100K Strong in the Americas

The Nexo Global Innovation Competition for Creative and Cultural Industries

Esteban Garcia Bravo, Purdue University, garcia0@purdue.edu

Finding the Right Partner /
Finding the right competition

Open Estudio

Information Visualization and Digital Fabrication with Applications to the Creative Industries Field

Finding the Right Partner

Isabel Cristina Restrepo
Universidad de Antioquia, Medellín

Jose Cadavid, ITM

PI

Esteban Garcia Bravo

Purdue University, West Lafayette

Co-PI

Andres Burbano

Universidad de los Andes, Bogotá

Angus Forbes, UCSC

Previous research colaborators:
Rapport and trust established through the years
Study abroad, papers, conferences, teacher

Open Estudio: A platform for Colaboration between Colombian and US students since 2014

2467/3970: A SHORTCUT TO CONNECTING PURDUE UNIVERSITY (USA) AND UNIVERSIDAD DE ANTIOQUIA (COLOMBIA) IN AN INTERDISCIPLINARY EXPERIENCE BETWEEN ART AND TECHNOLOGY

Esteban Garcia, Purdue University, Lafayette, USA; Isabel Restrepo, Universidad de Antioquia, Medellin, Colombia

ABSTRACT

2467 miles / 3970 kilometers separates West Lafayette (USA) from Medellin (Colombia). Although this distance represents geographic, cultural and social differences, it also outlines a bridge for creative possibilities that connect two cities by an intercultural dialogue around new media. In particular, this paper describes the process and strategies that we developed between 2013 and 2014 to teach a study abroad course entitled "Interactive Art and 3D Animation" in the city of Medellin.

The purpose of this interdisciplinary course was to approach the topic of location, society and technology through each student's experience of the city. We combined each other's research expertise both in digital media and interactive visualization to create an integrated learning experience. Namely, merging Restrepo's experience leading the research group Hipertrópico – using digital media and open source software to develop socially interactive projects – with García's background on computer graphics visualization. This paper explains the collaborative efforts that brought both of these universities together, elaborating on the planning, methodology, realization and outcomes of the course in May 2014.

INTRODUCTION

This paper gives an account of the different steps that were required for the realization and socialization of the academic experience Open Studio / Estudio abierto: Interactive art & 3D animation in Medellin. The experience was designed to facilitate an intercultural and interdisciplinary exchange among students, professors and researchers from Purdue University and Universidad de Antioquia in Medellin (UdeA).

BRIDGING TRUST

This project idea was born in Sydney, Australia, at the 2013 International Symposium of Electronic Arts. We were both participating in the Latin American Forum panels. After the panel, we had a first conversation about the curricular similarities that our departments at our corresponding institutions (Purdue and UdeA) had on digital media. We both identified a great opportunity for educational research and development for the future. Upon our return, we expressed to the department heads and deans of each college our desire to solidify a Colombia – USA exchange. We would like to mention that the institutional support that we received was a strong step towards the realization of this project. To create a bridge between the two universities, we required the involvement and effort of several stakeholders. At Purdue, we were encouraged by Dr. Patrick Connolly, Department Head of the Computer Graphics Technology and Dr. Robert Cox- Dean of Globalization. At UdeA, we had the unconditional support of

Francisco Londoño, Dean of the School of Fine Arts, the Hipertrópico research group -a group of faculty devoted to the teaching and exploration on the digital arts. We were guided locally throughout this process by staff and administrators of the international relationships programs and globalization offices. All these people played an active role in the planning and creation of this intercultural bridge.

At the early stages of planning starting on September 2013, we held bi-weekly meetings via Skype. The meetings included the entire faculty from the Hipertrópico group in Medellin (Pablo Pulgarin, Carlos Mario Sánchez and Alexandra Tabares) and Esteban Garcia in West Lafayette. This process was important to dialog and to get to know each other, as well as to outline the recruiting strategies and the content of the academic experience. These meetings continued regularly until the beginning of the course.

In November, Restrepo visited the Purdue campus to meet with the dean of globalization and other faculty at the College of Technology. We held our first student call-out and visited classrooms to promote our program, we also advertised using flyers across campus. During this four-day visit, we worked extensively to sketch the methodology of the course. During the following months (December through February) more call-outs followed and we recruited twelve Purdue students. Six UdeA students were selected by faculty to participate of this experience. We were especially intent on creating an intercultural classroom. Our entire course was bilingual, an aspect that facilitated conveying information, as well as the integration and cooperation of the participants.

