



#### EXPERIENCIA DE AULA

# Building Intercultural Competence in 4th graders by using ICT

Javier Hernández jhernandez@docente.als.edu.co

Elkin Mendivelso emendivelso@docente.als.edu.co

Alexander Chapetón achapeton@docente.als.edu.co
Colegio Abraham Lincoln, Bogotá, Colombia

#### **Abstract**

This paper describes a classroom intercultural experience among the Abraham Lincoln School in Elementary and two different schools in United States (US) through a virtual exchange called IVECA (Intercultural Virtual Exchange of Classroom Activities). A team of teachers in both countries worked together to foster Intercultural Competence in an environment full of friendship and motivation. First, three teachers of the English Language Arts of fourth grade in the Abraham Lincoln School, were provided with theoretical foundation and strategies on integrating intercultural activities along with virtual exchanges into regular classroom activities during 16 hours. This training was led by Eunhee Jung (O'Neill) creator and director of IVECA. After that training, teachers in both countries guided students to have a regular written communication on different common agreed topics based on the schools' syllabus, in order to have students exchange personal information and promote international interaction. After that, students were prepared on other topics as a base for a final oral performance. Finally, in a Live Class was shown a final product of interaction between the classes, in which it was also shared cultural and talent demonstrations. Written products provided learning experiences about friends and culture in both countries. Each stage demonstrated a process in which activities in classrooms also allowed growing of competencies such as communication, culture, and cooperation.

**Key Words**: Intercultural Competence, Cultural Awareness, Collaborative Learning.





### Resumen

Este artículo describe una experiencia de aula intercultural entre el Colegio Abraham Lincoln (primaria) y dos colegios en los Estados Unidos a través de un programa de intercambio virtual llamado IVECA (Intercultural Virtual Exchange of Classroom Activities). Un equipo de profesores de ambos países trabajó en equipo para fomentar la Competencia Intercultural de sus estudiantes en un ambiente lleno de amistad y motivación. En primer lugar, los docentes fueron capacitados en los fundamentos teóricos y en estrategias para integrar actividades interculturales junto con intercambios virtuales en actividades regulares durante 16 horas. Esta formación fue dirigida por Eunhee Jung (O'Neill) creadora y directora de IVECA. Después de esa capacitación, los profesores de ambos países guiaron a los estudiantes para que tuvieran una comunicación escrita sobre diferentes temas acordados teniendo en cuenta los programas escolares de cada colegio. Asimismo, los estudiantes intercambiaron información personal y se promovió la interacción internacional. Después de eso, los estudiantes prepararon una presentación oral con diversos temas culturales para ser compartidos al final del proceso. En esta "Clase en Vivo" se evidenció como producto final la interacción entre los estudiantes, en la que se manifestaron aspectos culturales e incluso talentos de los participantes. Los espacios de comunicación escrita proporcionaron experiencias de aprendizaje basados en la amistad y la cultura de ambos países. Cada etapa permitió y demostró el desarrollo de competencias como la comunicación, la conciencia cultural y la cooperación.

Palabras clave: Competencia Intercultural, Conciencia Cultural, Aprendizaje Colaborativo





#### Introduction

Communication with people from a different country with diverse cultures, traditions, religions and languages creates emotions on the community of students and teachers. However, these feelings are not always positive, principally when facing unknown challenges related to technological skills and language level. Other reasons are related to culture, this is why UNESCO (2008) has stated "Intercultural Education as a response to the challenge to provide quality education for all", taking into account "programs that encourage dialogue between students of different cultures, beliefs and religions (p. 8).

Developing the Intercultural Competence among learners help them to understand the differences above mentioned and be more conscientious of the world they live in. Nevertheless, they need to be taught how to deal with these differences and to be openminded and tolerant toward other cultures. How to build then a bridge that joins cultures where those students explore effective communication and values? This is where IVECA plays a key role in helping students developing competences when meeting other cultures.

