58.80	5.90
Q18	Media editing	34	1.97	0.62	20.60	61.80	17.60

Table 7 provides the same information as Table 6, but is presented in mean order. Notice that all of the technology tools had an average of 1.24 or higher and that they ranged to as high as 2.68. Three technology tools (Course Managers, Online Resources, and General Websites,) had the highest means (all 2.68) and were selected as being used often by at least two-thirds of the instructors. Note also that these were the three highest for the Flagship directors as shown in Table 3. Conversely, other technology tools (Mobile Apps, Blogs, Language Exchanges, Role-Play Games, and Language Software) had means below 1.50 and majorities or relatively large proportions of instructors reported that they *never* use them.

Table 7

*Flagship Instructors' Responses on Technology Tools in Language Flagship Classes (in Mean Order)*

How often do you use the following technology-based tools and resources in your language classes in a typical academic year?							
Item	Description	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Never</i>	<i>Sometimes</i>	<i>Often</i>
Q01	Course Manager	34	2.68	0.53	2.90	26.50	70.60
Q03	Online Resources	34	2.68	0.47	0.00	32.40	67.60
Q10	General Websites	34	2.68	0.53	2.90	26.50	70.60
Q11	Language Websites	34	2.15	0.65	14.70	55.90	29.40
Q16	Vocab tools	34	2.15	0.60	11.80	61.80	26.50
Q18	Media editing	34	1.97	0.62	20.60	61.80	17.60
Q02	Class Website	34	1.91	0.85	41.20	26.50	32.40
Q09	Social Networking	34	1.79	0.63	32.40	55.90	11.80
Q04	Audio/Video Conferencing	34	1.76	0.69	38.20	47.10	14.70
Q17	Assessment tools	34	1.71	0.57	35.30	58.80	5.90
Q06	Discussion Boards	34	1.65	0.64	44.10	47.10	8.80
Q07	Corpus Resources	34	1.62	0.64	47.10	44.10	8.80
Q05	Chat/Messaging	34	1.53	0.61	52.90	41.20	5.90
Q14	Mobile Apps	34	1.47	0.55	55.90	41.20	2.90
Q08	Blogs	34	1.41	0.49	58.80	41.20	0.00
Q12	Language Exchange	34	1.26	0.44	73.50	26.50	0.00
Q15	Role-play games	34	1.26	0.44	73.50	26.50	0.00
Q13	Language Software	34	1.24	0.42	76.50	23.50	0.00

### *Language Flagship Students*

Table 8 shows the Likert scale results for the 100 Flagship students' responses about the usefulness of various technology tools in their classrooms. Once again, the items are presented in item number order in order to illustrate the order in which the items were administered.

Table 8

*Flagship Students' Responses on Usefulness of Technology Tools in Language Classrooms (in Item Order)*

In a CLASSROOM setting, how useful do you consider the following technology tools for language learning?							
<i>Item</i>	<i>Description</i>	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Not Useful</i>	<i>Somewhat Useful</i>	<i>Very Useful</i>
Q01	Course Manager	100	2.45	0.61	6.00	43.00	51.00
Q02	Class Website	100	2.19	0.64	13.00	55.00	32.00
Q03	Online Resources	100	2.50	0.57	4.00	42.00	54.00
Q04	Audio/Video Conferencing	100	2.09	0.60	14.00	63.00	23.00
Q05	Chat/Messaging	100	1.88	0.62	26.00	60.00	14.00
Q06	Discussion Boards	100	1.78	0.59	31.00	60.00	9.00
Q07	Corpus Resources	100	1.69	0.63	40.00	51.00	9.00
Q08	Blogs	100	1.82	0.57	27.00	64.00	9.00
Q09	Social Networking	100	1.99	0.66	22.00	57.00	21.00
Q10	General Websites	100	2.36	0.59	6.00	52.00	42.00
Q11	Language Websites	100	2.30	0.67	12.00	46.00	42.00
Q12	Language Exchange	100	1.89	0.61	25.00	61.00	14.00
Q13	Language Software	100	1.70	0.69	43.00	44.00	13.00
Q14	Mobile Apps	100	2.00	0.65	21.00	58.00	21.00
Q15	Role-play games	100	1.53	0.64	55.00	37.00	8.00
Q16	Vocab tools	100	2.51	0.57	4.00	41.00	55.00
Q17	Assessment tools	100	1.97	0.57	18.00	67.00	15.00
Q18	Media editing	100	1.70	0.64	40.00	50.00	10.00

Table 9 provides the same information as Table 8, but in mean order. Notice that all of the technology tools had an average of 1.53 or higher, and that they ranged as high as 2.51. For the students, the same three technology tools ranked highest by the directors and instructors (Course Managers, Online Resources, and General Websites) were in the top four (with means of 2.45,



2.50, and 2.36, respectively) and were selected as being *somewhat useful* or *very useful* by almost all students. However, Vocab Tools had the highest mean in terms of usefulness for students, but was ranked much lower by the other two groups. Conversely, unlike the responses of the directors and instructors none of the technology tools had means below 1.50 or majorities of students responding that they are *not useful*.

Table 9

*Flagship Students' Responses on Usefulness of Technology Tools in Language Classrooms (in Mean Order)*

In a CLASSROOM setting, how useful do you consider the following technology tools for language learning?							
<i>Item</i>	<i>Description</i>	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Not Useful</i>	<i>Somewhat Useful</i>	<i>Very Useful</i>
Q16	Vocab tools	100	2.51	0.57	4.00	41.00	55.00
Q03	Online Resources	100	2.50	0.57	4.00	42.00	54.00
Q01	Course Manager	100	2.45	0.61	6.00	43.00	51.00
Q10	General Websites	100	2.36	0.59	6.00	52.00	42.00
Q11	Language Websites	100	2.30	0.67	12.00	46.00	42.00
Q02	Class Website	100	2.19	0.64	13.00	55.00	32.00
Q04	Audio/Video Conferencing	100	2.09	0.60	14.00	63.00	23.00
Q14	Mobile Apps	100	2.00	0.65	21.00	58.00	21.00
Q09	Social Networking	100	1.99	0.66	22.00	57.00	21.00
Q17	Assessment tools	100	1.97	0.57	18.00	67.00	15.00
Q12	Language Exchange	100	1.89	0.61	25.00	61.00	14.00
Q05	Chat/Messaging	100	1.88	0.62	26.00	60.00	14.00
Q08	Blogs	100	1.82	0.57	27.00	64.00	9.00
Q06	Discussion Boards	100	1.78	0.59	31.00	60.00	9.00
Q13	Language Software	100	1.70	0.69	43.00	44.00	13.00
Q18	Media editing	100	1.70	0.64	40.00	50.00	10.00
Q07	Corpus Resources	100	1.69	0.63	40.00	51.00	9.00
Q15	Role-play games	100	1.53	0.64	55.00	37.00	8.00

Table 10 shows the Likert scale results for the 100 Flagship students' responses about the technology tools they outside their language classrooms. Again, the items are presented in item number order in order to illustrate the order in which the items were administered.

Table 10

*Flagship Students' Responses on Use of Tools for Language Learning Outside of Class (in Item Order)*

OUTSIDE of the classroom, how often do you use the following tools for language learning purposes?							
<i>Item</i>	<i>Description</i>	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Never</i>	<i>Sometimes</i>	<i>Often</i>
Q20	Online Resources	100	2.22	0.59	9.00	60.00	31.00
Q21	Audio/Video Conferencing	100	1.70	0.71	45.00	40.00	15.00
Q22	Chat/Messaging	100	1.64	0.77	54.00	28.00	18.00
Q23	Discussion Boards	100	1.32	0.56	73.00	22.00	5.00
Q24	Corpus Resources	100	1.28	0.55	77.00	18.00	5.00
Q25	Blogs	100	1.40	0.65	69.00	22.00	9.00
Q26	Social Networking	100	1.95	0.68	26.00	53.00	21.00
Q27	General Websites	100	2.46	0.62	7.00	40.00	53.00
Q28	Language Websites	100	1.83	0.76	39.00	39.00	22.00
Q29	Language Exchange	100	1.31	0.59	76.00	17.00	7.00
Q30	Language Software	100	1.28	0.49	74.00	24.00	2.00
Q31	Mobile Apps	100	1.71	0.73	45.00	39.00	16.00
Q32	Role-play games	100	1.20	0.49	84.00	12.00	4.00
Q33	Vocab tools	100	2.46	0.73	14.00	26.00	60.00
Q34	Assessment tools	100	1.67	0.69	46.00	41.00	13.00
Q35	Media editing	100	1.37	0.63	71.00	21.00	8.00

Table 11 provides the same information as Table 10, but is presented in mean order. Notice that all of the technology tools had an average of 1.20 or higher, and that they ranged as high as 2.46. Three technology tools (General Websites, Vocabulary Tools, and Online Resources) had the highest means (with 2.22, 2.46, and 2.46, respectively) and were selected as being used sometimes or often by almost all students. Note also that these were the three highest for the Flagship directors as shown in Table 3. Conversely, other technology tools (Blogs, Media Editing, Discussion Boards, Language Exchanges, Corpus Resources, Language software, and Role-Play Games) had means below 1.50 and majorities or relatively large proportions of students reported that they *never* use them.

Table 11

*Flagship Students' Responses on Use of Tools for Language Learning Outside of Class (in Mean Order)*

OUTSIDE of the classroom, how often do you use the following tools for language learning purposes?							
<i>Item</i>	<i>Description</i>	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Never</i>	<i>Sometimes</i>	<i>Often</i>
Q27	General Websites	100	2.46	0.62	7.00	40.00	53.00
Q33	Vocab Tools	100	2.46	0.73	14.00	26.00	60.00
Q20	Online Resources	100	2.22	0.59	9.00	60.00	31.00
Q26	Social Networking	100	1.95	0.68	26.00	53.00	21.00
Q28	Language Websites	100	1.83	0.76	39.00	39.00	22.00
Q31	Mobile Apps	100	1.71	0.73	45.00	39.00	16.00
Q21	Audio/Video Conferencing	100	1.70	0.71	45.00	40.00	15.00
Q34	Assessment Tools	100	1.67	0.69	46.00	41.00	13.00
Q22	Chat/Messaging	100	1.64	0.77	54.00	28.00	18.00
Q25	Blogs	100	1.40	0.65	69.00	22.00	9.00
Q35	Media Editing	100	1.37	0.63	71.00	21.00	8.00
Q23	Discussion Boards	100	1.32	0.56	73.00	22.00	5.00
Q29	Language Exchange	100	1.31	0.59	76.00	17.00	7.00
Q24	Corpus Resources	100	1.28	0.55	77.00	18.00	5.00
Q30	Language Software	100	1.28	0.49	74.00	24.00	2.00
Q32	Role-Play Games	100	1.20	0.49	84.00	12.00	4.00

### ***Comparing the Views of Flagship Directors, Instructors, and Students***

In addition to the investigating how much the directors, instructors, and students used various technologies and found them useful, we also wanted to examine the degree to which the views of the directors, instructors, and students on the use and usefulness of various technology tools were different and/or the same (or correlated). Thus, that was our second research question. Because of differences in age and experience between the directors, instructors, and students, we expected their views to be different, but because all three groups are dealing with the same issues, we expected their views to also be similar or at least somewhat correlated.

***Differences in ratings.*** Table 12 summarizes the mean ratings for the various technologies assigned by flagship directors, instructors, students for in-class technology, and students for technology used outside of class. Notice that the technologies are listed down the left side of the table and that the first four columns of numbers are for the three groups including students'

judgments for technology inside and outside the classroom. Note also that the last six columns of numbers to the right in Table 12 show differences in means between various pairings of groups. For example, for question 1, Course Manager, the difference in means between directors and instructors was a negligible -0.04, the difference between directors and students in class was 0.19, and so forth.

For the sake of discussion, we defined an *interesting difference* between groups rather arbitrarily as any difference in means of .45 or more, and so these interesting differences are given in bold italics font in Table 12. So for example, the only interesting difference between directors and instructors was that the mean difference between directors and instructors (in bold italics) was ***-0.48*** meaning that instructors rated Class Websites nearly half a point higher than directors, which probably makes sense given that instructors are much more likely to use such websites in their teaching.

Other interesting differences where directors rated higher than students (for in class uses) appear for General Websites. At the same item, the students (in class) rated higher than directors for Class Websites, Chat/Messaging, Language Exchanges, and Mobile Apps. Interesting differences where directors rated higher than students (outside class) appear for Online Resources, General Websites, Language Websites, and Media Editing. Interesting differences where students (in class) rated higher than instructors appear for Language Exchanges, Language Software, and Mobile Apps. Interesting differences where instructors rated higher than students (outside class) appear for Online Resources, General and Media Editing. And finally, interesting differences where students' (inside class) ratings were higher than students' (outside class) ratings were for Discussion Boards, Language Websites, and Language Exchanges.

Table 12

*Differences in Ratings Given for Use and Usefulness of Various Technologies Between Flagship Directors, Instructors, Students In Class, and Students Outside Class*

		Group Means				Group Mean Differences					
		Directors	Instructors	Students in class	Students outside class	Diff Directors – Instructors	Diff Dir – Ss in class	Diff Dir – Ss outside class	Diff Inst – Ss in class	Diff Inst – Ss outside class	Diff Ss in – Ss outside
Q01	Course Manager	2.64	2.68	2.45	NA	-0.04	0.19	NA	0.23	NA	NA
Q02	Class Websites	1.43	1.91	2.19	NA	<b>-0.48</b>	<b>-0.76</b>	NA	-0.28	NA	NA
Q03	Online Resources	2.86	2.68	2.50	2.22	0.18	0.36	<b>0.64</b>	0.18	<b>0.46</b>	0.28
Q04	Audio/Video Conferencing	2.14	1.76	2.09	1.70	0.38	0.05	0.44	-0.33	0.06	0.39
Q05	Chat/Messaging	1.43	1.53	1.88	1.64	-0.10	<b>-0.45</b>	-0.21	-0.35	-0.11	0.24
Q06	Discussion Boards	1.50	1.65	1.78	1.32	-0.15	-0.28	0.18	-0.13	0.33	<b>0.46</b>
Q07	Corpus Resources	1.50	1.62	1.69	1.28	-0.12	-0.19	0.22	-0.07	0.34	0.41
Q08	Blogs	1.57	1.41	1.82	1.40	0.16	-0.25	0.17	-0.41	0.01	0.42
Q09	Social Networking	1.79	1.79	1.99	1.95	0.00	-0.20	-0.16	-0.20	-0.16	0.04
Q10	General Websites	2.93	2.68	2.36	2.46	0.25	<b>0.57</b>	<b>0.47</b>	0.32	0.22	-0.10
Q11	Language Websites	2.29	2.15	2.30	1.83	0.14	-0.01	<b>0.46</b>	-0.15	0.32	<b>0.47</b>
Q12	Language Exchanges	1.36	1.26	1.89	1.31	0.10	<b>-0.53</b>	0.05	<b>-0.63</b>	-0.05	<b>0.58</b>
Q13	Language Software	1.43	1.24	1.70	1.28	0.19	-0.27	0.15	<b>-0.46</b>	-0.04	0.42
Q14	Mobile Apps	1.43	1.47	2.00	1.71	-0.04	<b>-0.57</b>	-0.28	<b>-0.53</b>	-0.24	0.29
Q15	Role-Play Games	1.14	1.26	1.53	1.20	-0.12	-0.39	-0.06	-0.27	0.06	0.33
Q16	Vocab Tools	2.21	2.15	2.51	2.46	0.06	-0.30	-0.25	-0.36	-0.31	0.05
Q17	Assessment Tools	1.79	1.71	1.97	1.67	0.08	-0.18	0.12	-0.26	0.04	0.30
Q18	Media Editing	2.07	1.97	1.70	1.37	0.10	0.37	<b>0.70</b>	0.27	<b>0.60</b>	0.33

***Correlations between sets of ratings.*** In addition to differences in means, it is often productive to look at the correlations between the ratings in different pairings. The correlations between the sets of ratings produced by flagship directors, instructors, students for in-class technology, and students for technology used outside of class are shown both across the top and down the left side of Table 13. Notice the series of four 1.00s that are placed in the squares that move diagonally across Table 13. Above and to the right are the Pearson product-moment correlation coefficients for all possible pairings of these four groups, ranging from a low of .796

to a high of .938. Below and to the left of the diagonal are the coefficients of determination, which some people find easier to interpret because they represent the proportion of overlapping variance between each pairing. For example, the coefficient of .879 indicates that 87.9% of the variance in the average ratings assigned by directors and instructors was overlapping, and by extension 12.1% is not overlapping. Thus the ratings assigned by directors and instructors varied in very similar ways, and in fact, in terms of any LFTIC initiatives moving forward, it might make more sense to consider the Flagship directors and instructors as one group and the students as a second group. Notice also that the coefficient is .860 for the ratings of students for in and outside applications of technology, which means that 86% of the variance between the ratings in this pairing is overlapping, where 14% is not. Therefore, the students were rather self-consistent in these two sets of ratings, though as shown in Table 12, there are also mean differences to take into account.