Fig. 1. Flyer for the open call, 2013, Esteban Garcia, paper, © Esteban García.

Critical perspectives on the use of technology for Pea...

Open Estudio: Mapping Intercultural Dialogues through Art and Technolo...

Isabel C. Restrepo[1], Esteban García Bravo[2], Pablo A. Pulgarín[3], Carlos M. Sánchez[4]

[1,3,4] Universidad de Antioquia, Medellín, Colombia
[2] Purdue University, Indiana, USA

[1]cristina.restrepo@udea.edu.co, [2]garcia0@purdue.edu, [3]pablo.pulgarin@udea.edu.co, [4]cmario.sanchez@udea.edu.c...

Abstract

This paper presents the continuation of our interdisciplinary work connecting art and technology at Purdue University (USA) and Universidad de Antioquia (Colombia). In particular, this presentation will analyze retrospectively the research, methodology and outcomes of the course experience "Open Studio / Estudio abierto: Interactive art and 3D animation", during 2014 and 2015. We will also evaluate the course in order to provide improvements for the upcoming 2017 course. The academic exchange reflects on the topic of cartography in the digital era, introducing the concept of the journey as the starting point for reflection and artistic creation. Our methodology encourages cooperative work between students and professors, establishing a dialogical relationship without the traditional teaching hierarchies. The participants of the experience (students and professors of Purdue University and U.de A) create a bridge for an interdisciplinary, geographic and cultural exchange. The social and cultural projection of this pedagogical research experience is expressed in the resulting art projects, as well as in exhibitions of the results and reflections of participants.

Keywords

Art and Technology, Dialogic Pedagogy, Problem-based Learning (PBL), Intercultural Exchange, Teamwork, Programming, 3D Modeling, Journey and Cartography

Introduction

Open Estudio is an academic and intercultural research experience between Purdue University (USA) and Universidad de Antioquia (Colombia), created to facilitate reflection and creation towards art and technology. "Open Estudio", is our hybrid English-Spanish word to frame this exchange experience, departing from the idea of an Open Studio. Open Studio experiences were gatherings of artists and academics to share ideas during the art salons of the 17th century. Embracing the openness of these meetings we incorporate this approach in the 21st century by including methodologies of cooperation and teamwork as a strategy for cultural exchange, interdisciplinary work and creativity. The physical exchange of faculty and

students during the intensive course is possible b... intensive planning organized through virtual int... between the coordinators at Purdue Univer... Universidad de Antioquia. These managing activi... be carefully planned and are crucial steps for th... and improvement of the program, facilitating a... intercultural collaboration that makes the c... evolve each version. In particular, this course op... a Maymester Study Abroad program from Pur... an elective course at Facultad de Artes of Univer... Antioquia. Professors, instructors, researchers and... from both universities participated at the 2014 a... studio experiences that encompassed two modules. The first module took place during the first week, focusing on the development of technical competency in the areas of animation and programming interactivity. For this content, we used the open source platforms Processing and Blender. The second module, during the second week, focused on intercultural group work through the development of multimedia and interactive projects. These projects were presented as a public art exhibition at the end of the experience. For both modules the instructors emphasized on the concept of "Journey" and invited students to document their experiences through journaling and cartography. For this matter, the course had a third modality that included daylong trips to the city of Medellín and its mountainous and exuberant surroundings.

Figure 1. Purdue University's student analyzing a map of Santa Fe de Antioquia in the 2015 course

