Building Immersive Learning Experiences through Simulations

Hui-Ya Chuang
Leon Potter
Julio Rodriguez
Ruslan Suvorov
Stephen Tschudi
Language Flagship Technology Innovation Center
University of Hawai‘i at Mānoa
Technology Innovation Center

THE LANGUAGE FLAGSHIP

The Context
The Theory
The Design Process
Implementation
Context

27 Language Programs
(22 institutions of higher education across the U.S.)

10 Overseas Centers
(Brazil, China, Morocco, India, South Korea, Kazakhstan, Tanzania, Turkey)
Green Ideas, Inc.

全球性的环保市场营销组织，我们秉承绿色可持续发展理念，致力于帮助各大企业进行环保方面的市场推广，并协助其开拓一条绿色可持续发展的道路。我们坚信各大企业在绿色生产方面都有可提高的空间。我们的目标是通过创新的市场推广策略，帮助客户以及整个社会宣传我们的理念。

进入 / 進入
Activity Theory

AT is a theoretical framework for studying human activities as socially and culturally mediated phenomena (Engeström, 1987, 2001; Vygotsky, 1978)

AT can be used “to model and to represent a particular language learning activity as seen from the perspective of different actors participating in the learning activity” (Blin, 2004, p. 384).
Activity System in the Simulation

- **Subjects**: Individual students
- **Rules**: Chinese course policies, Green Ideas policies
- **Community**: Co-workers/classmates, Chinese course instructor, Green Ideas staff
- **Division of Labor**: Students’ apply for a job and complete a group project, Instructor provides scaffolding, Green Ideas staff play corporate roles
- **Object**: Demonstrate value as an employee of Green Ideas
- **Tools**: Green Ideas website
- **Outcome**: Improve language skills in Chinese, Develop understanding of cultural norms in a Chinese work environment
Simulation design process

Simulation **objective**: Enable learner to experience the world of work in a multinational corporation as a means for bridging academic and professional language skills. Experience to include:

→ **Research** company and **apply** for position of interest
→ **Interview** and gain regular position, or internship
→ Undergo worker **orientation** (HR / company policies, assessment)
→ Perform team-based **research** task related to one’s position
→ Make formal **presentation** as a team
→ Receive “supervisor” **feedback; revise, resubmit**
Simulation design process

Simulation **scope**: Chinese courses from 205 → 486, ranging from “threshold” participation (= partial & preparatory) to full participation

205 Intermediate Business Chinese
- Compare typical business résumés in English and Chinese
- Browse Chinese-language job listings and develop personal résumé targeting specific position

305 Advanced Business Chinese
- Research, browse, target and apply, interview, hire, HR
- Carry out team-based Advanced level targeted task for a specified division of Green Ideas, Inc.

486 Selected Readings in Chinese (content-based)
- Research, browse, target and apply, interview, hire, HR
- Carry out team-based Superior level targeted task for a specified division of Green Ideas, Inc.
Simulation design process

Simulation **stakeholders and contributions**: Language Flagship Technology Innovation Center grantor and team members, instructors, learners, community of business practice (CoP)

→ **LFTIC**: theoretical grounding and concept, funding, company structure & website wireframe, initial position- and task-design

→ **Instructors**: input to shape instructional approaches/ scaffolding to match learners’ developmental levels

→ **Learners**: input on own concentrations and interests resulted in creation of additional positions

→ **CoP**: models and templates for learner product
Green Ideas, Inc. is a non-profit organization that advocates for environmental sustainability. By providing comprehensive services in the areas of public relations, environmental education, and community engagement, we aim to empower individuals and organizations to adopt green practices and policies. Our mission is to create a more sustainable future for all, where environmental considerations are integrated into everyday decision-making. Whether it's developing community programs, fostering partnerships with local businesses, or raising awareness through innovative campaigns, Green Ideas, Inc. is dedicated to making a positive impact on the planet and the people who call it home.
Simulation design process

Development process:

- Initial brainstorming: company vision/mission
- Company structure and website wireframe
- Materials development: executive profiles, company info, positions, tasks, HR training modules
- Pedagogical interventions designed with instructors
- Consultation, revision
- Implementation ← we are here
- Iterative re-design
- Extension of Green Ideas, Inc. simulation to other languages
Simulation design process

Design characteristics:

**Holistic**: Company conceived of as a complex organism

**Realistic**: Input sought from stakeholders; “tools and rules” adopted from CoP; products portfolio-ready for learners’ future use

**Flexible**: Positions and tasks addressed actual student specializations and interests; pedagogical interventions stressed scaffolding rather than “dumbing down” of tasks

**Extensible**: Green Ideas, Inc. branches can be developed for many languages and markets
Implementation

Nov 2015  Finalized website wireframe
Dec 2015  Website is launched
Jan 2016  Finalized storyboard activities, main project, and assessment criteria
Feb       Finalized tasks and instructional material; recruited students
Mid-March Students applied for jobs and sent in applications
Apr       Conducted Skype interviews
Mid-Apr   Students were sent the tasks in groups of three or four
May       Students present their group tasks & submit reports
Job Interview

Job Interviews: each student is invited for an individual 15 to 20 minutes interview. Interview questions are designed based on real world interview experiences: 8 questions for advanced learners; 5 questions for intermediate learners.

Scaffolding: instructors integrated résumé writing and interview questions in the curriculum.
Student Tasks

Student Tasks: Tasks are designed to match different language levels and their roles in the company. For instance, marketing researcher, HR specialist, or translator.

Mentor: Students are asked to submit weekly reports to a senior employee in the company during the task.

Student-created artifacts produced during the simulation are collected and analyzed to investigate the effectiveness of the simulation for learning the Chinese language and culture in a Chinese work environment context.
Example of Project Task

Tesla wants to expand the market of its Powerwall home (solar) battery system into China. Guangzhou, China is holding the 8th Guangzhou International Solar Photovoltaic Exhibition and Tesla would like to participate in order to promote the Powerwall. The students’ task is to learn about China’s solar energy policy and then analyze the need of home solar power systems in China. The students write a report about how Tesla can adapt their products to meet Chinese consumers’ needs. Tesla would also like some sample brochures and posters to display at the exhibition. The posters and brochures should be in both Chinese and English with the same content and with adaptations to accommodate cultural context.
Recommendations

Extend time frame
Strengthen authenticity
Recommendations for next iteration

1. Extend time frame → more chances for feedback, iterative drafting
2. Strengthen authenticity by emphasizing corporate culture → Learners focus on real-life purposes rather than academic purposes (task performed for client rather than teacher); students take questions to supervisor in company rather than to teacher
What’s Next?

Implement recommendations from first pilot

Involve participants from another U.S. Institution

Involve a Flagship Center Abroad

Draft teacher recommendations

Pilot in an additional Flagship Language
Mahalo