Table 13

*Correlations and Coefficients of Determination for Ratings Given for Use and Usefulness of Various Technologies by Flagship Directors, Instructors, Students In Class, and Students Outside Class*

	Directors	Instructors	Students in class	Students outside class
Directors	<b>1.000</b>	0.938	0.796	0.811
Instructors	0.879	<b>1.000</b>	0.836	0.827
Students in class	0.634	0.698	<b>1.000</b>	0.928
Students outside class	0.658	0.684	0.860	<b>1.000</b>

## Qualitative Results

We also gathered qualitative data from the three groups in the form of open-ended items. One general observation that startled us in analyzing these qualitative data was the response rate, which was much higher than what we have experienced in open-ended items in other surveys

that we have conducted. This phenomenon may have to do with the nature of people who participate in Flagship programs, or perhaps the participants in this survey project were more interested in the technology topics involved in our survey than is typically the case for topics in other survey projects. In any case, we will once again present the results separately for Language Flagship directors, Language Flagship instructors, and Language Flagship students. The entire set of qualitative data are available in Appendices C (for Flagship directors), D (for Flagship instructors), and E (for Flagship students).

The responses of the appropriate groups of stakeholders will be addressed in turn in response to the following general (and more specific) questions:

- What is the present situation with regard to use of technology in the Flagship programs (for training, advising, and assessment)?
- How could technology be used to aid teaching/learning (generally, as well as before, during, and after the Flagship students' capstone year)?

***What is the present situation with regard to use of technology in the Flagship programs?***

We observed several general findings from the open-ended, qualitative responses to the questionnaire items regarding current technology. First, there were very high response rates to the open-ended items compared to the response rates to open-ended items in the many other survey projects that we have been involved with over the years. Second, there was a great deal of variation in responses across both topics and participant groups. This may be an indication that various people, and groups of people, are using very different technologies to accomplish their work, perhaps even when they are doing similar things. Ultimately we realized that this wide degree of variation could be used by us to create an inventory or even database of the kinds of technologies being used by different people, groups, and programs across the Flagship programs. We have made a start with that in **Appendix B**, but we would like to see this list be put up online for interactive access and contributions from by all Flagship participants.

Here we will discuss our findings about the use of technology under headings for three major themes that we found running through our data:

1. Availability of technology professional development opportunities
2. Use of technology for *advising* students
3. Use of technology for *assessment* purposes

**Professional Development.** With regard to professional development (PD), most *directors* (with 10 responses) indicated that technology-related teacher PD orientations and workshops are regularly provided within their institutions. They also cited attendance at conferences as another avenue for PD. Two of the director respondents clearly found the item unclear, with one even saying that “the meaning of this question eludes me.” On another note, one response indicated the need for support: “The key thing about adopting new technology is TIME. Adding technology to classes (and the whole program in a comprehensive manner) requires a huge learning curve, and lots of experimentation. It would be great if TIC could relieve some of that pressure, by previewing, testing, and packaging technological resources for us to put into practice.”

*Instructors* (with 22 responses) listed a number of opportunities for training including workshops, webinars, and other training at their institutions (or in one case at another institution during summer).

**Advising.** With regard to advising, *directors* (with 9 responses) offered a number of ideas. Five replied that resources are made available online that help with advising. One pointed out that students apply online. Other responses indicated the use of email and *WeChat* communications with advisees. Three said that either no technology was used for advising, advising was face-to-face, or it was not practical given the low number of students

*Instructors* (with 25 responses) also mentioned a number of options. Their responses fell into three categories. Some responses indicated that technology was used for *providing information* (e.g., websites, *YouTube*). Others mention using technology for *communicating with students* (e.g., email, *Skype*), while still others mentioned using technology for *record keeping* and keeping track of grades and assignments (e.g., *Google Drive* is used “to track every student’s record,” *FilemakerPro*).

**Assessment.** For assessment purpose, the *directors* (with 12 responses) all responded that they do some form of online testing. Seven indicated that they use some form of oral proficiency interview (OPI). Four indicated that they use tests made available by Brigham Young University (BYU). Three listed American Council tests. Three mentioned using Standards-based Measurement of Proficiency (STAMP) tests. And, a two said they used an additional home-grown or another unspecified test (with one respondent each).



*Instructors* (with 19 responses) also indicated a number of different testing ideas. Eight indicated that they use some form of online testing. Three listed STAMP tests. Two indicated using a form of OPI. And, one each mentioned additional home-grown and an unspecified other test. Instructors also mentioned classroom test development tools.

### ***How Could Technology Be Used to Aid Teaching/Learning?***

We observed several general findings from the open-ended, qualitative responses to the questionnaire items regarding future uses of technology that could be used to aid teaching and learning. First, once again, we found a large degree of variation in responses across both topics and participant groups. Second, there were a number of indications that the Language Flagship programs are still exploring a number of new options regarding technology.

Here we will discuss our findings in this area on four major themes that we found running through out data with regard to use of technology for enhancing teaching and learning of languages: (a) generally, (b) before the Language Flagship Capstone Year, (c) during the Capstone Year, and (d) after the Capstone Year for language maintenance. Each of these themes will be discussed from the points of views of directors, instructors, and students.

**Generally.** The *directors* (with eight responses) responses varied greatly with regard to general uses of technology including:

- “A website with graded readings”
- “Move our live classroom platform onto apple and android devices”
- “Some kind of platform so that we could easily share this kind of developed work product with other schools”
- “We need to develop technology based instruction materials that make foreign language learning more engaging”

Importantly, one pointed out more generally that “Technology changes all the time. My main interest is keeping abreast so that students know we are not behind the times in our use of technology.”

The *instructors* (with 19 responses) also had various takes on this issue. Some requested faster internet service or access to useful websites. Several wanted more access to equipment (e.g., iPads, a color printer). Others suggested specific software they would like to use in the future (e.g., *WordSmith*, *Wimba*). And, one other argued that “for young college students, we

need to develop technology-based instruction materials that make foreign language learning more engaging.” Overall, instructors did not offer very concrete ideas for new technology, possibly because they are not sure what is available. As one indicated: “I'd like more information on what's being used in other institutions.”

The *students* (with 59 responses) generally provided more specific and concrete suggestions for technologies, such as:

- Calls for more software in Chinese, Persian, and Russian.
- Touch screen devices and software that could be used to practice character writing (and account for stroke order in Chinese).
- Subscriptions to websites like *Pimsleur* and *Rosetta Stone*
- More use of websites like *WeChat*, *Groupme*, and *FluentU*, as well as programs like *Skritter*, *Anki*, *Quizlet*, and *Pleco*.
- More language input sources like websites, recordings, podcasts

On more positive notes, some students mentioned that the technologies used at their institutions already worked well. One student raved about the usefulness of *Google Docs* for sharing documents and providing feedback.

***Before the Language Flagship Capstone Year.*** *Directors* (with 13 responses) had several ideas about how technology could be useful in preparing the students' *before* their Capstone Year. They specifically mentioned videos (4), PowerPoint (3), GLOSS (2), and a variety of other single-mention tools used for things like a pre-departure videoconference where students make presentations to and meet with their overseas host faculty, and a “semester-long series of preparatory talks relating to the overseas program.” In one case, all preparation for the Capstone Year was handled as a regular part of the language classroom (including etiquette in the host country and cultural differences from America). However, one director took exception to this specific item: “Specifically for capstone preparation? That is hard to distinguish from our general use of technology for language learning purposes.” Another director pointed out that they do not call their overseas program a *capstone* because it occurs in the penultimate year of their program.

*Instructors* (with 18 responses) indicated specific tools they used: three said they use *WeChat* for preparation; three mentioned videos for that purpose; and, two cited websites developed to accompany their textbook. Other technologies included by instructors were “PowerPoint presentation pre-departure” and a preparation “webinar.” In one case, all preparation was

handled as a regular part of the language classroom (again, including etiquette in the host country and cultural differences from America). In contrast, several responses indicated a lack of information regarding Capstone preparation; four indicated that they did not know; three wrote N/A; one said that they were not aware of any capstone preparation; and one said that “American councils administers the overseas program.”

*Students* (with 75 responses) gave a wide variety of suggestions for what they would like to see used for Capstone preparation purposes, far too many to list here (for more on these, see Appendix B).

***During the Language Flagship Capstone Year.*** Directors (with 12 responses) also offered ideas for how technology could be useful *during* the Capstone Year, while the students are abroad. Most directors specifically listed what they wanted students to do during this time: two listed reading online news in the target language and two listed e-portfolios. Several listed activities such as doing online assessment; video-conferencing to “help us to better keep track of students [*sic*] progress and monitor their condition;” and using social media to create an online community.

One director seemed very clear about their current requirements during the capstone year: “These comprise (1) job application portfolio; (2) interactive blog or website; (3) workplace video; (4) two essays describing the internship; and (5) multimedia Powerpoint and final presentation.” However, several directors cautioned that technology might not be as readily available or flexible in the host country as it is in the US.

Some *instructors* (with 20 responses) had specific ideas about technology that would be useful during the Capstone Year. Online activities were suggested by 11 teachers. One suggested “A Flagship mobile app which includes (1) messaging tools to communicate with Flagship centers and other Flagship students (2) student discussion forum to post questions or share tips: e.g., Phrase of the day, Cultural tip of the day, How do I say this? (3) Shareable glossary/notebook for students to keep a record of professional language they use on a daily basis during the internship.” Several others suggested using online chat or *Skype* to report back to teachers or to avoid “emotional isolation.”

*Students* (with 67 responses) tended to center around what students would like to use during their Capstone Year. Many referred to online resources, such as 20 suggested online dictionaries

(including four who specifically mentioned *Pleco*), and *WeChat* (2) (see Appendix G for more ideas in this area).

***After The Language Flagship Capstone Year.*** *Directors* (with 12 responses) also had ideas for how technology could help with maintenance of the students' language proficiency *after* the Capstone Year is completed. Several mentioned online websites and resources for continued "learning and assessment." Others responded with specific website ideas (again, see Appendix B for more details). One director had a fairly comprehensive set of specific ideas: "An idea we've been floating for years! A series of online modules for language maintenance would be great. Offered along with alumni services—job opportunities and placement, get-togethers, events, etc." Two others specifically mentioned the idea of an alumni network.

*Instructors* (with 21 responses) mostly suggested technologies they had identified earlier such as *Google*, *Skype*, *WeChat*, and *Pleco*. Simply put, their goals tended to be for the students to continue learning and practicing the language.

*Students* (with 58 responses) tended to reference language maintenance strategies during the Capstone Year. Many referred to online resources and suggested using a number of specific websites, resources, and tools for continuing to learn and practice their language skills: four mentioned using videos; three suggested podcasts, movies, and online dictionaries; and two mentioned using mobile applications (for more complete information, see Appendix B).

## Conclusions

### ***Limitations***

***Sample sizes and representativeness.*** Of the three surveys discussed here, our findings are based upon sample sizes of respondents that range from considerably low to more moderate, with 14, 34, and 100 responses for each Flagship directors, instructors, and students, respectively. It is important to remember several things when making interpretations about the results presented here based on these samples, in particular that these are not random samples. In most survey research, the people who respond are those with motivation to do so, either because they have a particular issue they want to address or see addressed, or because they belong to a subset of the population that is internally motivated to do so. Such results may not reflect the greater population, either in terms of motivation or in terms of how widespread the opinions and

issues raised are viewed by others. Thus, given the overwhelming detail of the open-ended responses, these results can be said to provide a large number of ideas and examples, but readers should interpret the meaning of such results cautiously.

**Questions not asked.** In the back of any survey researcher's mind is always the nagging suspicion that there might have been questions that we didn't ask but perhaps should have. We asked the directors and instructors if there were any such questions.

Four *directors* responded with *no* or *NA*. However, one director responded as follows: "I was very surprised not to be asked about (a) present levels of technological support within Flagships and their host institutions, and (b) the kinds of support that might usefully be offered by the TIC. These questions would seem to go to the heart of the matter." Another commented that "Mostly everything comes down to time and directors and Flagship teachers generally have little luxury to explore learning how to use a give technology and understanding how it can improve the pedagogy goals one has."

Similarly, most *instructors* responded with *no* or *NA* or left this item blank, but one instructor said we should have asked: "How can we support your Flagship instructional technology projects?" And, "how the students respond to the technology use, positive impact or negative impact?" Another wrote: "I'd be interested to see how much technological flexibility teaching staff have within their respective programs and institutions."

We didn't ask this question of students. Clearly, a few people would have liked to see additional items on our survey instruments.

### ***Interpretations***

What does this all mean? The four questionnaires in this project provided a good deal of information about how technology is used and could be used in the Flagship programs from the perspectives of those directors, instructors, and students who responded. We will discuss our conclusions about that information in four areas: (a) technological innovation in Flagship classrooms; (b) the need for trade-offs; (c) the need for standardization; and (d) the need for increasing communication.

***Need for technological innovation in Flagship classrooms.*** Clearly, a wide variety of technologies are currently being used by all participant groups, but to a large extent that usage is focused on web-based technologies. At present, interactive and adaptive technologies were less

frequently used. We also found some striking differences in the ways these groups rated some of the technologies (see Table 12). We also found at least moderate similarities in relative average ratings among all three groups, and considerable overlaps in the relative average ratings of directors and instructors, as well as for the average ratings of students for uses of technology inside and outside their classrooms. However, it may be that a lack of innovation in the use of technology in classroom settings may be limiting how much students are aware of technological resources for language learning on their own.

***Need for trade-offs.*** Apparently, technology is fairly difficult to access and implement for many instructors and directors in a way that is both efficient and yet keeps up with the changing pace of technology. Innovation requires resources and training, but it seems that the value of technology relative to the number of students and its overall usefulness remains uncertain for some participants. It appears to us that, given their familiarity and breadth of knowledge with different technologies, students may be the most valuable resource for both locating and learning about new kinds of technology as they emerge.

***Need for standardization.*** One way to possibly account for the difficulties in implementing and learning about new technologies for language purposes is to develop shared platforms and tools for learning collaboratively across Flagship programs. While the practicality of this strategy remains unexplored, the pooling of resources would seem to be one way to address some of the resistance and challenges for using more interactive and adaptive forms of technology.

***Need for increasing communication.*** While collaboration and professional development activities seem to be numerous within Flagship programs, lack of communication within programs for the individual stakeholders (directors, instructors, students) might be limiting the availability and buy-in of technology use in the classroom. To enhance such communication among Flagship programs, all of the technology suggestions offered by the directors, instructors, and students are listed in **Appendix B**. We truly hope that this comprehensive listing of available technologies and the other analyses provided in this report will serve as valuable resources for all Flagship stakeholders.

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**Appendix A**  
**Responses from the Small Sample of Language Center Directors**

Table A

*LC Directors' Responses on Interactions with Language Flagship Participants (in Item Order)*

Please describe your Language Center's interactions with participants in The Language Flagship program in a typical academic year.

<i>About</i>	<i>Item</i>	<i>Description</i>	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Never</i>	<i>Sometimes</i>	<i>Often</i>
Groups	Q01	Flagship Instructors	4	2.50	0.50	0.00	50.00	50.00
	Q02	Flagship Students	4	2.25	0.43	0.00	75.00	25.00
	Q03	Other Departments	4	2.25	0.43	0.00	75.00	25.00
	Q04	Other Instructional Centers	4	2.25	0.43	0.00	75.00	25.00
	Q05	Outside Departments	4	2.25	0.43	0.00	75.00	25.00
	Q06	Government/private programs	4	2.00	0.71	25.00	50.00	25.00
Activities	Q07	Corpora Development	4	1.50	0.87	75.00	0.00	25.00
	Q08	Teaching Materials	4	2.25	0.83	25.00	25.00	50.00
	Q09	Technology in Teaching	4	2.50	0.50	0.00	50.00	50.00
	Q10	Technology in Research	4	1.75	0.43	25.00	75.00	0.00

Table B

*LC Directors' Responses on Interactions with Language Flagship Participants (in Mean Order within Groups & Activities)*

Please describe your Language Center's interactions with participants in The Language Flagship program in a typical academic year.

