PEDAGOGICAL INTERCULTURAL PRACTICE OF TEACHERS IN VIRTUAL ENVIROMENTS

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ABSTRACT

This study presents some of the results of the project "Training and Development of Intercultural Competency of Teachers in Virtual Enviroments", carried out in ten Colombian Caribbean higher education institutions (HEI) offering virtual programs. It was performed in three steps: 1-diagnosis, 2-training, and 3-analysis of the pedagogical practice. The article shows third-stage results of six cases corresponding to teachers who had participated in the two previous stages selected. The study used a qualitative approach based on a cooperative action research design. The stage here reported aimed at analyzing and assessing virtual teachers' practice in virtual learning environments. Data were collected from each case's Virtual Learning Environment, and they were analyzed by using documentary analysis of the teacher's pedagogical practice. This analysis was performed by the participant teachers, the researcher, and an external expert. Results show a changing process of intercultural conception both in the design and in the implementation and evaluation. In order to overcome some weaknesses observed, it is necessary to train the teachers not only in the intercultural education but also in topics such as curricular design and educational technology.

Keywords: Virtual Learning environment, intercultural competencies, intercultural pedagogical practice, virtual education, distance education.

INTRODUCTION

This paper shows the results of the final stage of the research project "Training and Development of Intercultural Competency of Teachers in Virtual Enviroments", whose objective aimed at designing, implement and evaluate a pedagogical proposal to develop intercultural competency in virtual learning environment. The research was carried out in three steps: diagnosis of the intercultural competency in virtual teachers from the Colombian Caribbean region; design and implementation of the proposal to train and develop the intercultural competency of virtual teachers in virtual learning environments; and analysis and assessment of virtual teachers' practice in virtual learning environments. This paper deals with the results of the 3rd step. In the first section, the theoretical framework will be established; then, the methodological aspect of the research will be discussed; the next section will deal with results and discussion; and finally, a conclusion.

DISTANCE AND VIRTUAL EDUCATION

Virtual and distance education would be conceptually considered in a sociocultural approach, which uses information and communication technologies for creating teaching and learning virtual environments characterized by the interaction, dialog, and motivational aspects for students' learning (a new role assumed by teachers and students), and the design of interactive and motivating materials for student's independent work (Badia, Barbera & Momino, 2001; Garcia, J., Badia, Garcia, C., & Meneses,2013; Monerero & Badia, 2013). The network current model of the latest generation of distance education (Garcia, Ruiz & Dominguez, 2007; Badia, et al. , 2001; Cardona-Roman & Sanchez-Torres, 2011; Garcia, J., et al., 2013), gives the student the initiative in the learning process, the possibility of working cooperatively, the access to databases, as well as to multimedia resources, simulations and, sophisticated forms of knowledge representations.

Teaching Guidelines for the Design of Virtual Environments
Pedagogical guidelines are based on the contributions of a constructivist and socio-cognitive approach (Carretero, 2009; Marín & Salinas, 2014; Vygotsky, 1988), with some elements of the artistic and socio-communicative theory (Medina, 2015), responding in this way to the new methodological proposals for distance education in virtual learning environments. These proposals take into account the following aspects:

The context of teaching and learning that has been defined taking into account the contributions of Badia et al. (2001); Bozalek, Gachago, Alexander, Watters, Wood, Ivala, & Herrington (2013); Brown and Campione (1997); Dominguez (2006); Fonseca & Redondo (2015); Garcia, J., et al. (2013); Monerero & Badia, 2013; Mueller (2014); Woo, Herrington, Agostinho and Reeves (2007), characterized by

- ➢ recognition of students' cultural aspects assumed as opportunities for the teaching and learning process;
- ➢ establishing professor-students' cooperation environment, focusing on self-learning and personal responsibility acquisition;
- ➢ generating an empathic climate in the classroom recognizing the students´ previous knowledge;
- ➢ specifying the objectives, competencies and content students should reach and dominate, planning a sequence and rhythm recommended to achieve them;
- ➢ student-center methodological conception, offering the tools to build learning, stimulating collaborative learning among students of diverse cultures, in a learning atmosphere mediated by ICT;
- ➢ taking into account principles for creating intercultural learning communities and for transforming co-learning processes by recognizing and assessing individual and group differences, and applying authentic and transparent evaluation processes, coherent with the curriculum vision;
- ➢ the development of authentic learning tasks that make reference to the representation of real learning situations on the subject.