In the classroom, the creation of a comfortable atmosphere oriented to other cultures, is a strong bridge that can support possible misinterpretations, especially when these aspects do not allow participants to have a fluent communication. Students must face challenges in the classroom when they are preparing their ideas to share in front of an audience. Emotions can be easily moved from frustrations to a feeling of success when small goals are accomplished daily. Students also need to learn how to share a part of their identity and culture as well as learn from students of other countries. In this specific description, we find that most of the





students were eager to participate by performing their best, showing autonomy, increasing a sense of responsibility and recognizing the fact that English can be finally used in an authentic academic context. English language as the main means was used, at all levels, from beginners to experts, who even had had the chance to use it in real contexts before this experience. Finally, the paired t-test on the mean differences of Knowledge and Language Proficiency scores of the participant students were statistically significant. IVECA program helped students increase intercultural knowledge and the ability to communicate more diverse topics effectively with students from the state of Vermont in US.

### Context

TicALS is a research group composed by teachers at the Abraham Lincoln School (Bogota, Colombia) that constantly analyzes the technological phenomena in school environments. Through its interdisciplinary practices TicALS guides the development of digital competencies on the Abraham Lincoln's school community with the purpose of promoting teaching and learning processes based on the ICT's advancements. In 2015, TicALS organized a conference in which some schools and Universities in the city were invited in order to share their experiences related to ICT integration in Education. Within the contexts of this periodic lectures, the Abraham Lincoln School was contacted by IVECA. They were really interested in working with the school due to the efforts of the Abraham Lincoln to adapt new methodologies in the pedagogical practices.





IVECA is a virtual program created by Ph. D. Eunhee Jung O'Neill, that offers a twoway international and intercultural exchange in which virtual dialogues among bilingual teachers and students around the world take place. O'Neill (2007) created this program under the philosophy to promote the United Nations' goals to spread a quality in education for all and for global citizenship, and to support effort of peace around the world and for women's empowerment. Virtual platforms narrow boundaries among countries and IVECA is a bridge among them. Schools take new integration of technology to support their students' academic performance and participation in a globalized world. In our specific case, 4<sup>th</sup> grade English teachers were told about the technological integration in order to participate in this virtual exchange. As consequence, the teachers started looking for ways to engage and motivate students to participate in a virtual intercultural program. Students needed to brush up in their competencies by learning, updating and adapting their skills to a more formal academic environment, needless to say that they enjoyed the process. In regard to this, it can be said that, "social media technologies are becoming a practical supplement to the traditional learning environment" (Ebner, Lienhardt, Rohs, & Meyer, 2010), which became the best explanation of the positive answer to the proposal. For this specific classroom experience, 4th graders were chosen to be part of the process of building their Intercultural Competence by participating in this exchange. It was a group of 102 students from 10 to 11 years old, who have been taught English language since preschool (4 years old) as a foreign language, and for being considered to have a good level of English to communicate their ideas in English effectively. Then, 4<sup>th</sup> grade English teachers, the Head





of English area, and the Principal participated the implementation of the project. The partnered schools were located in Vermont, US and the students were also in 4<sup>th</sup> grade.

#### **Theoretical Framework**

## **Intercultural Competence (IC)**

Many authors have labeled this competence in different ways: cross-cultural adjustment, cross-cultural adaptation, cross-cultural communication, intercultural understanding, intercultural sensitivity, cultural awareness, cultural competence, international competence, global perspectives, global competence, and global awareness among others (O'Neill, 2008), then it is necessary to set an specific definition for the purpose of this paper such as "Intercultural competence is the ability to develop targeted knowledge, skills and attitudes that lead to visible behavior and communication that are both effective and appropriate in intercultural interactions" (Deardorff, 2006).