Open Estudio: A platform for Colaboration between Colombian and US students since 2014
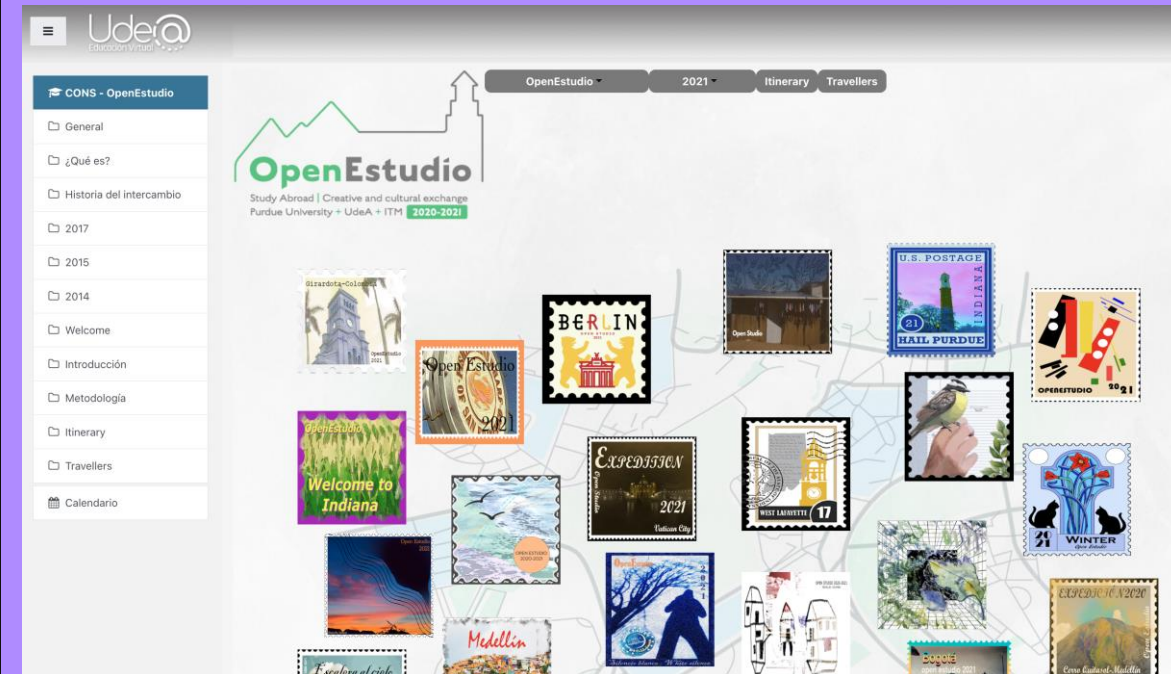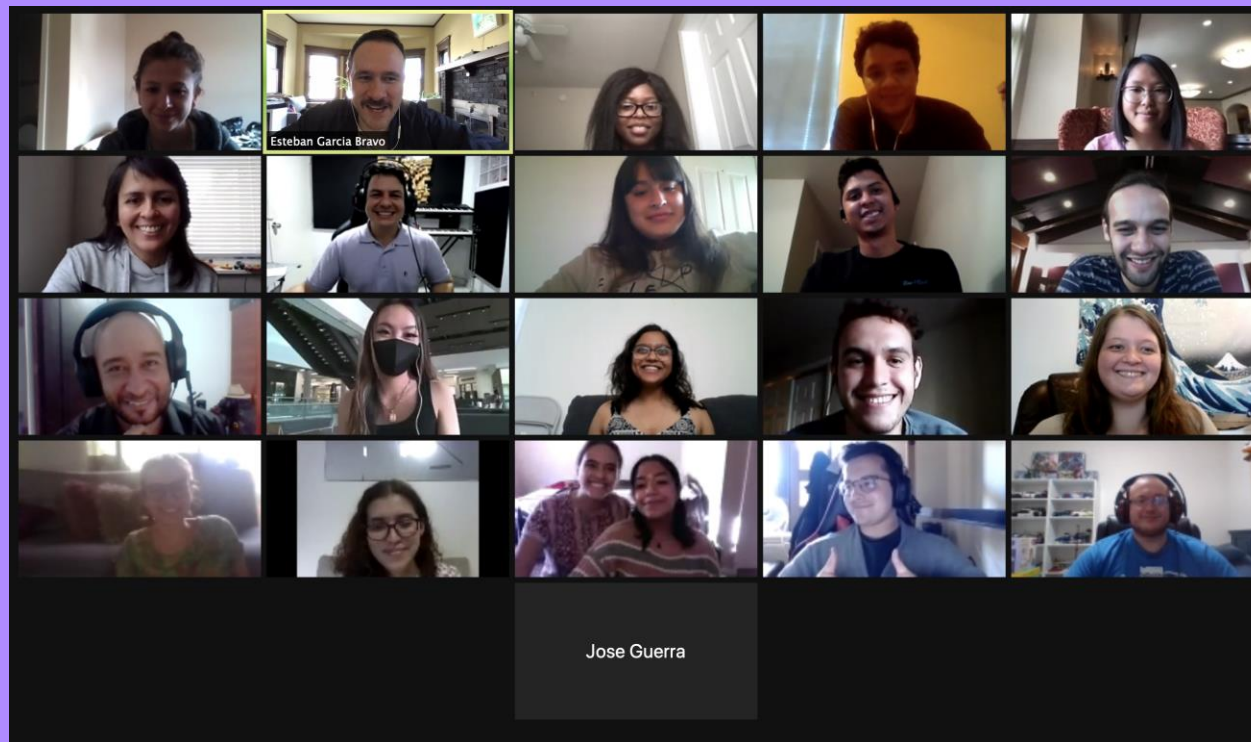
Open Estudio 2021 (Purdue, UdeA, ITM)