<i>About</i>	<i>Item</i>	<i>Description</i>	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Never</i>	<i>Sometimes</i>	<i>Often</i>
Groups	Q01	Flagship Instructors	4	2.50	0.50	0.00	50.00	50.00
	Q02	Flagship Students	4	2.25	0.43	0.00	75.00	25.00
	Q03	Other Departments	4	2.25	0.43	0.00	75.00	25.00
	Q04	Other Instructional Centers	4	2.25	0.43	0.00	75.00	25.00
	Q05	Outside Departments	4	2.25	0.43	0.00	75.00	25.00
	Q06	Government/private programs	4	2.00	0.71	25.00	50.00	25.00
Activities	Q09	Technology in Teaching	4	2.50	0.50	0.00	50.00	50.00
	Q08	Teaching Materials	4	2.25	0.83	25.00	25.00	50.00
	Q10	Technology in Research	4	1.75	0.43	25.00	75.00	0.00
	Q07	Corpora Development	4	1.50	0.87	75.00	0.00	25.00

Table C

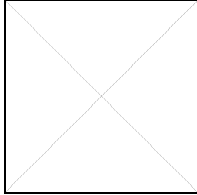
*LC Directors' Responses on Professional Development Opportunities Provided (in Mean Order)*

Please describe how often your Language Center provides the following professional development or instructional opportunities in a typical academic year.

<i>Item</i>	<i>Description</i>	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Never</i>	<i>Sometimes</i>	<i>Often</i>
Q12	Workshops for Teachers	4	2.25	0.43	0.00	75.00	25.00
Q13	Conferences for Teachers	4	1.75	0.43	25.00	75.00	0.00
Q14	Tutoring for Teachers	4	2.25	0.43	0.00	75.00	25.00
Q15	Workshops for Students	4	1.50	0.50	50.00	50.00	0.00
Q16	Conferences for Students	4	1.50	0.50	50.00	50.00	0.00
Q17	Tutoring for Students	4	1.25	0.43	75.00	25.00	0.00
Q18	Class visits	4	2.00	0.00	0.00	100.00	0.00

**Appendix B**  
**Technology Options in Flagship Programs:**  
**Compiled from the Open-Ended Responses of**  
**Flagship Directors, Instructors, and Students in this Survey**

**(Double click below to see entire database in .xlsx format with your Excel spreadsheet)**





## Appendix C

### Open-Ended Responses of Flagship Directors

**Q24 If you use technology to collaborate with other Flagship Programs, please describe which technologies you use and for what purpose. (n=7)**

- My institution doesn't have a Language Center. We do have an Office for Academic Innovation that helps and provides some technology support. We've received a short set of tutorial courses from someone at the NSA for advanced students on how to translate non-fictional texts. In the past we've done an online exchange with a Russian institution that included participants from both our domestic Flagship and one or two others (the local convener found it very hard to schedule, and that not all campuses were equally invested).
- While we talk with the other Russian Flagship programs, we currently do not have any ongoing collaborations in the area of curriculum.
- Skype, Adobe Connect, GoToMeeting, for synchronous meetings; Google Docs for sharing ideas and collaboration; Dropbox for document sharing.
- We use skype or out online classroom for meetings.
- Previously we used Cultura. I would like to develop ways for Flagship students at different universities to communicate in a somewhat structured way (i.e., not just through Facebook or something similar). Maybe a fun type of poetry memorization competition or debate.
- Previously we used CALLM to develop content courses to share with peer programs.
- We don't use any specific technologies used for collaboration with other Flagship programs.

Word	Frequency	Word	Frequency
flagship	4	courses	2
used	3	use	2
programs	3	online	2
we've	2	sharing	2
Russian	2	develop	2
previously	2	institution	2
meetings	2	students	2
collaboration	2	skype	2

**Q25 What technologies does your Language Flagship program use for advising students? Please describe how technology is used in this context. (n=9)**

- Students apply online. We have a website that we use for announcements, etc.
- We do face to face advising.
- I don't know that we use technology for advising, but I certainly have advised students to spend time with the Defence Department's GLOSS resources, the News in Simplified Russian, the frequency tables of words in Russian generated by the National Corpus. I encourage them to use vocabulary tutoring programs (flashcards) like quizlet. I encourage them as they get on in the program to spend time reading Russian webpages.
- Web-based program materials, e-mail communications w/ advisees
- We have a comprehensive iLearn site with language learning resources, dictionaries, etc. The News Forum section is frequently used for connecting with students for advising purposes.
- None to my knowledge. Bear in mind that our numbers are very small (the reason for the de-funding of our program).

- At this point we do not use anything but we have just developed a template in Filemaker that we will soon be using.
- Wiki
- WeChat
- We don't have any specific technologies used for students' advising.

Word	Frequency
advising	4
use	4
students	4
russian	3
program	3
resources	2
etc	2
used	2
time	2
encourage	2
face	2
news	2
spend	2

**Q26 What kind of technology-related training and support do you currently provide in The Language Flagship? What kind of training or support would you like to provide? (n=10)**

- We have three instructors and TAs. All of us use technology.  
UCLA Center for Digital Humanities provides help and training if needed.
- self-learning tools  
online self-assessment tools  
tools to adapt authentic materials
- Our flagship team is pretty technology savvy. Instructors can generally figure out what technology they need and how to use it.
- Semester orientations to technology, communicative method, language pedagogy, assessment and online language learning; 25-30 workshop opportunities during the AY on a range of technology topics; online support group for technology/pedagogy in hybrid/online courses. Online reading Materials website.
- I take it you mean for our teachers? Attendance at conferences and workshops primarily. The key thing about adopting new technology is TIME. Adding technology to classes (and the whole program in a comprehensive manner) requires a huge learning curve, and lots of experimentation. It would be great if TIC could relieve some of that pressure, by previewing, testing, and packaging technological resources for us to put into practice.
- We regularly have workshops to train our tutors to use our online classroom platform and related instructional content. We would certainly welcome any online workshop opportunities or newsletters on topics of instructional technology
- The meaning of this question eludes me. We use technology to deliver materials to learners, and to record their use of language, but the only "technology-related training" we give them would be training in the use of non-roman fonts (itself an often fraught task).  
Or do you perhaps refer to teacher-training?
- We work with advanced level Flagship students using technologies such as vimeo, Yable Chinese, Douban, Pleico, etc.  
Students in lower level courses are work with others in the regular Chinese program. I would like to see

more synergy between the regular courses and technology used for those levels and those in the higher levels.

- BYOD (e.g. Kahootit as assessment device)  
Mobile reading using news apps  
WeChat for community building and information sharing
- We did not receive or need any technology related training or support within the Flagship program at UHM because our University (specifically, Center for Language and Technology) keeps offering many technology related workshops. I have benefited from the Center workshops and we keep participating in technology or pedagogy-related conferences

Word	Frequency	Word	Frequency
technology	15	opportunities	2
online	7	instructors	2
use	6	support	2
language	4	pedagogy	2
training	4	instructional	2
workshops	4	learning	2
center	3	reading	2
materials	3	chinese	2
flagship	3	level	2
related	3	work	2
tools	3	workshop	2
program	3	conferences	2
courses	3	students	2
need	2	regular	2
using	2	topics	2
levels	2	assessment	2

**Q27 What technologies (e.g., hardware, software, websites) would you like to see implemented at your institution that would help you teach foreign languages more effectively? (n=8)**

- Technology changes all the time. My main interest is keeping abreast so that students know we are not behind the times in our use of technology.
- learning tools like wenlin and NJstar  
free learning support systems like gloss that uses authentic materials  
Chinese language assessment tools for students at different levels
- In the advanced Flagship courses we teach we often assign the students a large amount of reading to do before class. In class we spend time talking about the reading, but we rarely get to check on comprehension of nuances in the text, verification that they've found the correct contextual meaning for polysemous words, an opportunity to see how specific words are created in terms of word formation, and to help them learn specific vocabulary and collocations from these texts. We've not really had the man power to sit down and take some of the set pieces that we use and work up such well-thought out tutorials in our D2L system. Also, it would really be wonderful to have some kind of platform so that we could easily share this kind of developed work product with other schools. If we do it in D2L it is not easy to export to other schools.
- Classrooms capable of supporting synchronous shared distance courses; aggregation of crowd-sourced cultural and linguistic materials for use across Flagships;
- Ipad and tablets would be useful. We area also plan to move our live classroom platform onto apple and android devices. We are also still working on the assessment tool.
- Software. It would be helpful to have access to language-teaching applications that could be adapted between languages without the need to re-invent the wheel. It would also be useful to have an annotated register of available software of this and related types.
- more follow-up about specifically how technologies are being used at different levels.
- I don't know much about technology. I think that face to face is better than online instruction. However, for young college learners of foreign languages, we need to develop technology based instruction materials that make foreign language learning more engaging.
- I think that a website with graded readings in different disciplines will help students build up their reading proficiency in their own domain.

Word	Frequency	Word	Frequency
technology	4	words	2
students	4	really	2
materials	3	software	2
different	3	tools	2
use	3	schools	2
learning	3	useful	2
reading	3	work	2
need	2	think	2
languages	2	class	2
time	2	foreign	2
help	2	courses	2
levels	2	specific	2
platform	2	instruction	2
language	2	know	2
face	2	d2l	2
kind	2	assessment	2

**Q28 How do you think technology might be helpful for students to continue improving their language proficiency during the Capstone Year? Specifically, for their internship DURING the Capstone Year? (n=12)**

- There is no life any more without technology. We use it at UCLA all the time, and I expect that students use it during the capstone year.
- social media to create a learning community
- It depends on what is allowed in China.
- I am not sure what to answer here.
- Creation of materials onsite regarding cultural and linguistic particularities of their work/study environments; recasting linguistic and cultural materials for instruction of following cohorts. Development of LSP materials; creation of e-portfolios for longitudinal assessment.
- Though access to the web can be spotty for students on internships in various places, online resources still offer the greatest potential for language training. Flagship Nanjing does some Skype sessions with students to prepare for the OPI. Yet a much more comprehensive set of materials with broader purpose should be created. For our SF State students, we do require Capstone portfolios which are prepared online. These comprise (1) job application portfolio; (2) interactive blog or website; (3) workplace video; (4) two essays describing the internship; and (5) multimedia Powerpoint and final presentation.
- A Video conferencing system that can automatically matching teacher and students available time will help us to better keep track of students progress and monitor their condition. An online assessment tool would be great too.
- Well, this is a wide-open question! The advantages of technology that apply in other years do not disappear during the Overseas Year. Students can additionally make audio and video field recordings, though this is something we have not particularly encouraged. Most of our internships DURING the Overseas Year (actually this is the ONLY occasion when internships feature in our program) are in low-tech contexts where technology may be less useful or feasible than elsewhere.  
[This being a Language Flagship, I would suggest "might help language students continue to improve their proficiency..." as better English.]
- The current on-line OPI familiarity program could be updated through the use of technologies.
- Mobile language learning by news apps especially for reading will be helpful to maintain vocabulary and general proficiency during internship.
- It depends on the types of technology.
- They should read news online in both traditional and simplified characters and watch or listen to broadcast daily.

Word	Frequency	Word	Frequency
students	8	overseas	2
materials	4	flagship	2
language	4	creation	2
technology	4	cultural	2
online	4	proficiency	2
year	3	news	2
video	3	learning	2
use	3	capstone	2
internships	3	depends	2
opi	2	linguistic	2
time	2	program	2
help	2	better	2
internship	2	assessment	2

**Q29 How do you think technology might be helpful for students to maintain their language proficiency AFTER they have completed the Capstone Year? (n=12)**

- It helps them to access media in the language.
- online learning and assessment websites like gloss, JLU, Scola
- It depends on where students are and what language skills .
- I think it might be useful for them to have some kind of web engagement with continuing content from the L2 country/region.
- Creation of an alumni network with opportunities for synchronous/asynchronous communication?
- An idea we've been floating for years! A series of online modules for language maintenance would be great. Offered along with alumni services -- job opportunities and placement, get togethers, events, etc.
- Since the aim is to maintain or achieve superior level, a software that provide students with current news (listening and reading) and debate topics, that allows them to record their opinions and arguments for issues will be very helpful.
- Perhaps I'm missing something here: to my mind the advantages of technology for language learners run consistently through all years, levels, and learning contexts. In the bad old days, studies in our languages were mostly limited to the written word; but new technologies have helped us break out of that straitjacket. (A truism, of course.)
- This is another area where technology could play an important part. Often students' language proficiency lowers after they have completed Flagship and we don't have any program that could help them.
- Regular access to websites, chat groups, BBS etc. will be essential for students to participate in discourse in the target community to develop life-long learning habits.
- At this point, there are no Korean courses until they graduate after the capstone program. I am sure technology is really helpful after the Capstone program to maintain their language proficiency.
- Students should use online resources to maintain their language proficiency especially in reading and listening.

Word	Frequency	Word	Frequency
language	7	opportunities	2
students	5	alumni	2
maintain	3	years	2
proficiency	3	websites	2
learning	3	access	2
technology	3	reading	2
program	3	capstone	2
online	3	listening	2
etc	2	helpful	2

**Q30 Were there any questions related to technology in The Language Flagship that were not included in this questionnaire that you feel we should have asked? (n=6)**

- No
- N/A
- I was very surprised not to be asked about (a) present levels of technological support within Flagships and their host institutions, and (b) the kinds of support that might usefully be offered by the TIC. These questions would seem to go to the heart of the matter.
- Mostly everything comes down to time and directors and Flagship teachers generally have little luxury to explore learning how to use a give technology and understanding how it can improve the pedagogy goals one has.
- No.
- NA

**Q31 What technologies does your Language Flagship program use for capstone preparation purposes (e.g., pre-departure videos/modules)? Please describe how technology is used for that purpose. (n=13)**

- videos, web-based media, online modules (that accompany the capstone textbook)
- PPT, video
- This is handled by AC.
- We really haven't addressed this question specifically. I would like to see some kind of online ongoing short engagement activity for them over the summer before going to the capstone.
- PowerPoint presentation pre-departure
- Specifically for capstone preparation? That is hard to distinguish from our general use of technology for language learning purposes -- e.g., ChinesePod, FluentU!, SCOLA, GLOSS, Youdao, etc.
- We mainly use GLOSS online modules for listening and reading practices. Students will also be taking OPI-c to determine their levels.
- Videos
- We have a semester-long series of preparatory talks on a range of subjects relating to the Overseas program (I tend not to call this a "Capstone" as it falls in the penultimate year).
- We have used Cultura in the past--there certainly is room for technology to help in this area.
- Videos, WeChat
- We don't use any technologies for capstone preparation purposes because pre-capstone Korean Flagship students are all in one classroom for their capstone preparation. We created some videos or PPTs (workplace etiquette in Korea, differences between Korean and American cultures, etc.) for capstone preparation.
- Students make presentations to and have a pre-departure meeting with the faculty members in Nanjing via videoconferencing.

Word	Frequency	Word	Frequency
capstone	7	etc	2
preparation	4	purposes	2
videos	4	pre-departure	2
use	3	gloss	2
online	3	korean	2
students	3	modules	2
technology	2	specifically	2

**Q32 What technologies does your Language Flagship program use for language testing and assessment?  
Please describe how technology is used for that purpose. (n=12)**

- online tests
- BYU tests, American council tests, OPI, mock OPI  
online diagnostic assessment  
audio and video assignments
- For proficiency tests, we rely on on-line testing from BYU, AC, and STAMP.
- At present we are using the American Councils tests for annual assessment. We would like to develop an online placement test and perhaps some online thematic units for review/addressing areas of student weakness.
- Language testing is done through American Councils on-line tests
- BYU Computerized Adaptive Placement Exam (ALT and ART); OPI-C; HSK
- We use a range of standardized assessments; which one depends on the student's level of proficiency.
- Online proficiency test: OPI-C, CAP, and STAMP for yearly assessment.  
Online quiz tools: Quizzlet and Kahoot for classroom quizzes.  
We are in the process of developing our own assessment tools similar to google form, but with functions to automatically grade multiple-choice, matching, and fill-in questions.
- OPI, as per standard. Audio and video recordings in comprehension tests.
- Frequent online assessment of all skills(use of assessments as mandated for all Chinese programs). We also use additional online assessments, such as STAMP, and COPI and mock OPI interviews.
- BYU online reading and listening tests  
Skype OPI
- The Korean Language Flagship Center developed our own online tests (KLCFCPT) based on ILR guidelines.  
The test covers reading and listening comprehension only.

Word	Frequency	Word	Frequency
online	10	tools	2
tests	9	video	2
opi	5	listening	2
assessment	5	own	2
byu	4	language	2
assessments	3	placement	2
test	3	mock	2
use	3	audio	2
proficiency	3	councils	2
american	3	testing	2
stamp	3	comprehension	2
reading	2	opi-c	2
on-line	2		



**Q33 Has your Language Flagship program implemented a specific blended learning strategy? If so, please describe this strategy. (n=9)**

- All of our classes (from year 1 to year 4) are blended in a sense that all homework can be done on line and a lot of resources are included for students. Students do research on line and give presentations in class using media resources.
- we use E-learning website
- N/A.
- Certainly we are media heavy -- lots of authentic language sources that are integrated with classroom activities.
- Yes, We currently have both online and face-to-face class for our students during the semester. Students will have their group class face-to-face like a regular course, then small group class of 3 every week to do drills, and then 1.5 hour of online 1-on-1 conversation class to expand on what they have learned.
- Currently we are teaching a class in which the instructor is in China and the students are here. This is working well and could be a model to show how we could incorporate more input from in-country resources to our students.
- Yes, we provide mobile reading and tutoring during summer for those students who do not participate in summer programs.
- NA
- No.