Learning Conception
As in the virtual environment the learning process is mediated by technologies, these become the mediator elements to bring cultural differences into the classroom, promoters of interactive and communicative dialectical processes, distant in space and time (Lopez & Solano, 2010). Learning is assumed from the socio-cognitive, constructivist, socio-communicative and artistic approaches. Knowledge acquisition is based on the understanding to establish meaningful relationships between the new information and what is already available (Carretero, 2009). Social interaction is essential to foster the learning processes (Vygotsky, 1988), and the motivation to learn, without which no training activity can be done. Learning must be meaningful to students, so that new knowledge can be incorporated into the student's knowledge structures and acquire meaning from the relationship with existing knowledge (Duart & Sangrá, 2001).

This process participants are teachers, students and culture, because the aim is "to reach a greater knowledge of themselves and of their own culture because this is essential for being able to relate to other cultures effectively" (Arnaiz, De Haro & Escarbajal, 2010, p. 41). The virtual context is understood as the way "that uses technology to reach out the acquisition of culture through internal and external mechanisms for the appropriation of meanings" (Badia et. al., 2001, p. 78). Students learn at their own pace, interacting with the teacher and peers and progress in an autonomous way (Fonseca & Redondo, 2015). That is, the process focuses on the student, being the teacher mediator and companion in the process, and his/her mission should be to ensure the highest quality of the teaching-learning process, and take the tutorial action in processes of distance learning. The role of the teacher in intercultural environments can be summed up as an intercultural coach taking into account three basic elements of intercultural competence: self-awareness, knowledge, and abilities or skills.

Interaction

Interaction is a key aspect in training students process in virtual constructivist contexts, assuming the sociocultural approach whereby one learns in interaction with the other (Vygotsky, 1988). So, the intercultural aspect is vital since it determines the interactions of teaching-learning process actors, mediated through technology. According to Badia et al. (2001), virtual context interaction includes three key aspects: characterization of the interaction, psycho-pedagogical criteria and interaction, and educational functions. The first aspect deals with the frequency of social interaction, which is affected by some factors such as: professor's control over the learning activity; teacher's ability to maintain the interaction and the warmth and amount of aid provided; students' prior experience to perform the activity; and meaning and significance of the activities.

The psycho-pedagogical criteria are based on the teacher-apprentice, apprentice-other apprentices and apprentice-content interaction (Moore & Kearsley, 2011). In the former, the teacher should be sure their students can understand, answer to the different activities proposed and receive the necessary guidance to perform them. S/he should also foster the intercultural competencies in the virtual environment. This type of interaction is made through e-mail, forums, feedback, or communication in general, being individual or in group in the virtual learning environments (Berg-sørensen, Holtug, & Rasmussen, 2010; Rasmussen, Coleman & Ferguson, 2007;). In apprentice-apprentice interaction, there must be a high degree of interactivity among the classmates either individually, in small groups or with the whole class, according to the constructivism principle of knowledge collective construction or shared knowledge. This can be done if there is a positive interdependence relationship among students; a real exchange of knowledge and beliefs is fostered; and the development of tasks is focused in cooperative work (Badia et al., 2001).

In these cases, efforts should be made to promote the effective intercultural communication, involving the teaching-learning actors to avoid stereotyping, and to manage of intercultural communicative competence (Vilà, 2008). In the learner-content interaction, it must be borne in mind that the educational materials are presented in various formats (textual, visual or hypermedia) and that the content is developed in a clear, orderly and structured manner. The other aspect of the interaction in virtual contexts, the educational functions, includes interactions related to the activity management and organization. This serves to promote a high level of teacher-students' communication and collaboration to clarify information about the activities, and help students regulated their learning process through high levels of negotiation with the professor.

Virtual Learning Environment (VLE)

This refers to the virtual space where the teaching-learning process is developed. It is designed in Learning Management System (LMS) (Muñoz & Gonzalez, 2009). LMS is an informatics and telematics tool organized according to some learning goals that can be achieved exclusively within it, and with some educational psychology and organizational

intervention principles (Adell, Bellver & Bellver, 2008; Kidd & Song, 2008). Additionally, VLE use social networks tools to create learning communities in more flexible and friendly environments. Using such tools helps the teacher to use the more appropriate instructional strategies that support the construction of knowledge.

