Impact of a COIL Multidisciplinary & Multicultural Global Virtual Team Project on Cultural Intelligence

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Introduction

This presentation summarizes the impact of a COIL multidisciplinary & multicultural Global Virtual Team project on Cultural Intelligence.

Cultural Intelligence (CQ) is the capacity to function effectively in a variety of cultural contexts.

Disciplines include Creative Writing, Design of Virtual Worlds, and Design Methods.

Cultures are Mexican and American.
Krista Knight

- Teaches playwriting, screenwriting, and digital storytelling at SUNY Oswego.

- Member New Georges JAM and alum of EST's Youngblood, The Civilians R&D Lab, Page 73's Interstate 73, and TerraNova's Groundbreakers.

Olivia Hernández-Pozas

- Associate professor & researcher at EGADE Business School of Tecnológico de Monterrey in Monterrey

- She has been visiting professor in France, India, US and Puerto Rico

- Certified as Advanced Cultural Intelligence Facilitator by the Cultural Intelligence Center

- Has written articles and book chapters on different topics, including International Business, Global Competencies, Cultural Intelligence, Education, On the Job Training, and Group Theory
Eduardo Gonzalez

- Associate Dean of Engineering School, for Advanced Manufacturing.

- Senior Research Consultant of the United Nations Industrial Development Organization (2000-present) and member of the National Council of Mechanical and Electrical Engineering of the National Center for Higher Education Assessment.

- Lines of Interest: Design methodologies; Design and Development of Innovative Products; Augmented Reality & Virtual Reality In Industry.
Pablo Ramirez

- Associate professor of Electrical and Computer Engineering department

- Teaches Electronics, Electrical Circuits, Microcontrollers, and collaborates with Computer Science, Information Systems, and Art departments.

- Consultant, instructor, and researcher on: Virtual Reality, Augmented reality, Knowledge Management, Multimedia Systems, Distributed Learning, Planning and Administration, Networking Business, Electronic Systems Design and Manufacture.
COIL - Course Integration

Courses:

- Script writing - Krista Knight
- Design Methods - Eduardo Gonzalez
- Design of Virtual Worlds - Pablo Ramirez

COIL:

- Develop multidisciplinary and multicultural competencies
- Apply disciplinary knowledge of its course, to develop a project collaborating with fellow students
Course objectives

At the end of the course, students will be able to:

- Apply disciplinary knowledge of its course (scriptwriting, design methods, and virtual environments)
- Develop multicultural, multidisciplinary collaboration competencies, working with fellow students from Mexico and US institutions, to develop the course project
- Public presentation of the project the end of the semester, each institution will assigns spaces for this propose (Oswego and Tecnologico de Monterrey)
- CQ assessment
Learning Activities

1. Icebreaker, each student present himself to the group

2. Team groups, 9 groups with 6-7 members (2/3 scriptwriting, 2/3 engineering, 1/2 digital arts), resulting 9 Groups.

3. Project proposal, each team group worked with student partners to elaborate project proposal

4. Project development, each team group worked with partners to develop the project in its different components

5. Project presentation, at the end of the semester students presented their projects
Collaboration Space
Sample stories and digital illustration
Sample poster documentation

Grim Reaper Play

**Design Methodologies:**
- David Menchaca
- Francisco Cárdenas
- Alfonso Illeso

**Virtual Environments:**
- Luis García Besnier
- Valeria Marroquin

**Script Writing:**
- Nick Brown
- Cadi Mannold
- Jake Barbara

**Objective:**
The project developed had the objective to support, through videos and sounds of augmented reality, a theater performance from an original script. The audience will see through their smart electronic devices, a social network’s conversation containing icons and emoticons related to the character’s speech. It is intended to highlight the irony of today's social network trends and behaviors. Frequently, real personal interaction between individuals is ignored because of social networking. This social characteristic would be simulated in the play.

While the actors are interacting in front of the theater the audience will be more connected with the history using the technology of a smartphone tablet of a device in which you could download Aurasma. The audience has to point the marks that will be presented in front of them with different point of views. Aurasma will reproduce a video of the conversation of the characters of the play.

**Work Organization:**
The team in charge of the project was composed of three different divisions: design methodologies, virtual environments, and creative script writing. The design methodologies (DM) team was in charge of the administration of the design process. This includes the essential definition of the project through different design methodologies, the communication between members, administration of activities and documentation. The creative script writing (CSW) team responsibilities include the writing of an original script and the real-life performance of the play. The virtual environments (VE) team was tasked to create all the multimedia elements required for the virtual augmented reality aspects of the play.

The project was performed by an international collaboration where the tasks were undertaken in two different cities. CSW team worked in Oswego, United States, meanwhile DM and VE teams worked in Monterrey, Mexico. In order to a proper project development a good communication was required; because of the international constrain, it was decided that the main communication would be Facebook through an inbox. Each team would agree on due dates for each performed task.
Final presentations
CQ, Cultural Intelligence research

CQ is the capacity to function effectively in a variety of cultural contexts:

- **CQ Drive**, is the individual’s interest, drive and confidence to adapt to multicultural situations. Dimensions: Intrinsic Interest, Extrinsic Interest and Self-Efficacy

- **CQ Knowledge**, is the individual’s understanding about how cultures are similar and different. Dimensions: Business, Values and Norms, Socio-Linguistic and Leadership

- **CQ Strategy**, is the individual’s awareness and ability to plan for multicultural interactions. Dimensions: Planning, Awareness and Checking

- **CQ Action**, is the individual’s ability to adapt when relating and working inter-culturally. Dimensions: Speech-Acts, Verbal and Non-Verbal
CQ, Cultural Intelligence, cont.

- CQ was measured using a self-reported questionnaire, an online evaluation where individuals answer 54 questions that form CQ dimensions and sub-dimensions.

- Impact on CQ was measured comparing Pre-test and Post-test.
Results, Cultural Intelligence

● A COIL experience may change CQ scores.

● Results depend on individual and situational variables.

● Individual variables include for example student's personality and CQ initial stage.

● While situational variables include for example type of intervention and professor's coaching / training.

● Even in a same COIL project (experience), if learning objectives and focus for each group are different, CQ improvement will be different too.
In addition to improvement of CQ, a COIL experience can serve to make students more aware of the challenges, and can make them change from a status of unconscious incompetence to a conscious one, and beyond.

In this project, in average, CQ Drive remained the same and CQ Knowledge, Strategy and Action improved. But changes varied by group.

Students in US (School of Arts) reported the greatest improvement in CQ Action, while students in Mexico (Engineering) reported the greatest improvement in CQ Knowledge.

The group who ranked higher in CQ Drive & Strategy in T1, lowered its score at the end, showing better awareness at the end of the project.
General comments

- Maintain a OPEN communication with partner professors, to solve issues, adjust activities, etc.
- Have at least one LIVE class session, with students other universities
- Is very important to be closer with students group, ask about progress and teamwork
Thank You !!!

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