# Besides, it can be said that

"Intercultural competence is the ability to understand, appreciate, and respect the cultural differences of others and interact appropriately with people from different cultures/countries. Intercultural competence starts to develop as individuals realize their own perspectives and understand its reflection on others and different societies. They become sensitive and reconciling to each other's similarities and differences as they share and collaborate on ideas and activities of interest to them. This increased awareness develops rapidly at an early age. Direct communications facilitate accomplishing intercultural competence most effectively. Today, in the globalized 21st century, direct communications can occur anywhere and anytime through information and communications technology" (O'Neill, 2011).



These definitions help to conceive a world that is united by means of technology, but not one without values such as respect and tolerance. Educators play a key role in today's society. Creating new experiences for students worldwide, through international interaction and communication, taking into account cultural differences, religion, language, and other implied aspects will contribute to a better world. In this way, developing this competence is

## **Intercultural Communication Competence (ICC)**

a key element in education.

Based on the research about IC, other authors have complemented this concept with communication purposes (Fantini, 2000; Wiseman, 2001) being the base in which five specific dimensions are presented in Intercultural Communication Competences that will be briefly described according to O'Neill (2008),

Dimension	Conceptualization
Knowledge	The information necessary to interact appropriately and effectively. The requisite cognitive orientation to facilitate the acquisition of such information.
Attitudes	One's affect toward the other and intercultural communication.
Skills	The needed behaviors to interact appropriately and effectively with members of different culture.
Language Proficiency	The effectiveness of communication between the students in two nations.
Awareness	The most powerful dimension that influences the enhancement of other dimensions, while advocating several interculturalists' perspectives (Fantini, 2000).

 Table 1: Dimensions in Intercultural Communication Competence.





These dimensions were taken into account for creating the survey that IVECA coordinators applied before the implementation of the program and once the program was finished.

### Connectivism

Siemens (2012) developed a learning theory for the digital age which fills the needs of the twenty first century. According to him, connectivism is the integration of some principles which involve caring about diversity of opinions, information sources, learning what is unknown, maintaining continuous contact among participants, accurate and up-to-date knowledge and choosing what to learn among others. Siemens also states that "Knowledge is growing exponentially". In short, connectivism is being used in different virtual spaces, for instance, blogs, wikis, chat-rooms, forums, etc. which are available anywhere to discuss diverse topics. This is a way to develop "Distance Education" through information communication technology evolution. Far beyond, IVECA provided a space where students could be connected to each other to learn and interact. This is an experience that could not have been achieved without technology and pedagogical foundations.

According to Daniel (2012) MOOCs are a very good example of connectivism because they provide students with the opportunity to meet and be exposed to a diversity of cultures by means of an endless accessibility to online resources.





# Methodology

This article aims to describe the implementation process of the semester-long-program-activities in a school class. It could be considered a *descriptive study* according to Hernández-Sampieri, R., Fernandez Collazo, C., & Baptista Lucio, M. del P. (2010), who explained that this kind of study "seeks to specify the properties, characteristics and profiles of people, groups, communities, processes, objects or any other phenomenon that is subjected to analysis" (p. 80), in this case, the intercultural competence of students, and their communication abilities are being analyzed.

This study will also be considered as an Experimental Research that according to Arias (2006) is a "process that consists of subjecting a group of individuals to certain conditions or stimuli (Independent variable), to observe the effects that occur (dependent variable)". For this classroom experience, 4<sup>th</sup> graders were chosen as the population to be part of the process of building their Intercultural Competence. It was a group of 102 students from 10 to 11 years old.

Since collecting data was done before and after the implementation of the program, this experience was conceived as a "pre-post case study" (Sampieri et al. 2010, p. 136) with a group of fourth grade students and their Intercultural competence. The instrument used was a survey. The results were analyzed and presented throughout the development of this article and moreover in the conclusions at the end.