5 Colombian Students came to Purdue University for one semester

10 Purdue students collaborated with Colombian students (Study abroad was cancelled)
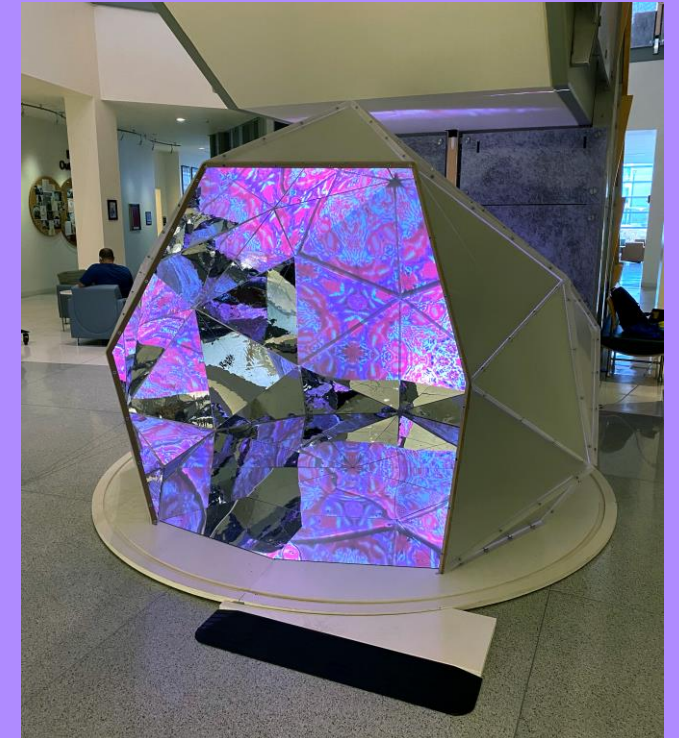
Open Estudio 2021

Information Visualization and Digital Fabrication with Applications to the Creative Industries Field (Uniandes/Purdue/UCSC)

2 Colombian Students came to Purdue University for one semester

1 Purdue Student did a virtual exchange with Universidad de los Andes Faculty

Proposal Development

How is the content delivered?
Mentorship model / Traditional course

Which other partners within your institution may help you?
Other faculty in your department
Office of Globalization
Intercurtural learning (IPG)

Proposal Development

Who is going to be the PI/Co-PI?
Define "host" university
Define clear measurable objectives
Housing plans and insurance: Work with stakeholders at your institution
Do pre/post tests to evaluate intercultural learning

**Advice in the process
of drafting proposal**

Use the template and write a compelling narrative
Design clear objectives that are achievable and measurable
Create a detailed timeline
Talk to DH, Deans and globalization to get matching funds
Ask for letters of support early
What are going to be the outcomes?
How will the program continue after this support?

What worked well?

Students did their best work

Selection of students (+)

Made an impact on the university and local community

Research resulted in publications and conference presentations

Lessons Learned

Get course on the schedule (Colombia/USA) groups
Mentorship was the most flexible model
How do you want to give the budget? Give students money or pay through university
Be prepared for everything! Flexibility, patience
How many students can you take care of?
Selection of students (-)
Housing with roomates
Learning experience for all involved