Educational Materials
They should: be learning facilitators and sensitive to the cultural plurality; motivate students; and comply with the learning objectives and allow learning to learn. (Fonseca & Redondo, 2015; Gil, 2009)

Learning Activities and Tasks
The design of authentic tasks online is suggested in virtual and intercultural contexts (Woo et al., 2007; Bozalek et al., 2013; Mueller, 2014) to encourage reflection and continuous revision, and the selection of resources available online/offline, with incremental degrees of difficulty. Tasks should include simulations with data analysis, communicative and intercultural reflection, field notes, intercultural exhibitions, contrast between individual and collaborative situations of cultures, collaborative work to facilitate exchanges and relationship among culturally diverse students, and development of joint projects that also prevent the formation of ghettos and separate groups (Medina, Dominguez & Lopez, 2010; Murua-Cartón, Etxeberria-Balerdi, Garmendia-Larrañaga & Arrieta Aranguren, 2012).

Learning Assessment and Monitoring
Learning assessment include diagnostic, formative and summative evaluation, as well as, the assessment metacognitive strategy involves student's reflection about his/her own learning, and multicultural and intercultural component. In this process, ICT provides new opportunities, for example, self-assessment and peer assessment, team and collaborative assessment tasks, on-line dialog and discussion, simulation and role-playing, problem-solving, online assessment and albums and portfolios. (Conejo & Castillo, 2014; Dominguez, 2006; Marín & Salinas, 2014). In virtual environments, monitoring occupies a central role, particularly in regard to the participation of the students in the different virtual spaces, to the development of the learning activities and to the assessment of aspects related to the competencies defined.

PURPOSE OF THE STUDY

This article aims at showing the findings of the research's third stage, whose objective was to analyze teachers' mediation in order to develop intercultural competence in virtual learning environments, by using the pedagogical proposal guidelines. Intercultural competence has been scarcely studied in Colombia. Literature review shows few Colombian systematic studies about this topic. Thus, it is very difficult to access to information related to teachers' training in order to deal with an intercultural education in on-site and virtual environments, as Castro (2009, p. 273) claims, "in Colombia there are some works on intercultural competence, however, it lacks a lot to advance in this process". Besides, there is no Colombian intercultural education policy coherent with constitutional principles of ethnic and cultural diversity (Bolaños, Tattay & Pancho, 2008), which establishes the academic and pedagogical practice articulation as the stronger element (Guido & Bonilla, 2010).

The above stated makes it necessary researches on this topic in order to know intercultural competence development level of virtual tecahers of Colombian caribbean region, and to develop pedagogical proposals addressed to the development of intercultural education in Colombia (Alarcon & Castro, 2012, p. 71). As a result, the research problem is stated as follows: How is virtual teachers' mediation carried out in order to develop intercultural

competence in virtual learning environments? And how does they apply pedagogical guidelines and orientations to design virtual intercultural learning environments?

METHOD

The study here reported was performed in ten Colombian Caribbean higher education institutions (HEI) offering virtual programs, being its object of study these institutions' on-line teachers in virtual and distance programs. The project was developed in three stages, and in each one, according to the objectives, different methodological approaches were used. In the first stage (professor's intercultural competencies diagnosis), the approach was quantitative in nature; in the second and third phases, which attempted to describe the process of formation and transformation of the practice, the approach was qualitative. In this article, we present the results of the phase 3 in which the proposed training program in participant teachers' educational practice was implemented an evaluated. Thus, this stage was a participatory evaluative research, consistent with the cooperative action-research, involving on-line tutors of the HIEs selected.

Participants

Colombia is divided into 32 departments, and the students participating in the research were from different departaments, as follows. 72% from Departament of Atlantico; 6% from Bolivar; 9% from Magdalena; 3% from Cesar; 2% from Tolima; 3% from Antioquia, 1% from Norte de Santander; 1% from Santander, and 1% from Venezuela. Although, there are not systematic experiencies of intercultural education in the Colombian Caribbean region, it cannot be ignored the diversity and presence of aborigen, afro-descendant and Romany communities in the country. In the departments of the Colombian Caribbean region (Atlantico, Bolivar, Cesar, Cordoba, Guajira, Magdalena and San Andres), there is a significant percentage of this population regarding to the total Colombian population (DANE, 2005)

Beside this cultural population, there is another phenomenon presented in the main cities of the region: the forced displacement and volunteer migrations due to different causes, mainly the political situation of the country. Table 1 shows the statitiscal of forced displacements in terms of receptor places.