# The process followed

To begin, the Abraham Lincoln School received an invitation from IVECA to participate and pilot the Intercultural Virtual Learning approach for Colombian students. The school board was informed about the goal of IVECA and they decided to take part in it after having discussed with the English teachers the implications of the program. Before starting with this project, the teachers at the school from Colombia and US received online training sessions of more than 16 hours, all of them took professional development courses through a live webinar, which consisted in how to use the platform and how to train students to do the same along with the topics seen in class. After this training, the participant teachers shared their lesson plans, topics, teaching strategies and teaching viewpoints regarding Intercultural understanding. These teachers were also introduced to the strategies to be used, to successfully enhance students' Intercultural Competence.

On the side of IVECA, it facilitated the organization and setting of technological tools and the instructional support system within each school. IVECA also administered pre-and post-surveys and provided the quantitative data analysis result on the mean score changes of students' intercultural competence. Students' responses to an open ended-question asking about their experience were also categorized.





# **Intercultural Learning Experience**

Students showed their excitement as soon as they were told about the possibility to participate in this program. They were motivated for the new intercultural learning environment and demonstrated their best efforts to perform the activities. The experience was truly positive although it was not always an easy journey. At the beginning, students and teachers experienced impatience and anxiety sometimes. However, students' positive attitude towards a new and different type of learning experience fostered developing their critical and analytical skills (Alred, 2003). Students found different ways to understand and adapt themselves within different discipline areas which covered varied topics related to science, culture, and social studies. Students were trained to use and acquire written and oral skills effectively in an academic environment.

Participating in an intercultural experience is one way to prepare students for globalization and also a chance to fill the requirements of a discipline in the 21st century. For teachers, it was evident what Gupta (2003) stated: "Intercultural experience offers a wealth of opportunity for educators (...) alike to experience the unpredictable, to discover something new about themselves which would not have been possible in any other situation" (p. 171). Specially because this was the first time these teachers were connecting their group of students with those from another country thanks to an ICT tool like the one provided by IVECA.





IVECA demanded a performance that had to be followed in detail. The teachers from Colombia decided to perform an agreed guideline by helping students in a guided scaffolding process. Students were also given the freedom to occasionally improvise their writing and oral ideas. In the final oral presentations (Live Class), students also were autonomous, some of them followed a script which was previously rehearsed, searched and wrote by themselves, meanwhile others decided to freely write or do their oral presentations. They were modeled by means of vocabulary lists and mind maps. They were assigned to reflect on their cultural and historical background, as well as to do research with the help of parents and teachers. There were some students who completed the information based on their own experiences and knowledge. In any case students were committed to keep the boundaries of the guidelines provided and under the issues of their responsibility and motivation.

## **Intercultural Activity**

Since Intercultural Competence was related to the ability to use oral and written language appropriately and effectively (O'Neill, 2008), students started with this intercultural interaction by means of writing controlled messages to their assigned peers abroad. Students' initial messages were provided with teachers' feedback; however, it was a challenge for many of them because of their vocabulary constraints, anxiety and lack of self-confidence when using English to express their ideas on simple messages. Nevertheless, students wanted to share who they are in terms of culture and interesting facts about their lives and country.



Soon, most of students felt free to write and use their writing abilities after classroom writing practices. Students' anxiety on their English was finally disappeared when some of them shared that they "were happy to receive answers from their peers abroad". They found a way to communicate their thoughts and share issues of culture previously worked in class. Social Competence (Han. H.S 2006), was increased through this daily basis practice as well, especially those students who were afraid to share with different people but at the end were able to have a respectful interaction with their peers. Teachers competency to promote autonomy and the development of intercultural responsibility was also improved.

Relationships among students were established and maintained through good manners and politeness. It is well known that there are differences in beliefs, behaviors and meanings when students interact with each other and it is also widely recognized the ways of being polite vary from one language and culture to another (Byram, M. 1997). However, IVECA coordinators harmonized this cultural and linguistic diversity by mediating and assisting communications between the teachers from different countries and integrating the subject areas and objectives of each school into globally sharable curriculum. Additionally, when organizing and matching peers, they took into account students' age, gender and English levels.