Word	Frequency
students	7
class	6
resources	3
face-to-face	2
year	2
media	2
line	2
currently	2
online	2
summer	2
group	2

**Q34 What technologies do you use most in classroom settings and in what way? (n=14)**

- videos, powerpoint
- PPT, gloss, E-learning website, video, audio, online dictionary, pleco, quizlet, audacity, mobile learning apps
- Smart Board and Smart Board Notebook software for classroom interaction and teaching material design  
Powerpoint presentation, video clip, sound recording
- powerpoint presentations to present vocabulary with images; online illustrations (perhaps a still from a video) to have students narrate a scene;  
small clips from a video to have the students think about what verb of motion could describe what the characters are doing
- Powerpoint presentations for lesson plans
- Wiki for collaboration, posting resources, and assignments
- PowerPoint for instructional presentations, YouTube/Vimeo/streamed audio/video content, wikis, etc. for peer editing; audio/video recording and editing software
- Slides, films, video clips, Powerpoint presentations. More often in my culture courses than in my language courses.
- Video clips of news for writing. Power Point presentations for outlines and pattern drills. We have our own website [chineseforall.org](http://chineseforall.org) as a course management tool and online communication platform.
- Video clips, PowerPoint, images, sound recordings.
- Mac Keynote, especially for conjunction of image and sound.  
Hindi Urdu Flagship's own website resources, typically in demonstrating their usefulness in self-help.  
Simple projection of online dictionaries, as basis for discussions of register, semantic range, etymology, etc. Projection of film clips, news reports, documentaries for various specific functions.  
The humble photocopier still has much to offer: a text that students can write on directly is often of greater enduring usefulness than short-lived ephemeral projections.  
Your question is about classroom settings; there are further uses (of listening practice and student recordings) in other contexts such as homework assignments.
- ppt to present and highlight aspects of Classical Chinese, video clips to show connections between Classical and Modern Chinese
- Video clips and PPT
- Every class I use video clips, YouTube, and PPTs because I teach Korean language courses (Korean through film or Media Analysis in Korean).
- online news sites for teaching current affairs; PPT of content; video clips to illustrate cultural concepts

Word	Frequency	Word	Frequency	Word	Frequency
video	13	korean	3	recording	2
clips	9	etc	2	chinese	2
powerpoint	7	usefulness	2	software	2
presentations	5	youtube	2	editing	2
online	5	board	2	classical	2
ppt	4	content	2	images	2
news	3	present	2	projection	2
sound	3	own	2	film	2
courses	3	language	2	still	2
students	3	recordings	2	classroom	2
audio	3	teaching	2	smart	2
website	3	resources	2		

## Appendix D

### Open-Ended Responses of Flagship Instructors

**Q19 Please list any other technology-based resources you use that were not mentioned above. (n=11)**

- Wechat
- Gloss, Scola, EduCannon, Padlet, Kahoot, WeChat
- Course website specifically designed for Al-Kitaab Arabic textbook
- Google Docs, Doctopus
- none
- NA
- Voicethread
- WeChat, Pleco
- commercial website developed for us with our pedagogy and textbook
- Quizlet
- alkitaabtextbook.com

Word	Frequency
wechat	3
textbook	2
website	2

**Q20 What technologies do you use most often in classroom settings and in what ways? (n=29)**

- Audio or video clips to practice listening skills, Powerpoint presentations of content, corpus for vocabulary learning, wikis for collaborative learning
- power point presentations to teach grammar and provide relevant drill and visual aid  
video/audio clips online which are relevant to class
- youtube site, downloaded and edited youtube files, power point presentation, soundcloud
- PowerPoint for lectures  
Video clips to illustrate cultural concepts and for listening practices
- PPT, video and audio clips from youtube
- video and audio materials - listening exercises
- PowerPoint presentations of content and video clips to illustrate cultural concepts
- video clips from youtube, Powerpoint to teach vocab and grammar and present the topics for discussion
- video clips
- audio/video clips for listening and speaking practice and cultural content; for close listening exercises, we have students bring in their own laptops and headphones so they can focus on parts that they are having the most trouble with; document camera when marking texts together or reviewing work as a class
- PDFs I create from Google Images for a planned picture discussion. Videos of native speakers writing by hand.
- Blackboard in teaching assistance.
- Video clips for language learning, Power Point to present vocabulary, SKYPE for oral exams, google docs for online collaborative editing
- video clips, PowerPoint Presentations, Prezi, Youtube
- Online video resources
- PowerPoint and video clips
- Video clips to illustrate cultural concepts, ppt for vocabs, soap operas and audios for listening and watching the materials etc.
- PowerPoint presentations of content; video clips to provide samples of language usage (e.g. oral academic style) and to illustrate cultural concepts; Skype to supervise my PSU capstone course with overseas students; blog platforms (Google, Piazza) to organize online communication between PSU students and students in Russia; Audacity for recording myself and students speeches.
- Video clips and power point.
- youtube videos
- sometimes I assign homework based on videos
- PowerPoint presentations extremely frequently to highlight the most important things to learn from that day, to review and give visual representations of concepts, audio files to listen to language spoken by a native speaker,
- depends entirely on level of class/students
- Powerpoint for outlining information; video clips for visualizing materials for students
- blackboard, Powerpoint, video and audio for teaching and homework; Facebook for assignment and discussion
- PowerPoint presentations, video clips, audio clips
- Powerpoint and video clips
- YouTube - cultural videos to show and discuss in class
- Canvas - for grade keeping and commenting on participation, hw, etc.
- video clips and website info to show Korean language sample, content, and culture
- Youtube, google slides, textbook companion website (al-kitaab)

Word	Frequency	Word	Frequency	Word	Frequency
video	21	power	4	blackboard	2
clips	19	videos	4	teaching	2
powerpoint	12	class	4	practice	2
youtube	8	online	4	psu	2

audio	8	discussion	3	provide	2
presentations	7	materials	3	show	2
students	7	learning	3	oral	2
cultural	6	collaborative	2	homework	2
listening	6	etc	2	relevant	2
content	5	ppt	2	website	2
concepts	5	present	2	vocabulary	2
language	4	visual	2	teach	2
google	4	native	2	grammar	2
illustrate	4	exercises	2	skype	2
point	4	files	2		

**Q21 What technologies does your Language Flagship program use for advising students? Please describe how technology is used in this context. (n=25)**

- We use Filemaker Pro as a database to store student information. The flagship staff can search and obtain a student's records (classes s/he has taken, assessment results) before advising a student.
- video clip made by flagship students  
visual aid made by language flagship center
- Emails  
Excels for standardized scores, including graphs.
- online flashcard, Sakai
- none
- Not sure what advising students mean exactly. I guess I would say Google drive because we use it to track every student's record.
- PowerPoint
- Skype
- not sure I understand this question -- face-to-face advising in office hours?
- Feedback is given using Laulima in the grade-book, and announcements are made using the Laulima announcement tool.
- Skype
- We use an online system called BANWEB, which has a DARS report system
- NA. I helped students or advised students face to face. When we were not able to meet, we used emails or telephone.
- Excel
- Internet, web-sites, deep approach web site, YouTube, social media such as Facebook or twitter...
- Video clips and PowerPoint presentations
- Power point and video clips to analyze different artistic works which are related to the particular topic.
- n/a
- e-mail
- do not know
- N/A
- phone call
- Email, comments sections on Canvas and alkitaabtextbook.com website.
- Advising and technology?  
email exchange.
- E-mail

Word	Frequency	Word	Frequency
advising	4	powerpoint	2

students	4	face	2
video	3	student's	2
flagship	3	student	2
made	3	sure	2
use	3	emails	2
using	2	email	2
e-mail	2	clips	2
laulima	2	online	2
system	2		

**Q22 What technologies does your Language Flagship program use for language testing and assessment? Please describe how technology is used for that purpose. (n=19)**

- Online tests (e.g. STAMPS, Webcape)  
For formative assessment in a particular course, I often use "Vocaroo" "Voicethread" for oral assessment.
- We have developed Korean Flagship online test, and used it until we switched to LTI.  
We download Korean standardized test TOPIK online.  
OPIs are obviously done over the phone.
- CMS -Canvas
- BYU reading and listening and OPI tests for pre-summer and post-summer. We use these tests to find out the students' progress and we do them before they start their summer program (at the end of the spring semester, in May) and after they come back (at the beginning of the fall semester).
- not much
- Skype video and/or voice and phone calls are used for oral proficiency interviews, when face-to-face is not possible
- We use the online assessment for class placement purposes.
- computer-based testing
- Online ACTFL testing
- We developed online reading and listening assessment tools based on ILR scale for Korean Flagship students.
- Excel
- Online tests (created by ACTR or other Russian language programs).
- n/a
- websites on the internet; the OPI and STAMP tests assess students' language abilities, and these tests are all taken online
- web based assessment tools developed by UT with partners
- assessments- HSK and STAMP for providing quantitative measurements in students proficiency; Lingua Folio for quantitative information regarding students progression
- STAMP TEST, replacement test
- aswaatarabiyya website sometimes for selecting listening materials for exams.
- Web-based testing (ILR)

Word	Frequency	Word	Frequency
online	8	flagship	2
tests	6	language	2
students	5	semester	2
assessment	5	proficiency	2
test	4	based	2
developed	3	reading	2
use	3	phone	2

testing	3	used	2
listening	3	tools	2
stamp	3	oral	2
korean	3	quantitative	2
opi	2	ilr	2

**Q23 What technologies does your Language Flagship program use for capstone preparation purposes (e.g., pre-departure videos/modules)? Please describe how technology is used for that purpose. (n=18)**

- We did Webnar for the students.
- American councils administers the overseas program
- N/A
- I have not worked on capstone-year-specific activities with my students, so I'm not certain.
- I am not currently aware of what the program uses for capstone preparation.
- Beyond my knowledge.
- I know that the professor who teaches Capstone uses a blog and SKYPE conferences
- We don't use any technologies for capstone preparation purposes because pre-capstone Korean Flagship students are all in one classroom for their capstone preparation. We created some videos or PPTs (workplace etiquette in Korea, differences between Korean and American cultures, etc.) for capstone preparation.
- NA
- Videos and photos.
- Video and audios.
- n/a
- I have not prepared for Capstone yet, I have no prior knowledge with this
- i do not know
- We have not yet had a specific type of technology that we use for Capstone preparation but we use Lingua Folio with Capstone in mind throughout students' Flagship career.
- audio and video
- Powerpoint and electronic dictionaries
- pre-departure videos about Korea University (the overseas site)

Word	Frequency	Word	Frequency
capstone	8	flagship	2
preparation	5	program	2
students	4	knowledge	2
videos	3	american	2
use	3	know	2
korea	2	korean	2
video	2	uses	2
overseas	2	yet	2

**Q24 How do you think technology might be helpful for students to continue improving their language proficiency during the Capstone Year? Specifically, for their internship DURING the Capstone Year? (n=20)**

- A Flagship mobile app which includes (1) messaging tools to communicate with Flagship centers and other Flagship students (2) student discussion forum to post questions or share tips: e.g., Phrase of the day, Cultural tip of the day, How do I say this? (3) Shareable glossary/notebook for students to keep a record of professional language they use on a daily basis during the internship
- During internship, they may be gaining immersion, but not much grammar or formal instruction. Online course might aid during their internship what overseas.
- Online chat or skype can monitor the student's emotional issue and can provide instant help if the student can't fit into the new environment or has cultural shock. It's more about a emotional consolation.
- Self learning would help the students in absence of their teachers abroad.
- Gloss or Scola
- Not sure
- Some kind of message board to provide students who are currently in an internship with opportunities to ask questions of former students, teachers and other "experts" who can give advice on how to get along in the workplace. Meaning, as conflicts/problems arise, students can ask questions (even on a daily basis), and get advice/support in the form of discussion comments. This could be analyzed for patterns to create an online FAQ for students preparing to go on their internship, and to refer to during their internship.
- Technology might help them understanding the culture better, and it is easier for them to make friends.
- Students use SKYPE to report to the teacher, and thus use narration; they also also write on Facebook in Russian
- It depends on the types of technology.
- PowerPoint presentations to improve formal presentation skills; synchronous online messaging and communication; learning vocabulary using online flashcards, online dictionaries, and corpora; online multimedia resources for watching dramas, movies, music videos online and for reading news
- Technology is good for improving the students' skills such as listening. It is also helpful for understanding the culture of specific country that students will be in there for the capstone yea.
- Easy to access and operate the online testing tools with quick feedback (vocabulary, grammar, reading / listening comprehension); self-recording with feedback.
- it helps to display the real object which become easy for them to understand easily.
- They could share their experiences with their peers at home and discuss it with each other. It might help them reflect more on their experiences
- Pleco, a Chinese-English dictionary application for mobile phones, will never stop being useful for students of Chinese,
- Using skype to talk with Chinese friends and teachers is helpful
- Google translate is also a good resource for unfamiliar sentences
- WeChat can be used to communicate with Chinese colleagues, friends, and acquaintances
- they should be immersing themselves in the environment, not online.
- During the internship in their Capstone Year, among many, students are exposed to a collection of domain specific vocabulary words. It would be helpful if technology can facilitate to structure these vocabulary words in a pedagogical fashion so that students can retain and produce these words naturally in their output, both in written and spoken communicaiton.
- Students could still use the online resources, website, and Skype to keep on tutoring program
- recording (if possible) their language sample in the internship, and receiving feedback from instructors

Word	Frequency	Word	Frequency	Word	Frequency
students	14	discussion	2	skills	2
online	11	communicate	2	language	2
internship	8	easy	2	ask	2
use	4	learning	2	culture	2
skype	4	advice	2	experiences	2
help	4	keep	2	cultural	2



technology	4	resources	2	reading	2
vocabulary	4	basis	2	tools	2
teachers	3	provide	2	capstone	2
feedback	3	good	2	formal	2
friends	3	student	2	environment	2
helpful	3	get	2	specific	2
questions	3	listening	2	share	2
flagship	3	day	2	messaging	2
words	3	mobile	2	daily	2
chinese	3	understanding	2	grammar	2
using	2	emotional	2		

**Q25 How do you think technology might be helpful for students to maintain their language proficiency AFTER they have completed the Capstone Year? (n=21)**

- very important
- Using online practice sites would be helpful.
- Can provide remote help for them
- Self learning would continue to improve students language skills
- Technology can help students advance their study outside of the classroom setting and can be more individualized, but it is important to have a teacher supervise the process, e.g. guiding the students through the use of the technology, selecting the materials, etc.
- After returning to the US, I think students should use audio/video chatting software to maintain connections with friends abroad. Digital/online resources used by students abroad should also remain accessible after they return, by way of digital dropbox or collaborative wiki/FB group.
- Staying in touch with the people they met and worked with by using the social media of that country. Seeing Facebook-like updates, reading comments, and posting comments. Also, getting into a TV series, music, or other form of entertainment can be good and motivating to staying with using the language.
- It provides more opportunity for them to practice target language.
- Use SKYPE to call the friends they met abroad; reading online newspapers
- In many cases, there are no Korean language courses until they graduate after the capstone program. I am sure that technology would be really helpful after the Capstone program to maintain their language proficiency.
- online multimedia resources and synchronous online communication
- It can be helpful to keep their knowledge of language and culture.
- Easy to access and operate the online testing tools with quick feedback (vocabulary, grammar, reading / listening comprehension); self-recording with feedback. Online collections of texts for reading on the topic relevant to the Capstone Year abroad and/or to students' professional interests.
- helps them a lot to get great knowledge about different things . technology makes things to become real things, students can see everything they learn through pictures and other means.
- Maintaining contact with authentic sources and friends makes a difference
- Pleco, a Chinese-English dictionary application for mobile phones, will never stop being useful for students of Chinese,
- Using skype to talk with Chinese friends and teachers is helpful
- Google translate is also a good resource for unfamiliar sentences
- WeChat can be used to communicate with Chinese colleagues, friends, and acquaintances
- we teach students to think about this from the time they are in first year, and they know more about technology than we do
- Most students have access to learning Apps so if the learning resources are presented in a form of Apps, I would imagine it only motivates them to sustain and improve their language skills.
- Create program Facebook, website, let the alumni keep on discussing
- keep up with Arabic via watching films on YouTube, etc.

- using SNS to continue their communication with Korean native speakers.