Table: 1
Figures of force displacement until 2011
From: Social Prosperity Department

Department	People received
Atlántico	28238
Bolivar	51587
Cesar	32407
Córdoba	33679
Guajira	17250
Magdalena	40688
San Andrés	25
Sucre	36178

This situation implies an urgent need of educative institutions to make changes favoring an intercultural dialog, which includes each culture and makes the necessary opening to develop two cultural processes: to position the own culture and to recognize that of others (Alban, 2005; Murua-Carton, Etxeberria-Balerdi, Garmendia-Larragaña & Arrieta-Aranguren, 2012). Though in Colombia, ethnic minorities are included in public policies, these are far from being understood in the normativity and, especially, in the practice in the pedagogical environment (Guido & Bonilla, 2010).

Data Collection and Analysis

In this phase, 6 cases-types of the different HIEs were selected. Each case corresponded to the virtual subject taught by the participant teacher, being the analysis unit the teachers' pedagogic practice. A content analysis technique was applied to the subjects chosen (Medina, 2015) made both by the teachers, the researcher and an external expert.

The Scale

To collect data, the "Guideline for self-analysis and reflection on intercultural practice in virtual learning environment" was designed and applied. It was built from the "Pedagogical guidelines/orientations for designing intercultural virtual learning environments" (Ricardo, 2013), and submitted to expert evaluation for realiability and validity. Table 2 shows and extract of the instrument.

Table: 2
Guideline for self-analysis and reflection on intercultural practice in
virtual learning environment

Criteria	Is this criterium reflected in your Virtual practice-How do you do it?	Evidences
Virtual teaching and learning context Learning Conception	Yes/No. Describe	Write fragments of the course as evidence of the citerium
	Yes/No. Describe	Write fragments of the course as evidence of the citerium
Interaction	Yes/No. Describe	Write fragments of the course as evidence of the citerium
Comments:		

Teacher participants completed the guideline by a documentary analysis of their practice in the VLE. At the same time, the researcher had access to the teachers'virtual classroom. The researcher and an external peer analysed the documents completed by the teachers and counter checked the given information with the contents, activities and students/teachers participation in the virtual classroom. In such a way, data were triangulated in order to obtain greater reliability of results.

FINDINGS AND DISCUSSION

Regarding the Teaching-Learning Context, in general terms, teachers used a simple language to present and describe the activities in which an appropriation of the intercultural discourse is observed (Excerpts come from the virtual courses of the Case Study and the Guideline for self-analysis and reflection on intercultural practice in virtual learning environment). This demonstrates teachers recognize each student's cultural aspects and have this in mind as opportunities of the teaching-learning process (Badia et al., 2001). The use of strategies for the development of critical and reflective thinking is encouraged (Excerpt 1). The course methodological approach is student-center. The individual and group differences are recognized and valued, creating an empathic environment. Teachers provided a framework for cooperation facilitating cooperative and communicative work, focused on self-learning and acquisition of personal responsibility. Their also consider the principles of intercultural learning communities, which include the quality and pacing of the questions in groups, the deep and structured content, and the authentic and transparent processes of evaluation. (Brown & Campione, 1997; Bozalek et al., 2013; Dominguez, 2006). (Excerpt 2)

Excerpt 1. Case 1
Activity 2. Socio-cultural determinants of health promotion
To develop this activity, we suggest to do the following:

1. **Participate in the forum Socio-cultural determinants of health promotion, in the following topics: health promotion definitions, identify cultural elements in them. You may highlight their intercultural considerations and those protecting inequities. It is valid to send related videos or conceptual maps. To develop the activity, you may consider class discussions. Remember we study definitions classified as goal oriented, aim-oriented, and activity-oriented.**
2. **Send to the forum reflecting about socio-cultural determinants of health promotion. Historical context, jokes which make evident stereotypes related to inequitable health attention, especially in promotion and prevention. Make a critical comment of two peers' interventions. Be respectful with them when making the joke criticism. In the joke, it can be observed patterns of discrimination, stereotypes, equity and racism.**