## **Intercultural Virtual exchange**

Virtual exchange has grown constantly over the last decade, it involves online exchanges with geographically distant partners, and it offers many possibilities for enhancing pedagogical new experiences for students and teachers. It allows learners to benefit from both face-to-face and online learning modes (O'Dowd, R. & Lewis, T. 2016). Besides, virtual



Revista Electrónica TicALS - ISSN: 2463-0624 - Vol.01, N° 3- Mayo 2017- http://grupoticals.wixsite.com/ticals

tools need to have especial pedagogical design with the help of cameras, TV screens, and computers. A series of steps must be followed by teachers in trained sessions, on students' preparation in classes and on a final product in a Live Class.

A virtual space called "room for students" in the online platform was opened to allow students to share what they learned from what they have rehearsed in classes. During the first weeks students were trained in the use of appropriate language, politeness and coherent ideas to share, where they demonstrated their writing skills. In this first tries, students increased their ability to comprehend and made their distant peers understand them. They were exploring and raising intercomprehension by interacting with informal messages. Characteristics of these interactions included: Ice-breaking greetings, choosing a topic to wait for an answer, discussing the topic by choosing appropriate vocabulary and related to the resources searched, writing final versions on notebooks and editing to share later. Students also did oral presentations in class. Among these processes, some students received immediate answers from their peers. Previous work done by students was the base for final presentations in a Live Class.

# **Live Class**

The term Live Class describes a normal class with additional ingredients, it means having an international encounter with the help of technology, two groups of students from two different countries met in one class and shared their insights about certain previously studied topics. A setting was arranged and students did presentations to a group who was doing the same preparation outside. A Live Class reflected the efforts done during a semester. For the first time, students faced their peers and saw them talking and sharing





their thoughts, there was a sense of security and nervousness at the same time. Also, there was a sense of group inclusion and gratification for finally sustaining what they prepared during this process.

In self-presentations, some students did polite facial expressions and others gazed. When formal oral presentation started, respect was demonstrated from each side. In a ritual, teachers guided students by following a script, while the presentations were going on, students demonstrated their ability to communicate and understand native speakers. They were ready to ask and answer questions in an environment that soon became more informal. Students felt more confident and in some cases interpreted gestures from students they were facing. From both sides, students were mindful and had the ability to manage anxiety and to empathize as well as to adapt behavior to the expectations of others.

### **Conclusions**

For a semester, teachers involved in this Project established constant communication inside of the bridge program of IVECA. Teachers had the opportunity to create worksheets which were developed in cooperation with each student. It was also a hardworking and unique experience with foreign colleagues. Through this experience, more about US culture, history, and language were learned. It also contributed to personal development of participant teachers in employing a new teaching and learning method that must be promoted in 21st century education as one of the teachers expressed "I think our kids need to be exposed to more and more experiences like this one in which they must be respectful towards other





people's culture and traditions, so they can value both theirs and their own culture"-A. Chapetón.

Students began familiarizing themselves with some of the basic norms of the culture and some misconceptions about the use of written texts related to grammar in which they finally found native speakers also committed spelling mistakes.

Students from Colombia thought students from other countries were very different to them, but at the end, they could notice "they were just as cute as them". They also found that family ties outside were like theirs and they concluded that "differences were not as big as they thought", instead these differences were very enlightening. They were thankful that there were not very many communication barriers that students had to overcome. For instance, some students commented about the program "I liked the activities and knowing about kids of other country like clothing, traditions and culture (...) and seeing their faces in the Live Class (...) it was nice!"; "it's was so fun to meet people from a different part of the world"; "I liked it because I could talk more about me".