Word	Frequency	Word	Frequency	Word	Frequency
students	10	capstone	3	comments	2
language	7	program	3	good	2
online	7	things	3	used	2
using	5	skills	2	think	2
technology	5	maintain	2	staying	2
friends	5	etc	2	apps	2
reading	4	feedback	2	improve	2
abroad	4	help	2	met	2
helpful	4	year	2	communication	2
use	3	form	2	makes	2
learning	3	knowledge	2	important	2
keep	3	digital	2	korean	2
resources	3	access	2	continue	2
chinese	3	practice	2	skype	2

**Q26 What kind of technology-related training and support do you currently receive in The Language Flagship? What kind of training or support would you like to receive? (n=22)**

- Flagship training workshops in summer.  
I would like to attend a series of webinars/ online courses on a specific area.
- We recently received an online workshop on LUR.
- curriculum of hybrid teaching.
- None,  
I would like to receive training in instructional technologies that are easily compatible with LMS.
- Technology for higher-level teaching
- I would like to attend the workshops for designing technology related teaching activities for advanced students.
- Canvas training is provided, and the tech support at our university is usually responsive, should something go wrong. The Al-Kitaab Arabic course website, however, is not terribly user-friendly, and I would have appreciated both someone fixing that up and/or training us how to use it more efficiently; instead, we pass along information on how to use the website by word of mouth. I would also like to see how other technologies that I have not yet used might be useful in my classroom.
- I receive no training in the language flagship.
- None.
- I discuss technology with colleagues. Would like to learn more about mobile applications, about how to create online quizzes and surveys
- We did not receive or need any technology related training or support in the Flagship program at UHM because our University (specifically, Center for Language and Technology) keeps offering many technology-related workshops. I have benefited from the Center workshops.
- NA  
workshop
- Mostly asking my colleagues or/and PSU technology assistant staff.  
It would be interesting to learn how to build your own web-page using the different platforms, how to make a short film (with the subtitles, music, etc.); how to make an e-book that could be used on Kindle or IBook.
- software
- I went to the University of Arizona for a week-long training targeted at technology use  
I also took up STARTALK transitioning to teaching on-line workshop
- I would like to be able to work with one tool per quarter to exploit its full potential and be able to have a site with suggestions of its use

- no training
- Support comes in the form of advise from teachers and fellow students
- none  
none
- We haven't had the chance to receive any technology-related training. A workshop where we can learn about what technologies students enjoy using for their learning would benefit our faculty.
- blackboard
- others technology related tools
- None
- How to collect students' language sample (or opinions) effectively and efficiently, and how to edit them efficiently for your purpose.

Word	Frequency	Word	Frequency
training	9	learn	3
technology	8	online	3
use	4	university	3
teaching	4	technologies	3
workshop	4	using	2
workshops	4	center	2
receive	4	colleagues	2
students	4	technology-	
support	3	related	2
flagship	3	attend	2
language	3	used	2
related	3	able	2
efficiently	3	website	2

**Q27 What technologies (e.g., hardware, software, websites) would you like to see implemented at your institution that would help you teach foreign languages more effectively? (n=19)**

- Voiceboard, iPads that instructors can reserve and borrow for class activities
- Hope to have a studio that we can tape and publish our own materials
- Our university's Internet is quite slow and unstable. Also, many of the foreign websites cannot be accessed at times.  
Clearance on the above would be helpful.
- Increase existing instructional technologies compatibility with LMS . This will centralize instruction under one system and increase instructional tools available for instructors
- not that I could think of
- I'm not sure; I'm also not entirely certain I know about the full range of technological options, so I'd like more information on what's being used in other institutions.
- I am open to seeing new technologies, but I also like to maintain a lot of interpersonal interaction in the classroom.
- I would like to use Wimba. This program would allow to test students oral production better than SKYPE, because it simulates the exam situation without the instructor being present or online
- I don't know much about technology. I think that face-to-face is better than online instruction. However, for young college students, we need to develop technology-based instruction materials that make foreign language learning more engaging.
- Websites
- software and websites
- WordSmith - the lexical analysis software (by Mike Scott) and/or other language analysis softwares developed in Russia or Europe (first of all in U.K.).
- software
- A room equipped for group Skype calls
- Smartboards
- Color Printer
- I can think of no technologies that are currently not already in use that could be of any more substantial help
- better classrooms
- It would be help if each tutorial room is equipped with a computer or an iPad with useful Apps installed to facilitate the learning.
- study group online
- hardware or software which we can do the things I mentioned in the previous question.

Word	Frequency	Word	Frequency
software	4	instructional	2
websites	3	learning	2
think	3	equipped	2
better	3	foreign	2
online	3	room	2
instruction	3	analysis	2
technologies	3	students	2
help	2	know	2
materials	2	increase	2
instructors	2	group	2
language	2	skype	2
use	2		

**Q28 Were there any questions related to technology in The Language Flagship that were not included in this questionnaire that you feel we should have asked? (n=13)**

- no.  
Thank you.
- How can we support your Flagship instructional technology projects?
- how the students respond to the technology use, positive impact or negative impact
- I'd be interested to see how much technological flexibility teaching staff have within their respective programs and institutions. For instance, we used Blackboard for years, and then everyone was forced to switch to Canvas, and now there's talk of switching back to Blackboard. Our program has gladly obliged, rather than using something external like Google Pages. I'd also like to know how informed other instructors are of modern language-teaching technologies, because I feel like I'm in the dark unless our institution provides (or forces us to use) some technology.
- Yes, "In what areas would you NOT want technology used in your teaching?" (where should technology be situated in the broader context of your teaching routines?). I would want to preserve at least half of my classroom time for students to be interacting as a whole class or with each other in small groups, though we could have large pictures to discuss, or words typed in real time on the big screen for everyone to see. I wouldn't want a series of Kahoot-like activities taking up more than 15 minutes of classroom time, because I want to open the class to stimulating discussions. (if tech can support that, I suppose I might be open to trying it).
- Not that I can think of
- NA
- None
- no
- n/a
- I cannot think of any
- no
- N/A

Word	Frequency	Word	Frequency
technology	5	support	2
want	4	class	2
time	3	use	2
teaching	3	students	2
used	2	classroom	2
impact	2	blackboard	2
open	2	see	2
think	2		

**Appendix E**  
**Open-Ended Responses of Flagship Students**

**Q19 Please list any other technology-based resources you use in the CLASSROOM that were not mentioned above. (n=19)**

- White board
- Pleco
- Lulima
- Instructional videos
- \*I have not used some of the resources above, so I do not know if I would find them useful or not, but there was not an appropriate bubble to express that.
- N/A
- N/A
- N/A
- None
- none
- PLECO
- None
- N/A
- N/a
- Unrelated I have not used many of the tools listed above
- Quizlet
- None
- Pleco
- Pleco

Word	Frequency
pleco	4
used	2

**Q36 Please list any other technology-based resources you use OUTSIDE the classroom that were not mentioned above. (n=15)**

- Pleco
- N/A
- NA
- N/A
- Anki flashcards
- None
- None
- PLECO
- Music sites
- N/A
- .Ru websites for news in Russian
- N/A
- Quizlet and Pleco
- None

- Pleco, Quizlet, Anki, Skritter

Word	Frequency
pleco	4
quizlet	2
anki	2

**Q45 What technologies do you use most in CLASSROOM settings for language learning and in what ways? (n=85)**

- pleco
- Mobile dictionaries
- online dictionary
- Powerpoints in class with vocabulary and grammar practice
- PLECO (mobile dictionary)
- NCIKU (online dictionary)
- online dictionaries and language corpus
- None.
- online dictionaries: pleco, youdao
- In classroom settings we use the expertise of our professors - most of these things would be a hindrance to the natural give and take of having a talented professor. Furthermore, the assumption that each type of these programs is or has been used in a classroom means that you're receiving faulty data - some of these I've never heard of, but you've required answers anyway..
- Laulima, online dictionary
- powerpoint - introduction of grammar and vocabulary
- video clips from youtube or other sources - see grammar or vocabulary in use
- None while in classroom
- Pleco
- I most often use a Chinese-English/English-Chinese dictionary app on my phone so that I don't have to ask about an unfamiliar word right away as the teacher is speaking. It's also helpful to see how the dictionary would translate a word or a phrase that I learned through the teacher's explanation in Chinese. Sometimes when a word I want to use, or just a relevant word I want to remember, is on the tip of my tongue, I'll try to look it up.
- Pleco Chinese dictionary iPhone app
- Nciku online Chinese dictionary
- Chinese-English and English-Chinese dictionary apps (Pleco, Youdao) to look up vocabulary meanings and usage
- Online dictionaries; foreign media sites in target language (eg BBC)
- Online dictionary
- Online dictionaries to look up words (Multitran.ru and wikislovar)
- Videos and audio for practicing listening. Sometimes powerpoint slides.
- Teacher uses online videos, especially news videos, which is useful for listening and comprehension practice.
- Instant translators are useful (Google Translate), for personal on the spot use if I do not know a word.
- Online dictionaries (using vocabulary in sentences)
- Online dictionaries to look up vocabulary, Search engines to look up cultural aspects, website for workbook to listen to the conversations online, etc.
- Online dictionaries
- Online dictionary for vocabulary.
- Pleco dictionary app for looking up new vocabulary.
- online dictionaries and course management systems
- Phone dictionary app to look up vocabulary
- Videos for listening

- mobile dictionaries to look up vocabulary
- language exchange sites to practice speaking/listening with a native speaker
- foreign news websites to practice vocabulary in a real life setting
- Blackboard for grades and homework
- Plexiglass, YouTube, the textbook CD
- Plexiglass, YouTube, the textbook CD
- PLECO and NCIKU
- Online corpora of Russian word usage, online dictionaries to look up vocabulary, course management systems to find course handouts and homework worksheets, online multimedia resources for class discussion purposes or listening comprehension
- online dictionaries to look up vocabulary, audio files for listening
- Aratools, BBC Arabic, youtube
- Online dictionaries for word reference, language-specific news outlets to learn about current events in countries of interest
- None
- BBC languages to read articles and watch videos
- Course management- Canvas- use to organize class documents and communicate assignments and grades
- Online language dictionaries
- Online textbooks for looking at examples and videos
- Online dictionaries for looking up vocabulary words
- Canvas and al kitaab online
- Al-kitaab companion website
- Online dictionaries for words, but sometimes they lack entries or have inaccuracies.
- Chalkboard, Videos via YouTube, Class learning website, News articles (possibly)
- powerpoint presentations for showing grammar and spelling of new words, videos and audio recordings to practice listening
- None in class currently
- Course website
- Video
- Audio for listening exercises
- The book and its companion website
- Online dictionaries
- Online Companion site; Used to listen to dialogue and videos
- Online dictionaries (Yandex Translate) to look up vocabulary
- Russian social media (VK) for practical/everyday Russian
- Familiar films dubbed in Russian
- Texting actual Russians
- Naver Online Dictionary to look up and verify vocab words and also to look up example sentences
- Google Translate to verify words
- Online articles and videos
- I use my iphone for the certain vocab apps and to quickly look up a usage of a new word or a jargon. I also use wikipedia when we discuss an event or a cultural artifact that was not on the syllabus but that is being discussed in class-so I may be fully aware of the conversation.
- YouTube - find music and videos in the target languages that are appropriate to the topic
- Wiktionary, grammar websites, both to expand my working knowledge
- Google translate to verify the gist of what in translating
- I use PDFs of my textbooks when possible
- We use blackboard and PPT.
- Plecco- looking up characters
- Quizlet -to practice vocabulary, and Pleco-to look up meanings and examples of usage
- Online Dictionaries, Social Media, Wikipedia
- Online dictionaries, a course website to list assignments/exams/events, online tests and assignments
- Mobile app dictionaries for help with voaab and course moodle site for accessing assignments and readings



- Pleco to look up stroke order  
PowerPoint to view new material  
MP3 recordings to practice listening
- Google translate, Plecco, Yabla, Yellow Bridge
- N/A
- Powerpoint, sometimes authentic material (e.g. video, website), dictionary on phone
- We do not use any technologies in the classroom. I selected not helpful for many simply because I had never used them. I selected helpful for some because it seemed like they might be helpful if I was to start using them.
- Canvas - checking assignments and grades  
Pleco - Flashcards/Dictionary
- Cellphone to look up vocabulary in the dictionary app.
- Pleco Dictionary  
Canvas
- Online dictionaries to research vocabulary, grammar, and usage patterns
- mdbg.net (online dictionary)
- Pleco  
Anki
- Pleco
- I constantly use Pleco as a quick dictionary to look up chinese words, definitions, tones, and stroke orders.
- Dictionaries
- Online Chinese news websites, YouTube
- dictionaries,  
Chinese Reader  
Electronic Handwriting Pen
- Pleco - to look up vocabulary
- Pleco Chinese dictionary
- Online dictionaries to look up vocabulary  
Google Docs/Drive to coordinate group projects and to share classroom content  
YouTube to watch target language content
- Pleco for definitions and to look up how to write Chinese characters
- Online dictionaries to look up vocabulary.  
Google image searches to look up vocabulary  
Youtube videos of news broadcasts or TV shows
- Canvas and online dictionaries to look up new vocabulary

Word	Frequency	Word	Frequency	Word	Frequency	Word	Frequency
online	40	new	5	media	3	see	2
dictionaries	27	canvas	5	management	3	stroke	2
look	23	usage	5	target	3	languages	2
vocabulary	23	assignments	5	using	2	social	2
dictionary	21	language	5	meanings	2	speaking	2
pleco	17	class	5	plexiglass	2	textbooks	2
use	12	classroom	5	content	2	cultural	2
videos	12	helpful	4	examples	2	plecco	2
listening	9	mobile	4	events	2	listen	2
youtube	9	audio	4	site	2	want	2
chinese	8	russian	4	material	2	recordings	2
word	8	looking	4	vocab	2	blackboard	2
practice	7	video	3	textbook	2	wikipedia	2
course	7	nciku	3	watch	2	useful	2

words	7	companion	3	english-chinese	2	systems	2
website	7	grades	3	foreign	2	definitions	2
news	6	verify	3	teacher	2	homework	2
google	6	bbc	3	cd	2	apps	2
app	6	articles	3	sites	2	characters	2
translate	6	websites	3	chinese-english	2	selected	2
grammar	6	phone	3	iphone	2	find	2
powerpoint	5	used	3	youdao	2	comprehension	2

**Q37 What technologies do you use most OUTSIDE the classroom for language learning and in what ways? (n=68)**

- Listening to podcasts
- Web content in target language. Dictionaries, help/discussion forums
- None.
- Online dictionaries and powerpoint presentations from other schools that are posted online.
- Phone apps: Vocabulary Builder, Quizlet, Naver Dictionary
- Dictionaries for definitions and word usage. Baidu.com for same purpose
- I don't often set aside time to use available technologies because I feel busy, but I do like to use mobile and online dictionaries with new or unfamiliar words, often for homework purposes.
- Email
  - Wikipedia
  - Baidu Baike online Chinese dictionary
  - Google translate
  - Pleco Chinese dictionary app
  - Nciku online Chinese dictionary
  - Perapera Chinese popup dictionary Google Chrome add-on
- dictionary apps to look up vocabulary, following some Chinese language accounts on Instagram to learn to new words, watching Chinese/Taiwanese TV shows (on Youku, DramaFever, Viki) to learn new words and practice listening
- Online dictionaries, media sites, podcasts/videos in the target language.
- Multitran and Wikislovar mostly.
- I use Italki a bunch and I've gotten most of my results from finding friends on italki and developing regular communication with them.
- I use Google, GoogleTranslate, Google Images, Wikipedia and Wiktionary regularly to figure out unknown words. I listen to BBC podcasts in my language of study. I watch YouTube videos in my language of study. I read foreign news sites for practice (BBC).
- Listening to podcasts while doing other tasks, looking up vocab and usage in dictionaries, etc.
- Use Naver app on my phone to translate words, use other Korean language apps on my phone to practice various aspects of Korean, etc.
- Tumblr to follow language-focused blogs, anywhere I can find TV shows in Russian
- Mobile language learning applications to boost vocabulary.
  - General content to practice reading and gain vocabulary.
  - Online multimedia resources to practice listening comprehension.
- I use Anki for HSK vocabulary and new class vocabulary words. I also use ctext.org to find Classical Chinese content with modern translations.
- online dictionaries and instant messaging
- Italki to find Skype language partners. Facebook and VKontakte to keep in touch by messaging with my language partners. Youtube to watch TV shows and videos in Russian. Spotify to listen to Russian music. Memrise (a vocabulary-learning website) to practice new Russian words.
- Quizlet for vocabulary practice

