



**DOCTORAL CONSORTIUM**

CV & Prospectus

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*June 2014*

## Major Research Questions

1. How is the learning experience affected for **undergraduate students in interaction design** by using a video game based on transformational play theory?
  - 1.1. *How do they use the content to achieve goals?*
  - 1.2. *How does the capacity to transform their context influence their in their learning?*
  
2. How are students **motivated and engaged** while they participate in the video game?



## **Theory / Methods / Design**

**Lack of qualitative research skills necessary for making an empathic connection with the user is a problem for interaction design students (Frascara and Noel,2012)**

By noticing the relevance of the aforementioned problem, this study is interested in knowing how to increase motivation in the students and engage them in the learning process.

This is how I found in video games characteristics and affordances that can help motivation toward learning through situated cognition theory.



## Theory / Methods / Design

Is of special interest for this research to understand the features of games, such as the *Transformational Play Theory of Barab (2009)*, where the main goal is to bring students **face to face with socially significant problems** so that they can **develop the skills they need to apply in their profession**, converting them in **empowered actors** capable of modifying their context through the use of **different tools** that help them to reach their goals.



Theory / **Methods** / Design

**Population:**

The project will be applied to 15 Mexican College Students of ages between 20 to 23 years of both genders, all Interaction Design Students.

**Research Role:**

Because this problem is part of my teaching experience, my role as researcher will be obtrusive and involved.



Theory / **Methods** / Design

Research question for the game design part of the project:

***How is the learning process for Mexican Interaction Design students?***

This question is going to be answered through teachers and students' interviews, observation and diary studies.

With the collected data I will look for patterns and form an interpretation to create the project categories and concepts necessary to establish the game design learning principles (Safer, 2009).



## Theory / **Methods** / Design

This information will be fundamental for building a model based in the *transformational play* (Barab, 2009) that consists of three parts:

- inquiry based learning
- portfolio
- social commitments (the University social model will also be analyzed to establish the Game Social Commitments).



Theory / Methods / **Design**

## **VIDEO GAME DESIGN**

This information will be the base for designing **the game mechanics** which are the core of the transformational experience because they have to satisfy not only the intrinsic needs of the student but also be directly related to the content that we want the students to learn, in this case to develop **ethnographic skills**





Theory / Methods / **Design**

## **VIDEO GAME EVALUATION**

For the evaluation of the students 'experience using the video game designed, the question:

*“How is the learning experience of Mexican college students who study interaction design affected by using a video game created by adapting the transformational play theory?”*



Theory / Methods / **Design**

## **VIDEO GAME EVALUATION**

The video game experience will be videotaped and then analyzed to answer the following questions\*:

- How did the use of didactic content help to achieve goals?
- How does the capacity to transform students' context affect their learning?
- How was the student motivation and engagement while they participated in the video game?



## One current challenge that you're facing

-How to Design a high engaging transformational game experience with limited resources (people and software).

*Second Life or Unity, Multiplayer or Singleplayer*

-Tools and methods to evaluate transference and motivation during the game experience

*Observation, interview?*