Excerpt 2. Case 3
Activity Forum: My Experiences

> *"Hi. Tolerance value has been one of the most commented topics in this forum. We are people who think in different ways, and discussions have been respectful. I like the interaction we have had because each one has expressed his/her point of view, and I like that because I can see my classmates' personal concept" (Student 3)*

> *"Teacher and dear classmates.*
> *I really think among us there has been a series of very interesting comments, which strengthens us in many aspects. The good thing is the respect existing among us. Each one of us is free of expressing his/her opinion and it is respected. I hope we continue in this way, strengthening ourselves more and more. Go ahead friendssssss." (Student 3)*

In the conception of learning category, it was found that teachers of all the cases used generating questions and support material, which serve the group to construct new knowledge collaboratively. In this process, social interaction (discussion, agreements, feelings, emotions, knowledge) (Extract 3) plays an important role to foster learning. The aim is to ensure that the student makes relations between the acquired knowledge and the socio-cultural and historical context in which s/he lives. That is, the courses' methodological approach is based on the constructivist and socio-cognitive theories, because knowledge is acquired by establishing meaningful relationships between the new information and the one has already been (significant learning), where the motivation plays an important role (Medina, 2015). (Extract 3).

Excerpt 3. Case 4
Sources of Information
Objective: **Deepen on different types of information sources starting from teh interchange of opinions with a critical attitude**
Activities:
  ➢ **Review last week document "Searching and assessing information"**
  ➢ **Participate in the discussion forum "My position before information sources"**

Objective: **This activity has two aims: firstly, to promote the critical sense in handling Internet sources, and secondly, to promote the collaborative construction of knowledge.**
Activities:
  ➢ **Read the document "Searching and assessing information"**

> ➢ **Select one of the groups aiming at participating in the collaborative construction of a mental map in which the different types of information sources are shown.**

Regarding interaction, teachers and students maintain ongoing dialogs through interaction means and the institutional platform and social networking resources, proposed for the module, under an empathic atmosphere. Students receive a timely feedback. During the interaction, students' personal stories, needs, knowledge and programming are respected. Although interaction is promoted, in one case it was not achieved, and in other it was made difficult because the group was large. It is worth noting that in one case, it was able to identify the teacher's role of supervisor, facilitator and source of information (Fonseca & Redondo, 2015). (Excerpt 4)

Excerpt 4. Case 2
> *OK Mauricio, you are improving; however, it is necessary for you to argue your comments by quoting authors or bibliographic sources which refers to the topic. In the same way, I invite you to quote your classmates' comments. Best regards.*

In general terms, interaction in the cases studied shows evidence of some of the most relevant factors mentioned in the literature (Badia et al., 2001; Berg-sørensen et al., 2010; Rasmussen et al., 2007). The professor guides the development of the activities; the teacher is able to maintain the interaction, as well as the warmth and amount of aid provided; another factor is the time of interaction and type of synchronicity (Excerpt 4). Content is presented in different formats (textual, visual and hypermedia) and from various sources (web, print media, videos, photos) (Badia et al., 2001). In two cases, the students may select the material to use. (Excerpt 1)

In the Virtual Learning Environment, the modules are designed on an LMS, allowing ease of access to content, as well as flexibility and interactivity of all the activities and topics. Social networks tools are used to enrich and complement the experiences and the LMS (Adell et al., 2008; Muñoz & Gonzalez, 2009; Kidd & Song, 2008).

With regard to educational material, it is possible to affirm that in most of the cases, course materials are relevant and consistent with assessment objectives, methodologies and experiences. They show facts and problem situations, which can be applied in other contexts. Some activities are developed with material students look for and select, using quality criteria provided by the teacher (Excerpt 3 and 4). Materials are not discriminatory and it can be said they are sensitive to diversity (Gil, 2009) because the student can select and compare information from different countries. Three of the cases reflect some aspects that characterize the design of intercultural digital educational materials (Duart & Sangrá, 2001; Medina et al., 2010; Gil, 2009).