- I use Chinese websites like renminwang for news articles  
I use Blackboard to check homework and grades  
I use online dictionaries to check over words I don't know  
I watch YouTube videos in Chinese to practice what I know and learn new things, such as TV shows and music
- PLECO
- Online multimedia resources to read news, watch Russian vloggers; social media to follow what Russian-speaking acquaintances are doing in daily life, also to find out trends in contemporary Russian culture; vocabulary learning tools to review new words
- Listening to music in the target language
- Aratools for vocabulary, BBC Arabic for news, youtube
- Ara Tools as online dictionary  
BBC Arabic for reading activities
- Al-Kitaab Textbook online for homework  
BBC languages to read articles and watch video  
online dictionaries to look up vocabulary
- Online dictionaries  
Duolingo
- Google for looking up information  
YouTube for looking up videos  
Online dictionaries for looking up vocabulary
- Google to ask grammar questions
- Google translate for some word search. Arabian desert for word and grammar
- Whatsapp, hellotalk, italki, skype - Practicing with other people, grammar questions, sayings and colloquials
- Rosetta Stone would be the tool I use the most.
- online homework and tests, dictionaries
- Youtube and Mosfilm to watch movies with subtitles in order to learn more about fluidity and structure of speech from native Russian speakers
- mobile dictionary a lot  
googling "how to conjugate \_\_\_"  
reading russian news is v helpful!!
- Book and its companion website
- Phone language  
online dictionary
- I listen to podcasts to increase my comprehension and understanding of different dialects.
- Naver Online Dictionary to look up and verify vocab words and also to look up example sentences  
Google Translate to verify words
- Online articles and videos
- GoogleTranslate, ru.Wiktionary, linguee.com
- I use online dictionaries and other websites that help with word conjugations.
- Same as classroom
- Nicku dictionary  
YouTube for Chinese videos
- Quizlet to practice vocabulary, Pleco to look up meanings
- Online Dictionaries
- HelloTalk, a mobile synchronous messaging app that specializes in language exchange
- Pleco to look up words I do not know
- Same as before
- Pleco for looking up words
- WeChat, Pleco (Chinese dictionary and note card database).
- dictionary, various websites for research

- Canvas - syllabus, checking assignments and grades  
Pleco - flash cards/dictionary
- Using wechat
- Pleco  
YouTube
- Youdao.com to research real world application of vocab words
- google about grammer or dictionaries for characters I do not know.
- Anki flashcards  
Pleco dictionary  
Skritter mobile app
- Pleco
- I use Pleco to look up words constantly and to review stroke orders and tones. I use Quizlet to make my own flashcard sets and study for quizzes. I used to use Anki and Skritter as a way to review all the characters I had learned in the past, but later found these to be too expensive, even though they were the most useful.
- Plecko, YouTube, News websites (CCTV), FluentU
- Dictionaries  
Chinese Reader - facilitates reading  
Quizlet - used for studying unfamiliar words, phrases,
- Pleco - to learn vocabulary
- News websites such as voachinese.com
- italki.com for language exchange partners  
mylanguageexchange.com for language exchange partners  
Wiktionary.com to look up vocabulary  
YouTube to sample target language content
- Online dictionaries and wikipedia for vocabulary learning.  
BBC and other language specific news sites.

Word	Frequency	Word	Frequency	Word	Frequency	Word	Frequency
online	22	mobile	5	vocab	3	usage	2
dictionaries	17	looking	5	sites	3	grades	2
use	16	websites	5	music	3	skype	2
language	16	podcasts	5	anki	3	verify	2
words	16	italki	5	exchange	3	help	2
dictionary	15	quizlet	5	listen	3	questions	2
vocabulary	15	shows	4	articles	3	googletranslate	2
pleco	12	content	4	wikipedia	3	research	2
chinese	12	tv	4	study	3	wechat	2
youtube	10	app	4	apps	3	used	2
practice	9	translate	4	read	3	hellotalk	2
google	9	phone	4	messaging	3	tools	2
look	8	reading	4	grammar	3	media	2
news	8	homework	4	etc	2	characters	2
russian	8	word	4	resources	2	arabic	2
new	7	partners	4	same	2	various	2
com	7	find	4	follow	2	check	2
videos	7	know	4	unfamiliar	2	website	2
watch	6	target	4	wiktionary	2	baidu	2
bbc	6	review	3	skritter	2	multimedia	2
learn	5	naver	3	korean	2	comprehension	2

listening

5 learning

3

**Q38 How do you think technology might be helpful for you in preparing for The Language Flagship Capstone Year? (n=75)**

- Mobile, easy-to-use technology is always beneficial and convenient.
- Greater exposure. I need to be exposed to as much of the language as possible, as often as possible. Since I can't always be speaking the language, online content helps me get exposed to the language in forms that I would otherwise not encounter in the classroom. (Reading contemporary texts, listening to native speakers)
- I would be able to have interactive software rather than the traditional classroom setting.
- Anything that helps me to quiz and self-assess is going to be great for keeping me on-target for my personal proficiency goals and will help with the upkeep of low-frequency skills.
- Very
- online dictionaries help a lot
- Almost All homework and research is done online now
- The most useful aspect would probably be online interaction with Chinese people.
- I feel ready for my Capstone Year and sometimes just wish it was here already.
- Knowing which online dictionaries are very useful and accurate, knowing which Chinese news sources to pay attention to, learning how to use Chinese social media like Sina Weibo.
- Solid technology integration in the classroom could be very helpful in preparing me. By that, I mean that students who become competent in using online resources in the target language can help students prepare to use those resources in real world situations.
- I think using technology will be helpful for the capstone year abroad because it will get me used to using technology to help with language learning while on the go. Also, technology is widely used in the classroom now, so its better to get used to it in multiple languages.
- Sites like Italki allow one to not only develop language skills while still in the US, but also provide the means to build friendships in the area they will be in.
- Listening or participating in language in context activities
- Since technology is such a huge part of daily life, it may be easier for me to assess the information I need quickly, therefore allowing me to learn more.
- It can connect me to students who are currently abroad and students considering going abroad, it can prepare me for the tests
- Mobile applications to help increase my vocabulary, something that will be useful to achieving a fluency level high enough to start the capstone year.  
I also think that being able to speak with a native speaker online could help both linguistically and culturally prepare me for the capstone year.
- Reading newspapers online?
- using online dictionaries
- I think technology can help me from knowing how far I am away from capstone year, which help me keep track of my level in Chinese and how well I am doing in it.
- Skyping with Russian speakers will help me improve my conversational skills. Memrise will help me learn new words.
- It would help bring the lessons outside of the classroom
- I think it would be very helpful because I would be learning common everyday words in Chinese rather than super formal political vocabulary that we learn in class. Learning the common words is just as important and shows that you really know the language inside and out.
- Watch a lot of Chinese movie and current news with subtitles
- Watch a lot of Chinese movie and current news with subtitles
- Technology, although not the primary tool in language learning, does play a more minor role in preparation for Capstone. Perhaps through the application process? Honestly not exactly sure what this question is asking.
- Technology might help me both academically and culturally: academically, online dictionaries and corpuses would make me more self-reliant finding Russian-language sources for essays or finding verbal

governance. Culturally, social media, blogs and vlogs from Russian-speaking countries would keep me up to date with what my peers do everyday, what language they use, and what their life goals are.

- Only if you are communicating with another person.
- Online dictionaries and listening to native speakers
- It allows me to contact friends and peer in my host country to keep up with my language skills and to make preparations for the year.
- Being experienced reading first-hand sources such as news articles and also sources in dialects through popular social media outlets
- Blogs
  - Helping to gain a better understanding of the culture and colloquialisms
  - Yes, but often when language classes use a lot of technology it can be confusing
  - I don't think it will harm us in any way, but I don't think it will be all that useful.
  - Meeting with people from other universities or countries to practice speaking with others in arabic and learning more about their different cultures
  - It helps expose us to more dialects and broadens our vocabulary.
  - Very helpful
  - Places like social media can show one how the language is used in everyday/online activities. Classroom instruction helps with grammar, etc.
  - I think technology would be helpful because it allows students to get feedback from their teachers and a variety of sources while they are practicing. Also, the Internet provides a variety of resources, so if a student does not understand a topic in class, they will be able to look it up and learn it on their own.
  - Helps in preparing the ear to catch the speed of how native speakers naturally speak
    - 2) Helps learn how to enunciate words properly
    - 3) Helps hearing the fluidity of accent
    - 4) Helps in punctuation and getting more culturally acquainted
 (All responses pertain to video clips introduced in class and out)
  - Reading news articles in Russian is extremely helpful b/c it gives you real insight into the culture. Would love more video exercises
  - It could be helpful to give us resources such as Rosetta Stone subscriptions which we could use over summer to expand our vocabulary.
  - very helpful when studying outside of classroom
  - I can use use technology to interact with/listen to native arabic speakers, thus bettering my language skills.
  - It helps me connect with others and other resources that I wouldn't have known about by myself or had access to from my location
  - Keeping up with current events and learning more vocab
  - online flashcards are good for retaining vocabulary and are shared easily
  - It would be helpful in getting in touch with people from that country and just speaking with them through skype or other forms of social media. I can also get in touch with others who have already done the capstone year and what they recommend.
  - Yes
  - incorporate usable language specific keyboard instead of neck breaking pick and choose ,one by one answer fills
  - I think that a a website to test are speaking skills before we are tested would be helpful. I also think online speaking practice tutorials would be useful.
  - It will make learning more accessible.
  - not in flagship
  - I think technology will help me for preparing for The Language Flagship Capstone because it will help me improve my vocabulary while I am outside the classroom and do not necessarily have access to tutors or instructors but am still in need of assistance.
  - I expect that I will mostly benefit from using technology to practice my Russian with others online prior to my Capstone Year
  - N/A
  - Make learning more efficient
  - Dictionaries on our mobile devices are a huge asset for learning on the go.

- Potentially skype would be handy for communicating with administrators overseas. Additionally, online assessment modules could be used to test students level of proficiency.
- Pleco will be incredibly helpful and the calendar system on Canvas is useful for Flagship events. Apart from that, technology is just convenient for turning in materials for applications that would otherwise be mailed in paper form.
- I think it might be helpful for me to look up stuff relating to chinese language and typing.
- It could encourage collaboration between students outside of the classroom. It could also be a strong practice for listening, especially through watching news reports.
- If I am more technologically sound upon arrival to China for my Capstone Year I believe it will help me have less stress in hard times.
- It can help us review and used words and idioms that we don't use often.
- I don't think I need technology to learn.
- I think that using technology to read about current situations in the target language is one of the best ways to really prepare myself for the Capstone Year because it enables me to have a heads-up on the situation in that language before I even arrive in the country.  
Using certain applications to review vocabulary and grammar patterns is also very useful to the overall language learning process.
- I think that speaking face to face with a person is the one true way to learn a language.
- Watching videos and Chinese TV shows online really helps with improving listening skills
- Technology can help speed up the process of learning by eliminating time used to look at dictionaries or at previous textbooks. Technology should be used so students have a quick and easy resource to refer to in their studies.
- Well, technology is currently helping me prepare for the OPIc. It will and has connected me to the information I needed to better my Chinese.
- Technology, particularly online dictionaries and websites, are a quick and efficient way for me to build literacy and test my pronunciation during my language studies.
- Language exchange websites like italki and mylanguageexchange are incredibly useful for becoming comfortable with casual conversations, especially written. Participating in these will lower the language curve for when the student goes abroad.
- Technology-based learning would make the curriculum more interactive.
- It's useful to get a feel for how native speakers make use of social media. It's also helpful to see TV programs and news programs in order to understand entertainment.
- Rapidly learn new vocabulary

Word	Frequency	Word	Frequency	Word	Frequency	Word	Frequency
language	24	sources	5	keeping	2	understand	2
technology	21	need	4	review	2	countries	2
online	18	current	4	new	2	face	2
help	17	abroad	4	communicating	2	common	2
think	14	culturally	4	watch	2	events	2
learning	13	lot	4	connect	2	exposed	2
helpful	13	practice	4	possible	2	life	2
capstone	11	others	4	especially	2	tv	2
helps	10	just	4	speed	2	student	2
chinese	10	reading	4	still	2	blogs	2
year	10	look	3	helping	2	feel	2
useful	9	country	3	otherwise	2	variety	2
use	9	better	3	activities	2	skype	2
classroom	9	mobile	3	programs	2	person	2
learn	8	knowing	3	getting	2	watching	2
dictionaries	8	flagship	3	proficiency	2	information	2

vocabulary	8	russian	3	build	2	huge	2
used	8	level	3	subtitles	2	now	2
students	8	applications	3	articles	2	culture	2
using	7	way	3	movie	2	speak	2
news	7	able	3	websites	2	already	2
skills	7	everyday	3	studies	2	access	2
native	6	preparing	3	dialects	2	situations	2
get	6	keep	3	arabic	2	academically	2
social	6	test	3	quick	2	efficient	2
speakers	6	people	3	participating	2	currently	2
speaking	6	process	3	improve	2	interactive	2
media	6	really	3	italki	2	finding	2
resources	5	class	3	real	2	forms	2
listening	5	video	2	allows	2	goals	2
prepare	5	shows	2	grammar	2	target	2
words	5	touch	2	convenient	2	incredibly	2

**Q39 How do you think technology might be helpful for you to continue improving your language proficiency during your Capstone Year? Specifically, how do you think you might use technology while you are doing an internship during the Capstone Year? (n=67)**

- Communicate with other speakers.
- Absolutely being able to memorize the great amount of characters would be easier. Depending on what profession I will have for Capstone Year, I am confident technology would be helpful in every regard.
- While I was interning during my capstone year, I utilized online dictionaries a lot - both for writing/reading and speaking/listening. I utilized Skype to do my 1-on-1 tutoring sessions with a teacher in Nanjing. I also would watch Chinese tv and read Chinese news (online).
- To expand a specialized vocabulary and research technical aspects of usage.
- Very helpful and yes!
- computer programs or smartphone applications to study vocabulary help a lot in memorization
- Communicating with instructors, classmates and language partners
- I don't think it will help much.
- I'm not sure. I'm mostly excited to be surrounded by native Chinese speakers.
- Mostly, I think I will use Chinese dictionaries, social media, and news resources. The latter two I know the least about, but they will very much help me learn colloquial Chinese and online Chinese phrases. Also, I would pay attention to Chinese television shows, listening and using their phrases. Carefully. I also hope to keep a Chinese blog.
- I'm on the capstone year currently and I use foreign media sites, podcasts and online/mobile dictionaries on a daily basis. I wish I was more proficient in using a wide array of technologies as to be better prepared for the internship. I feel that my technology skills are lacking.
- Researching in the target language and using the technology in the target language through presentations, etc..
- I am currently on the Capstone Year, and all that I mentioned on the previous page is helpful.
- I don't know.
- I would use technology daily during an internship, whether it be using a dictionary to translate a word I don't know or just using it to review words that I didn't use often.
- Look up concepts I don't know, communicate with my workplace
- Most of all, an online dictionary. Besides this, various mobile applications to practice grammar and expand vocabulary.
- Watching lots of Chinese television when at home.  
WeChat with coworkers



- using online dictionaries
- Technology will come in handy when I am uncertain about something and I will be able to look it up, such as vocabularies that I've never learn or forgot how to write it.
- The same way I will use it in preparation for the Capstone Year.
- I think I'll use technology to drill key words or phrases
- I'm not sure that I will use technology during the capstone year. Doing an online blog would be helpful to reinforce my writing proficiency.
- WeChat  
PLECO
- Most importantly, I think that professional literature from, perhaps, Google Scholar would help me understand professional jargon and clichés. Language corpuses like Gramota.ru and RUSCORPORA would also give me insight into how certain words and phrases are used idiomatically in the Russian-speaking workplace.
- I believe that the pronunciation of words best helps me in learning Russian. Being able to hear someone speak it and then repeat it back, helps me best learn it.
- Yes- except for the fact that while we were in abroad for the summer program we didn't have access to the internet most of the time which greatly hinders the use of technology.
- During the summer, I used technology to keep friends and family updated and to share my experiences. I plan to do the same, and also to use online tools as resources for my internship.
- I hope to focus more on in-person experiences while abroad for my Capstone year. I would rather focus on spending time speaking with people in coffee shops rather than surfing the internet for Arabic blogs or popular TV shows, for instance.
- Helping to learn new vocabulary specific to internship field and learning colloquialisms via social media as well as keeping on top of the news of the day in the country and the region.
- It might be helpful for getting in contact with people or for providing study tools, but other than that I don't see much of a difference.
- Use technology to stay connected with ut and the us
- The internship might require you to work on a computer,
- Quick tool for looking up words we don't know
- I have a dictionary in my pocket and can practice anytime, anywhere.
- I would likely have an online dictionary if I couldn't get across my meaning to whomever I am talking to. Social media would also help, as well as news sites to get a chance to practice reading/writing.
- I think I would use technology to connect with native speakers and ask them questions about how to make myself better understood.
- Start a science forum and communicate cross culturally, this way I get to exercise dual linguistic abilities within a concentrated area of my undergraduate studies in Physics and Bio physics.  
2) Maintain relationships after Capstone year and create new ones using technology  
3) Communicate with research professional using Skype
- I am not sure if it would necessarily be helpful, because my focus will be on immersing myself in my environment. From that, I think I will improve my Arabic proficiency best.
- Somewhat helpful. I think most of the learning your capstone year would be your immersion.
- Unsure
- I don't really see it playing an important role.
- Online dictionaries would be very useful as well as online translators in the event of not being able to communicate. News sources in the language would also be helpful to not only maintain proficiency, but to also maintain up to date with recent events.
- Definitely helpful.  
It would help me to instantly bridge any language gaps
- allow scan availability to upload actual hand written assignment
- Techonolgy like language based newspapers would help with your reading comprehension. Also a dictionary will always be good for checking a word you may have forgotten.
- I will use online dictionaries to improve my vocabulary
- not in flagship