Intercultural competence was holistically achieved because students prepared topics and communicated appropriately (Language proficiency) by certainly knowing what they were saying (Knowledge) and by following the strategy (Skill) in which they felt more comfortable. Some students are conscious of the need to improve their low performance (Awareness) but at the end they felt motivated to learn about other cultures and even wanted to learn more and more about their peers from United States (Attitude). According to IVECA's quantitative data analysis on intercultural competence survey (O'Neill, 2008),

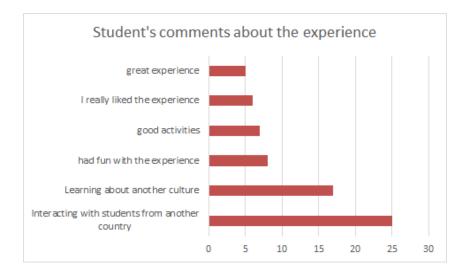


Œ

especially **Knowledge** ( $t_{72} = -2.616$ , p = .011) and **Language Proficiency** ( $t_{70} = -3.675$ , p = .000) of the students were significantly improved through the program.

It was also demonstrated that "friendship" learning was not fully achieved by all students because of different circumstances, it was great when students received answers by any student from USA: "I enjoy talking to kids from USA". Nevertheless, it was not the case for all the students: some of them had fewer interactions with the peers abroad due to some factors that affected their "friendship" experience: time constraints, lab schedules, tech skills, clearness on instructions, and English level: "My partner from US never answered to me"; "it was sad I couldn't see my friend in the Live Class (...) he was absent that day".

The following graphic shows the most common responses from students to the open endedquestion applied in the survey asking about their experience:



**Table 2:** Student's comments about the experience.

Evidently, most of them enlightened the opportunity to interact with students from another country and learning about another culture while having fun and a good time.





Teachers' responsibility to engage students was accomplished in this exchange program. The fact of having the chance to participate in these new experiences expanded their whole view. During this process, teachers focused on activities with double efforts to raise students' competencies. Teachers needed to adapt their term plans to meet the agreed new topics and provided students with continuous feedback on their written and oral performance. First, observations indicated students' low or high performance, however it provided also a vision of team work efforts. Students' hard work to show their best and to show the best of Colombia were outstanding. Every day, the new positive challenges became a routine for them. "This a way to meet new cultures and promote knowledge, understanding, communication, values. I wish more students had the opportunity to be part of this program. It will certainly help them to grow as global citizens". E. Mendivelso

At the end of the process it is concluded that students acquire a favorable attitude to the English language and had a good understanding of native speakers. On the other side, attitude, commitment, and responsibility from all participants were outstanding characteristics presented during the entire process. "I believe that good attitude was the outstanding tendency among some values promoted by our school: responsibility, trustworthiness and respect for others. Our students' affinity when facing what was unknown for them became a challenge and a powerful engine which led them to a feeling of continuous success. I learnt that attitude is the cornerstone to join cultures in one culture of harmony not matter the differences among them. Attitude accompanied by competence is what move





civilizations forward, they both make the difference and path the way to avoid misinterpretations". J. Hernández

ICT at Abraham Lincoln school demonstrated progress as a means of understanding one's own as well as the culture of others. Then, the use of ICT tools was successful in terms of achieving student's motivation towards putting in practice what they have developed during all these years of English language learning or as Ms. Mongui, Academic Coordinator of Abraham Lincoln School, stated towards IVECA program coordinators, "Educating children with a humanistic approach has been set as a priority and in that direction, we cherish the possibility to establish interaction with people from different cultures. Today we praise greatly the chance you have provided us. It's been an awesome experience working with you and IVECA organization these sessions that have contributed to expanding our intercultural understanding. Tons of thanks and may this be the first of many similar experiences." -Ms. Mongui.

### References

Alred, G. (Ed.) (2003), *Intercultural Experience and Education*. Clevedon, England: Multilingual Matters Ltd.

