

Technology Innovation Center Blueprint for Success

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Introduction

The Language Flagship Technology Innovation Center (Tech Center) at the University of Hawai'i at Mānoa presents this **Blueprint for Success** in order to help The Language Flagship, as well as other federal initiatives and academic programs interested in enhancing high quality language programs, to improve language learning through the strategic integration of technology. Through multiple symposia and outreach events to promote input and collaboration across the Flagship programs, the Tech Center has worked to make the integration of effective language learning technology central to The Language Flagship mission. The participation and input of Language Flagship directors, instructors and students, along with colleagues from across academia, government and the private sector, has been instrumental in refining our views and practices in the integration of blended learning into high quality instruction. We offer these Goals and Guiding Principles to the Flagship Community to assist our efforts in the integration of best practices in technology-based learning into the overall programmatic approaches throughout academia and the federal and private sectors.

Goals

The goals of the Blueprint ensure that blended technology innovation will achieve at least one of the following core goals to: Enhance Language Proficiency, Enhance our Community of Innovators, Create Global Professionals, and Strengthen Partnerships.

Goal 1: Enhancing Language Proficiency: use technology to support the Flagship Program goal of achieving professional language proficiency (to ILR 3/ ACTFL Superior) in all Flagship Languages.

Goal 2: Enhancing a Community of Innovators: ensure that projects that promote the Flagship culture of innovation in language education make every effort to involve the community in conception, development, and in utilization of technology innovation across the Flagship programs.

Goal 3: Creating Global Professionals: using innovative means to integrate technology dedicated to cultivating consummate professionals who are not only highly proficient in world languages but also well prepared to contribute their strong interpersonal skills, intercultural communication skills and collaborative spirits to the global workforce; use technology to support this mission by creating learning experiences that train these professional skills

Goal 4: Strengthening Partnerships: Using technology to build and strengthen partnerships within The Language Flagship Program as well as across other academic programs, other government training programs, and strategic private sector partners.

Guiding Principles for Technology Integration

Based on past experiences as well as input received in the multiple outreach events, The Language Flagship Technology Innovation Center has developed a number of guiding principles to ensure that technology innovation is effective and relevant. Following these guiding principles will help designers and program leads ensure that efforts will be successful in enhancing the mission of The Language Flagship.

- 1. Utilization: in order to be successful, technology initiatives need first and foremost a clear plan for consistent and sustained usage within the existing Flagship programs. Who are the potential users (instructors, students, and program managers)? How are stakeholders invested in integrating the technology into their curricula and/or their daily lives? How will the designers of a proposed initiative work with programs and colleagues to ensure that the technology will be used by teaching staff, students, and colleagues at Flagship institutions? New technological solutions need to answer a clear need and include plans for how the technology will be used.
- 2. Sustainability and Institutionalization: For the development of new technologies and the adoption of existing technology, the Blueprint focuses on planning for sustainment of use and institutionalization. A number of examples of sustainability include planning for source code maintenance, regular updating of content, maintaining server space, managing personally identifying information and performance data of users, and building a particular technology into the long-term planning for language programs. As technology capabilities change rapidly, sustainability and institutionalization must also include awareness of emerging technologies and planning for portability of content to new contexts.
- 3. Open Source Licensing & Interoperability: In keeping with the first two principles, to have full impact across the community, software design must have open source code, made available on an open, distributed version control system for source code. All new technology developed should also follow a standardized interoperability protocol such as xAPI that allows the collection, storage, and distribution of user performance data as well as communication of this data to other systems. Content developed by and for Flagship should follow best practices for public copyrighting such as Creative Commons licensing.

- 4. **Blended Learning:** For the purposes of this Blueprint, Blended Learning refers to learning that includes a face-to-face component as well as an online component that is meaningfully integrated into the curriculum. Technology integration should target those learning activities in a way that optimizes the learning experience from both a face to face and technology mediated environment.
- 5. Connection, Collaboration, and Sharing of Resources: Across The Language Flagship Program, instructors, students, program administrators, alumni and tutors alike need greater connection to one another and a technologically-supported means to collaborate and share resources. Technology is the best means for creating these connections across our distributed learning landscape. We encourage the thoughtful use of technology to connect students with similar majors or common interests, instructors and tutors who would like to share curriculum materials or exchange research ideas and findings, and program administrators who can learn from each other's innovations in program management. Using technology to connect our community of innovators will improve the Flagship experience and optimize the program management.
- 6. Professional Development: Inspired by the notion that all learning should follow the same basic pedagogical principles regardless of the means used to support instruction, the Blueprint emphasizes the importance of professional development for the use of technology to be part of all basic instructor training. As a departure from training sessions on the technical aspects of how to operate a particular technology, we encourage programs to start from the idea that all Flagship learning is blended learning and professional development programs should be built with this in mind.
- 7. Lifelong & Individualized Learning: Following the latest trends in learning science research, the Blueprint encourages using technology to support learner agency and individualized learning. Specifically, it emphasizes efforts that strengthen learners' metacognitive awareness about how they learn best and where they need improvement. For classroom-based language education programs, how can technology be best used to tailor curriculum to meet individualized needs of students?
- 8. **Leveraging Existing Resources:** To avoid duplicative efforts and siloed technology development, the Blueprint emphasizes the importance of making sure designers first

examine existing learning technologies that can be adopted or adapted. These technologies can exist at other universities, in private industry, or in other government training programs. Before conceiving of or developing a new technology solution, the Blueprint encourages working with the Technology Innovation Center as well as colleagues on campuses, including those in other disciplines, to see what may already be in use, with what degree(s) of success. The Blueprint especially underscores the examination of technologies not originally intended for language education, such as video and messaging software, which can be repurposed as a part of meaningful blended learning experiences.

Implementation of the Blueprint

The Language Flagship Technology Innovation Center (Tech Center) serves as a hub of innovative means for integrating existing technologies as well as piloting creative new technology development efforts. The Tech Center will help Flagship programs incubate ideas that serve the specific needs of The Flagship community and will increase efforts to codify and disseminate their best practices in blended learning and simulated learning experiences. The center will continue its work surveying the latest trends in educational technologies for language learning, identifying solutions that are the best fit for solving challenges within The Language Flagship.

As new technologies emerge, the Tech Center will work with The Language Flagship programs to leverage partnerships with new technology companies that need feedback from learner and instructor populations in order to build capabilities that are the best fit for their users. The Tech Center will also remain a nexus of partnerships with other government programs and agencies, sharing best practices, lessons learned, and research findings. Through The Tech Center, we will forge a unified way ahead with partners in academia, the private sector, and other government agencies.