- I think I will use technology to give me a greater understanding of the language and the culture of people speaking it.
- Since I am a physics student, I imagine the ability to access and read scientific documents abroad will be most useful to me
- N/A
- Pleco, to look up common phrases and expressions
- Again, electronic dictionaries are crucial as well as social networking apps to converse and talk with coworkers and employers.
- Making an online blog or other social media page would be cool.
- Again, the Pleco Chinese dictionary is absolutely amazing as it is well-designed and well-organized. I will most likely use it to look up words as I come across them. It also has a large number of very useful add-ons including flashcards. This will be helpful for drilling the new words I've learned throughout the course of my day in my free time. The flashcard system is useful because building decks of hundreds of cards can be done in minutes and the various quiz options help garner an actual knowledge of the characters studied.
- I might use technology to communicate, do my internship stuff, and do homework.
- I think technology could be useful to keep in contact with local students and further practice Chinese with them.
- Using websites that are quick, helpful and efficient when learning characters will be very helpful during Capstone Year. I am not much of a technology user, however in looking up statistics, facts or concepts i will use it quite a bit.
- I'll definitely be using Pleco all the time and also anki to learn and review my new vocab.
- If I am already emerged in the culture, I won't need technology to keep up my language.
- Of course i will, i live in the 21 century, dont i?
- Online dictionaries, research, communicating with Chinese friends via social media
- During an internship I would advise working with document in electronic form if that is possible in a file format such as word. This way interns will be able to rapidly check online resources if faced with unfamiliar terms or phrases. I also suggest using Chinese Reader 7 at the same time to save time by eliminating the need to type in Chinese characters in the dictionary.
- Technology may help us connect to the appropriate people that may bring opportunities such as a better internship. Most times, technology is my only resource.
- I will continue to use language exchange website while I am abroad, this time with the intent of meeting someone for a face-to-face exchange in-country.
- I will definitely use online dictionaries and wikipedia during internships.
- Practice and maintain vocabulary

Word	Frequency	Word	Frequency	Word	Frequency	Word	Frequency
technology	19	look	4	shows	2	coworkers	2
use	18	learning	4	native	2	again	2
online	16	new	4	lot	2	culture	2
chinese	14	pleco	4	review	2	television	2
helpful	12	keep	4	computer	2	experiences	2
using	11	abroad	4	give	2	workplace	2
year	10	people	4	utilized	2	contact	2
language	10	characters	4	mostly	2	looking	2
capstone	10	best	3	come	2	absolutely	2
think	9	definitely	3	electronic	2	helps	2
help	9	resources	3	tv	2	access	2
dictionaries	9	same	3	communicating	2	wechat	2
internship	8	get	3	friends	2	study	2
time	7	better	3	expand	2	used	2
words	7	focus	3	likely	2	tools	2

dictionary	7	speaking	3	listening	2	applications	2
communicate	6	physics	3	day	2	arabic	2
social	6	proficiency	3	internet	2	quick	2
phrases	6	speakers	3	mobile	2	currently	2
media	6	research	3	hope	2	improve	2
vocabulary	6	reading	3	connect	2	read	2
news	5	sure	3	sites	2	various	2
practice	5	professional	3	see	2	daily	2
learn	5	word	3	actual	2	concepts	2
useful	5	writing	3	skype	2	target	2
able	5	way	3	course	2	summer	2
know	5	blog	3	page	2		
maintain	4	need	2	exchange	2		

**Q40 How do you think technology might be helpful for you to maintain your language proficiency after you have completed The Language Flagship Capstone Year? (n=58)**

- Keeping direct contact with the Chinese people through social media and other third-party apps will help tremendously
- Maintain immersion.
- A character each day to memorize would be extremely helpful to document. Pleco is an incredible app, but more common phrases could be incorporated to look up popular Chinese sayings.
- Again, I will occasionally read Chinese articles on online news sites and watch Chinese tv online. I also keep in touch with my Chinese friends/co-workers via WeChat.
- By bringing target language media into my home and life; music, television, movies, sports, news, reading, etc..
- Very important in maintenance
- Keeps people connected to outside world for additional and or new information
- Job searching, networking, and communication
- It may help by providing interaction with Chinese people.
- An online game like Duolingo would be really helpful, something not quite a Class intensive, but that would help me keep up with new vocabulary, practice reading, listening, and writing.
- Media sites will be critical, as well as assessment based material to maintain/test my language skills.
- Same as the previous answer, continued use of technology in the target language to continually develop new vocabulary, syntax, etc...
- After completing the language capstone year technology will once again become crucial because skype can be used to maintain language skills with people from the area that one studied at.
- I don't know.
- I can use items such as apps on my phone or i-pad to help me maintain my proficiency. I can also talk to people in Korean almost anywhere on the Internet or through an app to help me maintain proficiency.
- I can keep watching TV shows and keep in contact with Russian friends
- Mobile applications and general content can help to keep whatever was learned fresh in the mind. A student could also use Skype or another form of communication to speak with someone they met during their capstone year to keep using the language.
- Watching Chinese movies on the Internet. WeChatting with Chinese friends.
- online dictionaries and videos
- Technology can give me so many resources that can help me maintain chinese such as social media, which I can keep in contact with the students that I might meet when I'm in capstone and I can be able to use my Chinese to communicate with them.
- The same way I will use it in preparation for the Capstone Year.
- It will force me to continually practice

- It would be very helpful because while I'm not in the country it may be the only way I can continue practicing what I've learning.
- Maintain a record of target language flash cards on the phone through PLECO WeChat
- Online social platforms like Skype would give me a chance to practice conversation with native speakers, online articles and books would maintain an advanced reading level. Writing my own blog or articles would also maintain my writing skills.
- To keep in contact with native speakers
- I'll be able to keep in contact with friends and peers who are native speakers.
- Actively reading news stories in Arabic, listening to Arabic podcasts, etc.
- Maintain contact with the culture and the language via news outlets (both written and video) and via social media
- Same reason as above
- Stay connected and using programs like alkitaab to review ideas
- Speaking with people on the web,
- By continually reading in Arabic online I am keeping my proficiency in the language high
- Very
- The same sites as mentioned above would help me attain my skills, but possibly places like duo lingo would give me small refreshing lessons if I find I might be falling out of practice for some reason. Listening to music/podcasts in the language would also help.
- Technology and the Internet would provide me with a variety of resources that I could use to practice speaking, reading, and writing in Russian. I would make it a point to watch videos and read texts in Russian on a regular basis.
- Technology is quick and connects with nearly every part of the world. I find it very useful in the process of learning Russian.
- Technology will force us to reactivate our vocabulary which we will forget overtime.
- Very important unless you stay in the country.
- I can continue to interact with Arabic speakers and engage myself with Arabic media.
- Yes.
- Keeping up with current events with online Turkish sources
- I'd like to stay in contact with the people I met through the capstone year.
- Connection to peers in host country and the world
- not enough experience to answer this now
- I could communicate with people in China using Skype.
- not in flagship!
- After my Capstone Year, I could use online programs just to maintain my language proficiency if I am not directly using it in my job on a day to day basis.
- Once again, I generally find technology most useful for practicing foreign language skills by chatting online.
- It will help me keep in touch with native Chinese speakers even if I do not move to an area of the world that speaks Mandarin
- N/A
- Movies, and skype will help me with my communications skills in Chinese
- Social media will help facilitate continued relations with people from China as well as offer an opportunity to continue using the language.
- Watching videos, communication with acquaintances via messenger/social media, reading articles
- I would say lots of drilling flashcards as well as speaking with Chinese friends with WeTalk will be the most helpful for retaining the language.
- Since I often watch chinese series it will be helpful to have technology to watch on and this can help me to maintain my Chinese.
- Podcasts and reading articles would be helpful for vocabulary retention.
- I believe websites that help the continuation of jogging your memory with languages will be beneficial to me after completing Capstone year as I begin to live back in the states for some time.
- Yes, if we keep reviewing it won't be as easy to forget.

- Dictionaries and reading.
- I consistently watch tv shows and use dictionaries.
- Keeping in contact with Chinese friends via social media, tuning in to news events
- I use a program call OneNote from the Microsoft program suite. I record all my class materials in there to include videos, texts, recordings, and essays. I plan on reviewing my past work periodically so I can refresh on previous knowledge. I also plan on utilizing the National Foreign Language Center to read on new material. In order to continue to maintain my speaking I will utilize social exchange websites where I can initiate a voice chat. As for writing, I can practice typed speech quite easily by composing small essay and send it for review to Chinese friends. Handwritten essay can also be accomplish if using a touch screen capable computer that is able to recognize Chinese handwriting such as the Microsoft Surface Pro 3.
- It can keep me up to date with the world around me if change does occur.
- Connecting with friends I have made in China with whom I can practice speaking Chinese after capstone is possible only through modern technology. Exploiting this technology is essential for maintaining my language proficiency.
- It will help me stay in contact with friends and colleagues I met during my time. Of course I will continue to consume target language media content on YouTube and news sites.
- BBC and other news sites along with social media will be the most useful ways to me to stay current on my language.
- Vocabulary maintenance

Word	Frequency	Word	Frequency	Word	Frequency	Word	Frequency
chinese	19	articles	5	again	3	foreign	2
language	18	stay	5	dictionaries	3	area	2
help	15	speakers	5	useful	3	music	2
maintain	13	arabic	5	podcasts	3	completing	2
keep	12	writing	5	movies	3	peers	2
media	11	vocabulary	5	able	3	forget	2
technology	10	continue	5	read	3	reason	2
online	10	native	4	find	3	essay	2
use	9	keeping	4	continued	2	texts	2
friends	9	new	4	time	2	programs	2
people	9	same	4	communicate	2	job	2
social	9	russian	4	practicing	2	record	2
contact	9	videos	4	reviewing	2	small	2
reading	9	target	4	once	2	app	2
capstone	8	etc	3	answer	2	websites	2
news	7	touch	3	shows	2	wechat	2
practice	7	give	3	content	2	force	2
using	6	tv	3	review	2	phone	2
year	6	china	3	events	2	connected	2
helpful	6	listening	3	current	2	class	2
skills	6	country	3	previous	2	program	2
world	5	continually	3	learning	2	apps	2
watch	5	day	3	material	2	way	2
sites	5	internet	3	pleco	2	microsoft	2

skype	5	met	3	resources	2	important	2
speaking	5	communication	3	basis	2	plan	2
proficiency	5	watching	3	maintenance	2	quite	2

**Q41 What technologies (e.g., hardware, software, websites) would you like to see implemented at your institution that would help you learn foreign languages more effectively? (n=59)**

- Listening to Chinese podcasts on iTunes
- Some sort of software that directly imports the language as it is today, and conglomerates all sources into one area: such as bringing all the videos, all the texts, and all the explanations into one source.
- A traditional classroom experience works well for Chinese language learning, but being able to use technology in order to memorize and practice characters both inside and outside the classroom would be helpful. Ideally, there would be panels on the tables where characters could be drawn with a finger/electronic pen. It could take into account stroke order and be sent to a student email like a Word document.
- There aren't a lot of Russian-language technologies that could be easily incorporated into the flow of an hour long course, I don't think there's anything we should be using that we aren't already using other than powerpoint or news sites for material for discussion.
- Quizlet, Anki, Nave dictionary
- FluentU - Website
- More software in the classroom such as recorded lectures
- I don't know.
- I have never been very tech-savvy, so I wish more technologies were introduced to me because I am not even very aware of what is available.
- I think the way that things are done is working very well as far as language learning goes - but I wish we spent a little more time learning how to read websites, use Chinese social media, practical applications of using the language to use technology.
- I'd like to see more use of software in the classroom, although I understand how that could be difficult in a language course.
- N/A
- Unkown
- I believe that we should be made to type more in Korean than we are made to now.
- Online dictionaries allowed in class
- I would like to see some sort of native speaking language partner become part of the program. Someone that students are not forced Students could contact them through either social media or programs like Skype.
- It would be really nice if the Anki app was provided for Flagship students because I really like it, but I have to use it in a browser (with Internet) because I don't want to pay \$25 for the app.
- Quizlet
- I would like for the university to pay for subscriptions to language-learning websites like Rosetta Stone or Pimsleur.
- Quizlet and perhaps a grammar site that has games to help drill the material
- I would LOVE to have an immersion discussion board where outside of class everyone can communicate in Chinese, saying "oh my gosh, I'm so tired!" or "Classes are killing me" or an invitation to do a group activity, because it encourages us to use Chinese outside of class.
- Vocabulary and book recordings
- I can't think of any.
- Not at UT but at the AALIM center in Meknes, internet/wifi capabilities need to be greatly strengthened!
- not sure
- I actually prefer less technology being pushed within the classroom. I would prefer to use the resources I am used to and have my institution focus more on the urging us to develop our speaking skills through partcicing with classmates and native speakers.
- Nothing more than currently in use
- Alkitaab is super helpful
- Better Arabic typing systems on canvas.
- More Duolingo I suppose
- I cannot think of anything more that might improve my language learning at the moment. I am mostly satisfied with how things are progressing thus far.

- .Ru websites
- Rosetta Stone or a similar website
- I want study options and media outside of the classroom to help
- No opinion
- I am not sure. I do not like the use of technology in a language classroom. I experienced this with another language class I had and I hated it. All of our assignments were online and it was the worse possible way to learn any new concepts.
- I'd like companion websites to be used more.
- Not really sure, since I use all of my own technology
- more efficient, effective, and user friendly way to upload voice recordings
- some sort of technology where I can hand write characters as practice would be helpful, more than just Google translate, more for test/practice to use on iPad- not sure if it exists, but would be nice
- I would like to see certain websites that help us keep up with our learning during breaks and when there is not as much access to help.
- I don't have any in mind that should be implemented directly, but perhaps our institution could provide a list of helpful technologies for maintaining language skills outside the classroom (it may already do this...)
- Online Flash cards
- More mobile apps.
- Video library!
- It would be amazing if Pleco and its add-ons were provided by the program. They are really incredibly useful tools.
- I am not sure what kind of software are there.
- I would like to see more websites implemented at my institution. It is hard to find the right sources for interactive language learning on the internet, and if my institution were able to organize strong sources into one website, that would be extremely beneficial.
- I believe the more written, spoken, and classic way of learning the more effective. More technology means less work for us in many ways which decreases our learning curve.
- A flagship group or wechat where we just all talk or type in Chinese.
- I don't find technology particularly helpful.
- I would love to see free use of Skritter and/or Anki in our Flagship Program. The cost associated with these programs has long hindered me from using them and when I did use the free trials for both, I found them to be incredibly useful for language learning.
- Rosetta Stone or a similar system.
- Unlimited Plecko app, message board to hear about Flagship experiences (possibly through a LinkedIn group or Facebook group)
- Chinese Reader 7  
Touch Screen Devices capable of recognizing handwritten Chinese characters such as Microsoft Surface Pro 3
- I would love to be able to practice my chinese with another chinese person, so I can practice my chinese, check my chinese homework, ask for help whenever needed. In exchange, I could provide similar services in english. This would be fantastic, and I would be significantly increase my confidence especially when speaking chinese. It would be extremely motivating, and my test grades/performance would be much better. I know this because i had a chinese roommate in shanghai that would do this. It worked very well. So any technology that achieve this would be very effective.
- Although I am a huge fan of language exchange sites, I would not enjoy it being mandatory. Teachers should make these sites known, but, for me at least, making it mandatory would take all the fun and motivation out of it.  
I definitely think teachers should be frequently pulling content from YouTube, however. This platform, of course, provides countless examples of the target language being used in a colloquial fashion -- it's a good bar by which to measure students' progress.  
Google Doc collaboration is just part of the process here at Portland State, and it's a immensely valuable tool for easily sharing documents and providing feedback. All Flagship institutions should use the Google Suite if they are not yet doing so.
- As it is, I feel that we have ample services at my university.