Learning Activities and Tasks are consistent with the course objectives and can be performed both individually and in group. The activities can be considered as genuine ones; besides, they are converted into intercultural and communicative reflection. Although, the multicultural perspective is part of the course, sometimes it is not actually worked. Learning activities are due to various teaching techniques, including activities for demonstration, exploratory, applied, creative and collaborative purposes (Excerpt 1 and 3), thus complying with the suggestions about the design of tasks that facilitate or encourage the development of intercultural competence (Medina et al., 2010; Murua-Carton et al., 2012). Activities have a detailed guide including explicit, clear, concise and comprehensive information about materials and inputs to use, objectives to reach and type of evaluation, and task are genuine because they have relevance in the real world; can be reviewed from different perspectives, using a variety of resources, among others. (Bozalek et al., 2013; Woo, et al., 2007).   To perform the activities, some factors are considered: the

understanding achieved the experiences, emotions and feelings, and the possibility to apply them to current contexts.

In the Evaluation and Follow-up category, it was found that teachers consider the evaluation as a process which provides self-assessment, coevaluation and heteroevaluation moments (Excerpt 2 and 4), by using rubrics and guidelines (Vandervelde, 2015) (Table 3) that enable students to value both their own performance and that of their peers. This process assigned to student roles of responsibility and co-protagonism in the first two modalities and participatory in the third (Conejo & Castillo, 2014; Dominguez, 2006). It is also noted that teachers make a permanent follow-up and monitoring of all activities, providing support, resolving doubts, inviting students to participate by giving opinions and discussing their views, through dialog (Excerpt 4). Evaluation in virtual environments is not focused on control but on learning, as well as it is more consensual and participatory (Salinas et al., 2008). This can be evidences in the cases studied, making possible to affirm these teachers are aware of the importances of evaluation in virtual environments, and that the process cannot be as the same as the one in face-to-face environments.

Table: 3
Rubrics

	Excellent	Good	Regular	Bad
Quality of selected Information in Blog (30%)	Postings present a focused and cohesive viewpoint that is substantiated by effective supporting examples or links.	Postings present a specific viewpoint that is substantiated by supporting examples and links. Postings are generally.	Postings present a specific viewpoint but lack supporting examples or links to websites or documents.	Postings present no specific viewpoint and no supporting examples or links to websites or documents are provided.
Construction a creativity Blog (30%)	Postings are creatively and fluently written to stimulate dialogue and commentary.	Postings are generally well written with some attempts made to stimulate dialogue and commentary.	Postings are brief and unimaginative, and reflect minimal effort to connect with the audience.	Postings are do not stimulate dialogue and commentary and do not connect with the audience.
Quality of findings and opinions of Activity Posted in Twitter (30%)	Tweets are creatively and succinctly written to stimulate dialogue and commentary.	Most tweets are written to stimulate dialogue and commentary.	A few tweets are written to stimulate dialogue and commentary.	Tweets are poorly written and do not stimulate dialogue and commentary.

CONCLUSION AND SUGGESTIONS

After analyzing the results, it can be concluded that the more important observed strenghts are:
  - ➤ The student-center pedagogical approach is the protagonist of the learning process, in which the professor becomes a permanent coach of the apprentice, thus promoting students' self-learning.
  - ➤ The methodologies used, which are consistent with the proposal of pedagogical guidelines for the design of virtual intercultural environments.
  - ➤ The design of authentic tasks, mainly characterized by a respect for the social and contextual realities.

- The interaction quality between actors in the process, as evidenced in most cases, and characterized by a high degree of empathy and affectivity.
- The positive attitude of teachers in intercultural work, demonstrating awareness of the importance of considering different cultures presence in the classroom to innovate their educational practice.
- The use of formative assessment in the development of the courses because the evaluation is seen as a student-center process.
- Educational materials in line with the majority of the features some authors propose.

In relation to the weaknesses, it is concluded that:
- There is little flexibility in the choice of the tasks shown in all cases, which avoid promoting student's autonomy and responsibility, one of the features of intercultural learning in virtual environments.
- Lack of knowledge about curriculum design, especially in what has to do with the consistency between the objectives, content, methodology and evaluation.
- In order to overcome these weaknesses, it is necessary to train the teachers not only in the intercultural education but also in topics such as curricular design and educational technology.

These research findings may serve as a guide to those teachers interested in improving their pedagogical practice in virtual learning environments, favoring and taking into account their students' cultural diversity. These results also serve to managers and actors of virtual education as a model for designing learning environments, which enhance the development of techers and students' intercultural competence through the defined pedagogical orientations. Additionally, they open a space for future researches about intercultural pedagogical practices using ICT in education.

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