Arias, F. (2006). El proyecto de investigación. Introducción a la metodología científica (Vol. 1). https://doi.org/Q180.55-M4A7





- Byram, M (1997) *Teaching and Assessing Intercultural Communicative Competence*, Clevedon, England: Multilingual Matters Ltd.
- Deardorff, D. K. (2006). The Identification and Assessment of Intercultural Competence as a Student Outcome of Internationalization at Institutions of Higher Education in the United States. Journal of Studies in International Education 10:241-266.
- Ebner M., Lienhardt, C., Rohs, M. & Meyer, I. (2010). *Microblogs in higher education—a* chance to facilitate informal and process-oriented learning. Computers & Education, 55, 92-100. Doi: 10.1016/j.compedu.2009.12.006
- Fantini, A. E. (2000). A Central Concern: Developing Intercultural Competence. In: SIT Occasional Papers Series (1). Brattleboro: School for International Training, from <a href="http://www.sit.edu/publications/sitops\_01.html">http://www.sit.edu/publications/sitops\_01.html</a>
- Gupta, A. S. (2003) Changing the focus: A discussion of the dynamics of Intercultural Experience. In G. Alred, M. Byram, M. Fleming (Eds.), Intercultural Experience and Education (pp. 155-178) Ontario, Canada: Multilingual Matters.
- Hernández Sampieri, R., Fernández Collado, C., & Baptista Lucio, M. del P. (2010). Metodología de la investigación. Mexico D.F., Mexico: McGraw Hill, Ed.
- O'Dowd, R. & Lewis, T. (2016), *Online Intercultural Exchange, Policy, Pedagogy, Practice*. New York and London: Routledge Taylor & Francis Group.
- O'Neill, E. J. (2007) *Implementing International Virtual Elementary Classroom Activities for Public School Students in the U.S. and Korea*. The Electronic Journal of e-Learning. Volume 5 Issue 3, pp. 207-218.
- O'Neill, E.J. (2008). Intercultural competence development: Implementing International

  Virtual Elementary Classroom Activities into public schools in the U.S. and Korea.

  Revista Electrónica TicALS Vol. 1, No. 3, Mayo 2017, ISSN 2463-0624. Bogotá, Colombia. Páginas: 141-162

  160





- Ph.D. dissertation, University of Virginia, USA (Available from ProQuest Dissertations Publishing, UMI No. 3326994).
- O'Neill, E. J. (2011). *Eunhee Jung O'Neill's Center for International Virtual Schooling*. April 27, 2017, de Huffpost Website: <a href="http://www.huffingtonpost.com/jim-luce/eunhee-jung-oneils-center\_b\_547642.html">http://www.huffingtonpost.com/jim-luce/eunhee-jung-oneils-center\_b\_547642.html</a>
- UNESCO. (2008). Guidelines on Intercultural Education. Documentacion Social, 231–261. Retrieved from http://unesdoc.unesco.org/images/0014/001478/147878e.pdf
- Wiseman, R. L. (2001). Intercultural Communication Competence (2nd ed.). Newbury Park: Sage Publications.
- Daniel, J (2012) Making sense of Moocs: Musing in a maze of myth, paradox and possibility. Journal of Interactive Media in Education.
- Siemens, G (2005) Connectivism. A learning Theory for the Digital Age. International Journal of Instructional Technology and Distance Learning.





## **About the Authors:**

**Javier Hernández** Bachelor degree in Modern Languages: Spanish and English Univiersidad Distrital Francisco de Paula Santander. Master in Applied Linguistics to TELF Univiersidad Distrital Francisco de Paula Santander.

**Elkin Mendivelso** Bachelor degree in Humanities: Spanish and Languages. Universidad Pedagógica Nacional.

**Alexander Chapetón** Bachelor degree in Languages (English and French) Universidad Libre de Colombia. Magister in: Proyectos Educativos mediados por TIC Universidad de la Sabana. Diplomados en Docencia en Internet de la Universidad Javeriana.