- There aren't really any good examples of language learning software for Persian

Word	Frequency	Word	Frequency	Word	Frequency
language	15	effective	3	far	2
use	14	similar	3	better	2
chinese	14	just	3	prefer	2
learning	10	app	3	pay	2
technology	9	rosetta	3	take	2
classroom	8	used	3	provided	2
websites	6	sources	3	skills	2
practice	5	love	3	test	2
software	5	program	3	social	2
think	5	media	3	exchange	2
helpful	5	online	3	programs	2
see	5	able	3	services	2
help	5	quizlet	3	board	2
flagship	5	website	3	easily	2
really	5	technologies	3	want	2
sure	5	group	3	recordings	2
using	4	discussion	2	already	2
institution	4	nice	2	wish	2
class	4	teachers	2	type	2
characters	4	free	2	useful	2
way	4	native	2	directly	2
students	4	examples	2	perhaps	2
sort	3	made	2	believe	2
stone	3	extremely	2	another	2
internet	3	implemented	2	order	2
sites	3	material	2	find	2
course	3	provide	2	university	2
anki	3	good	2	know	2
speaking	3	long	2	things	2
google	3	mandatory	2	incredibly	2

## Appendix F: LC Director Questionnaire

**(Double click below to see entire questionnaire with your pdf viewer)**

University Language Learning Centers  
Survey for Center Directors

\* Required

Demographic Questions

What is your institution? \*

What is your current academic rank? \*  
(e.g., assistant professor; research associate)

What is your job title within your Language Center? \*

How many years have you worked in your current Language Center? \*

If you would like to receive a copy of the findings of this study, please include your email address below.

Continue > 10% completed

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## Appendix G: Flagship Director Questionnaire

(Double click below to see entire questionnaire with your pdf viewer)

The Language Flagship Directors

\* Required

Demographic Questions

What is your institution? \*

In your institution on a semester, trimester, or quarter system? \*

Semester

Trimester

Quarter

Other:

What is your average class size? \*

What language(s) do you teach? \*

Arabic

Chinese

Hindi and Urdu

Korean

Persian

Portuguese

Russian

Swahili

Turkish

## Appendix H: Flagship Instructor Questionnaire

(Double click below to see entire questionnaire with your pdf viewer)

The Language Flagship Teaching Staff  
\* Required

Demographic Questions

What is your institution? \*

Is your institution on a semester, trimester, or quarter system? \*

Semester  
 Trimester  
 Quarter  
 Other:

What is your average class size? \*

What language(s) do you teach? \*

Arabic  
 Chinese  
 Hindi and Urdu  
 Korean  
 Persian  
 Portuguese  
 Russian  
 Swahili  
 Turkish

## Appendix I: Flagship Student Questionnaire

**(Double click below to see entire questionnaire with your pdf viewer)**

The Language Flagship Students  
\* Required

Demographic Questions

What is your age?

What is your gender?

What is your institution? \*

Please indicate your academic status \*

Undergraduate student  
 Graduate student  
 Other:

What is your status in relation to The Language Flagship program? \*

I am a Flagship student  
 I am NOT a Flagship student, and do not plan to become one in the future  
 I am NOT a Flagship student, but I am considering becoming one in the future

Please indicate your proficiency in the following language skill areas in regards to the language you are studying in The Language Flagship \*  
(proficiency levels are based upon the ACTFL guidelines)

Intermediate Intermediate Intermediate Advanced Advanced Advanced

**Appendix J:  
Cover Letter to Language Center Directors**

Aloha NAME,

I direct the Center for Language & Technology at the University of Hawaii and I am reaching out to you because your institution hosts a Language Flagship program. The Language Flagship is a federal program that produces graduates in many different areas of academic studies who additionally achieve a high degree of proficiency in a foreign language (<https://youtu.be/EghHOT73ju0>). A recent initiative of the Language Flagship resulted in the creation of the Language Flagship Technology Innovation Center (LFTIC), which I co-direct with Dr. Madeline K. Spring. One of the goals of the newly founded center is better understand the context in which the different Flagship Programs operate. For that purpose, we have created a survey which we hope will help us obtain baseline information that we will gladly share with you. Since the Language Flagship program operates in 24 institutions, the number of responses will be very small so I would like to request that you please consider participating and providing as much information as possible. I would appreciate your response no later than Tuesday, September 22nd. The questionnaire only takes a few minutes to complete and can be found here:

<https://goo.gl/XXnwyH>

By accessing and answering the above questionnaire, you are agreeing to all of the following:

Participation in this study will consist of filling out this online questionnaire. No personal identifying information will be included in the research results.

Participants who are interested in receiving a copy or summary of the findings of this survey will be provided with those details upon request, but participating in this research will be of no direct benefit to you, the participant. However, the results of this project will be used to help identify the technology needs of The Language Flagship and ideally help with future collaborations between centers and The Language Flagship programs.

We do not foresee any physical, psychological, or social risks or discomforts associated with this study, and participation is entirely voluntary. If you agree to participate, you may withdraw from the study at any time without penalty or loss of benefits to which you are otherwise entitled.

If you have any questions about this project, you can contact the principal researchers, Dr. J. D. Brown ([brownj@hawaii.edu](mailto:brownj@hawaii.edu)) or Jonathan Trace ([jtrace@hawaii.edu](mailto:jtrace@hawaii.edu)). If you have any questions about your rights as a research participant in this project, you can contact the University of Hawaii Committee on Human Studies (CHS) by phone at (808) 956-5007 or by email at [uhirb@hawaii.edu](mailto:uhirb@hawaii.edu).

By accessing the questionnaire and answering it, you accede to all of the above and allow the use of your survey data for the investigation described above with the understanding that all of the data will be kept 100% confidential.

The link for the questionnaire can again be found below, and we very much appreciate your time and consideration in helping the Language Flagship Technology Innovation Center with this project.

<https://goo.gl/XXnwyH>

Thank you,

Dr. Julio C. Rodriguez, Co-Director  
The Language Flagship Technology Innovation Center  
University of Hawaii at Manoa

<https://www.facebook.com/TheLanguageFlagship?fref=ts>

**Appendix K:  
Cover Letter to Flagship Directors**

Dear Dr. NAME (cc: NAME):

An important part of the new Language Flagship Technology Innovation Center (LFTIC) is to gather information about the use of technology for language learning in Language Flagship Programs and university Language Centers. To achieve this goal Drs. Julio Rodriguez and Madeline Spring, Co-Directors of LFTIC, have contracted with Dr. J. D. Brown, an expert on language program survey research, to conduct three surveys. We are hoping that you might be able to take a few minutes to complete a short survey regarding your experiences with technology use as part of The Language Flagship. We would appreciate your response no later than Tuesday, September 22nd.

The questionnaire can be found by clicking on the link here:

<https://goo.gl/mal196>

In addition, we will also be sending you a separate email shortly that we would like you to forward on to your Flagship Teaching Staff. This should include anyone who is teaching classes or tutoring in The Language Flagship program at your institution, including graduate/teaching assistants, tutors, dedicated Flagship teachers, or regular department teachers who may have Flagship (or potential Flagship) students in their language classes. We would also be interested in learning about their views on technology in The Language Flagship. This email will contain a separate link for the instructor survey.

Lastly, we will also be sending you one more email that we would like your Flagship Coordinator to forward to Flagship students. In some programs it will be easy to identify who these students are, whereas in some programs there will be a mix of Flagship and non-Flagship students in the regular third or fourth year language classes (there may also be some potential Flagship students in these groups). We are interested in learning about their views on technology in The Language Flagship. This email will also contain a separate link for the student survey.

By accessing and answering the above questionnaire, you are agreeing to all of the following:

Participation in this study will consist of filling out this online questionnaire. No personal identifying information will be included in the research results.



Participants who are interested in receiving a copy or summary of the findings of this survey will be provided with those details upon request, but participating in this research will be of no direct benefit to you, the participant. However, the results of this project will be used to identify the technology needs of The Language Flagship and ideally help with future collaborations between language centers and The Language Flagship programs.

We do not foresee any physical, psychological, or social risks or discomforts associated with this study, and participation is entirely voluntary. If you agree to participate, you may withdraw from the study at any time without penalty or loss of benefits to which you are otherwise entitled.

If you have any questions about this project, you can contact the principal researchers, Dr. J. D. Brown ([brownj@hawaii.edu](mailto:brownj@hawaii.edu)) or Mr. Jonathan Trace ([jtrace@hawaii.edu](mailto:jtrace@hawaii.edu)). If you have any questions about your rights as a research participant in this project, you can contact the University of Hawaii Committee on Human Studies (CHS) by phone at (808) 956-5007 or by email at [uhirb@hawaii.edu](mailto:uhirb@hawaii.edu).

By accessing the questionnaire and answering it, you accede to all of the above and allow the use of your survey data for the investigation described above with the understanding that all of the data will be kept 100% confidential.

The link for the questionnaire can again be found below, and we very much appreciate your time and consideration in helping the LFTIC with this project.

<https://goo.gl/mal196>

Thank you,

Dr. Julio C. Rodriguez  
Dr. Madeline K. Spring

Co-directors, The Language Flagship Technology Innovation Center

[LFTIC@hawaii.edu](mailto:LFTIC@hawaii.edu)

**Appendix L:**  
**Cover Letter to Flagship Instructors**

To: LF Program Directors and Program Coordinators

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Dear Dr. NAME (cc: NAME):

Thank you for your commitment to improving the Language Flagship Program. As mentioned in our previous communication, we would like to request that you forward the message below to all Language Flagship teaching staff. This should include anyone who is teaching classes, or tutoring in The Language Flagship program at your institution, including graduate/teaching assistants, tutors, dedicated Flagship teachers, or regular department teachers who may have Flagship (or potential Flagship) students in their language classes. A copy of the corresponding Human Studies Program approval is attached for your records.

Best regards,

Dr. Julio C. Rodriguez  
Dr. Madeline K. Spring  
Co-directors, The Language Flagship Technology Innovation Center  
LFTIC@hawaii.edu

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Dear Language Flagship Teaching Staff,

The Language Flagship Technology Innovation Center (LFTIC) is conducting a survey to better understand how technology is used in the Language Flagship program. You are receiving this message because you are teaching classes, or tutoring in The Language Flagship program at your institution. This survey is intended for graduate/teaching assistants, tutors, dedicated Flagship teachers, or regular department teachers who may have Flagship (or potential Flagship) students in their language classes. If you fall into any of these categories, we would like to receive your valuable input on technology in The Language Flagship.

Your participation will help identify patterns of use and potential areas of improvement. We are hoping that you might be able to take a few minutes to complete a short questionnaire regarding your experiences with technology as part of The Language Flagship program. We would appreciate your response no later than Tuesday, September 22nd.

The questionnaire can be found here:

[https://goo.gl/VqMdbjhttps://docs.google.com/forms/d/1OKqavyZrQGyCgeVUTEw2Y5hAZVbE3ZsH19qEdfx6\\_oI/viewform?usp=send\\_form](https://goo.gl/VqMdbjhttps://docs.google.com/forms/d/1OKqavyZrQGyCgeVUTEw2Y5hAZVbE3ZsH19qEdfx6_oI/viewform?usp=send_form)

By accessing and answering the above questionnaire, you are agreeing to all of the following:

Participation in this study will consist of filling out this online questionnaire. No personal identifying information will be included in the research results.

Participants who are interested in receiving a copy or summary of the findings of this survey will be provided with those details upon request, but participating in this research will be of no direct benefit to you, the participant. However, the results of this project will be used to identify the technology needs of The Language Flagship and ideally help with future collaborations between language centers and The Language Flagship programs.

We do not foresee any physical, psychological, or social risks or discomforts associated with this study, and participation is entirely voluntary. If you agree to participate, you may withdraw from the study at any time without penalty or loss of benefits to which you are otherwise entitled.

If you have any questions about this project, you can contact the principal researchers, Dr. J. D. Brown ([brownj@hawaii.edu](mailto:brownj@hawaii.edu)) or Mr. Jonathan Trace ([jtrace@hawaii.edu](mailto:jtrace@hawaii.edu)). If you have any questions about your rights as a research participant in this project, you can contact the University of Hawaii Committee on Human Studies (CHS) by phone at (808) 956-5007 or by email at [uhirb@hawaii.edu](mailto:uhirb@hawaii.edu).

By accessing the questionnaire and answering it, you accede to all of the above and allow the use of your survey data for the investigation described above with the understanding that all of the data will be kept 100% confidential.

The link for the questionnaire can again be found below, and we very much appreciate your time and consideration in helping the LFTIC with this project.

[https://goo.gl/VqMdbjhttps://docs.google.com/forms/d/1OKqavyZrQGyCgeVUTEw2Y5hAZVbE3ZsH19qEdfx6\\_oI/viewform?usp=send\\_form](https://goo.gl/VqMdbjhttps://docs.google.com/forms/d/1OKqavyZrQGyCgeVUTEw2Y5hAZVbE3ZsH19qEdfx6_oI/viewform?usp=send_form)

Thank you,

Dr. Julio C. Rodriguez

Dr. Madeline K. Spring

Co-directors, The Language Flagship Technology Innovation Center

[LFTIC@hawaii.edu](mailto:LFTIC@hawaii.edu)

**Appendix M:  
Cover Letter to Flagship Students**

Dear Language Flagship Coordinators,

As mentioned in our previous message, we would like to request that you forward this email to all Language Flagship students who are currently at or beyond the Intermediate Mid range of language proficiency in your Flagship language (i.e., they have taken at least two years of university-level courses or the equivalent). We realize that in some cases, Flagship students (or potential Flagship students) may be part of larger courses with non-Flagship students (e.g., in a third or fourth-year language class), and it is fine to include these students as well. A copy of the corresponding Human Studies Program approval is attached for your records. Thank you!

Dr. Julio C. Rodriguez  
Dr. Madeline K. Spring

Co-directors, The Language Flagship Technology Innovation Center  
LFTIC@hawaii.edu

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Dear Language Flagship students,

The Language Flagship Technology Innovation Center (LFTIC) is conducting a survey on the use of technology for language learning. Your participation is important because it will help better understand what technology tools and resource can be provided to students like you to improve your language skills. Please take a few minutes to complete a short survey regarding your experiences with technology use as part of your language learning in the Language Flagship program. We would appreciate your response no later than Tuesday, September 22nd.

The questionnaire can be found here:

[https://goo.gl/z10ZYAhttps://docs.google.com/forms/d/1hoNZs7iJ8gIoKa2AAIso2rFf1OPokT0FJl6VN9pGYkw/viewform?usp=send\\_form](https://goo.gl/z10ZYAhttps://docs.google.com/forms/d/1hoNZs7iJ8gIoKa2AAIso2rFf1OPokT0FJl6VN9pGYkw/viewform?usp=send_form)

By accessing and answering the above questionnaire, you are agreeing to all of the following:

Participation in this study will consist of filling out this online questionnaire. No personal identifying information will be included in the research results.

Participants who are interested in receiving a copy or summary of the findings of this survey will be provided with those details upon request, but participating in this research will be of no direct benefit to you, the participant. However, the results of this project will be used to help identify the technology needs of The Language Flagship and ideally help with future collaborations between language centers and The Language Flagship programs.

We do not foresee any physical, psychological, or social risks or discomforts associated with this study, and participation is entirely voluntary. If you agree to participate, you may withdraw from the study at any time without penalty or loss of benefits to which you are otherwise entitled.

If you have any questions about this project, you can contact the principal researchers, Dr. J. D. Brown ([brownj@hawaii.edu](mailto:brownj@hawaii.edu)) or Jonathan Trace ([jtrace@hawaii.edu](mailto:jtrace@hawaii.edu)). If you have any questions about your rights as a research participant in this project, you can contact the University of Hawaii Committee on Human Studies (CHS) by phone at (808) 956-5007 or by email at [uhirb@hawaii.edu](mailto:uhirb@hawaii.edu).

By accessing the questionnaire and answering it, you accede to all of the above and allow the use of your survey data for the investigation described above with the understanding that all of the data will be kept 100% confidential.

The link for the questionnaire can again be found below, and we very much appreciate your time and consideration in helping the Language Flagship Technology Innovation Center with this project.

[https://goo.gl/z10ZYAhttps://docs.google.com/forms/d/1hoNZs7iJ8gIoKa2AAIso2rFf1OPokT0FJl6VN9pGYkw/viewform?usp=send\\_form](https://goo.gl/z10ZYAhttps://docs.google.com/forms/d/1hoNZs7iJ8gIoKa2AAIso2rFf1OPokT0FJl6VN9pGYkw/viewform?usp=send_form)

Thank you,

Dr. Julio C. Rodriguez  
Dr. Madeline K. Spring

Co-directors, The Language Flagship Technology Innovation Center  
[LFTIC@hawaii.edu](mailto:LFTIC@hawaii.edu)