# MEASURING INTERCULTURALITY OF EUROPEAN PRE-SERVICE TEACHERS

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#### Resumen

El presente artículo tiene como objetivo evaluar las destrezas interculturales de futuros docentes europeos con el fin de analizar posibles deficiencias e identificar necesidades en la formación docente. Para ello, se diseñó un cuestionario que mide la Competencia Comunicativa Intercultural (CCI) siguiendo el criterio establecido por el Proyecto europeo INCA, desarrollado para evaluar la CCI. La muestra está compuesta por 113 participantes de 6 universidades y 10 nacionalidades, cuyas respuestas fueron analizadas estadísticamente. Los resultados muestran que la mayoría de los sujetos alcanzan la posición tres de cuatro, lo que implica una necesidad de insistir en la mejora del currículo de formación docente para enriquecer la CCI de los futuros docentes.

Palabras clave: Futuros docentes, Competencia Comunicativa Intercultural, formación docente.

### **Abstract**

This paper aims at measuring the intercultural skills of European pre-service teachers to analyze possible shortcomings and identify teaching needs in teacher training institutions. For that, we designed a survey to assess Intercultural Communicative Competence (ICC) following the criteria established by the European INCA Project, developed to evaluate ICC. The sample is made up of 113 participants, from 6 universities and 10 nationalities, whose answers were statistically analyzed. Results show that most European pre-service teachers participating remain in the third position out of four, which means that it is necessary to insist on the improvement of teacher training curricula to enhance future teachers' ICC.

Keywords: Pre-service teachers, Intercultural Comunicative Competence, teacher training.

### 1.- Introduction

Interculturality is currently the core of a huge amount of researches. Its interdisciplinary character makes its study be tackled from the point of view of Linguistics, Sociology, Anthropology, among others, and, of course, Teaching. Globalization, migration and the convergence of cultures in Europe are some of the reasons why teachers must be prepared to face intercultural situations and have knowledge and strategies needed to successfully solve possible transcultural conflicts. In interculturality training, Intercultural Communicative Competence (ICC), namely "the ability to interact effectively with people of cultures other than one's own" (Byram, 2000: 297), is a fundamental element.

Although there is not an agreement on how to define and limit the scope of ICC (see Spitzberg & Changnon, 2009 for a review) several models have been suggested in order to identify its components and their interrelation (Byram, 1997; 2009; Byram & Zarate, 1997; Chen & Starosta, 1996; Deardorff, 2006, 2009; Fantini, 2000; Moran, 2001; Ting-Toomey, 1999; among others). Despite the ambiguity in definitions and the shortage of unequivocal assessment tools, there seem to be consensus about the three abilities an intercultural competent individual must have: *skills*, or acting appropriately and effectively in the intercultural encounter; *knowledge*, or knowing about his/her own and his/her interlocutor's cultural conventions; and *attitudes*, or showing positive feelings towards cultural difference (Byram, 1997). This set of dimensions involves awareness about the processes involved in interaction and about how social groups might behave. Having a high level of ICC will increase the likelihood of success in intercultural interactions.

ICC has to be dealt with as a learning objective in class, as it is not developed spontaneously (Deardorff 2009). Students must be aware that their cultural background may be not representative beyond their community and they must develop a critical capacity towards cultural diversity, overcoming ethnocentrism, biases, stereotypes and prejudice.

Addressing education from an intercultural perspective in the multicultural European context is necessary: several studies urge the importance of training teachers who must be able to acknowledge and manage intercultural richness in Europe (Aguado, Ballesteros & Malik., 2003; Alkan & de Vredee, 1990; Lanas, 2014; Cavalli, Coste, Crişan & Van de Ven, 2009). The idea of pluriligualism and of an 'intercultural speaker', an individual who possesses a pluricultural competence to participate adequately in intercultural relations is highlighted in the reference document by the Council of Europe (2001) *Common European Framework of References for Languages: Learning, Teaching, Assessment.* There is an inseparable link between the ability to function effectively in a second language and the collection of skills, knowledge and attitudes that contribute to ICC (Byram, 1997). However, according to Clouet (2012) or Young and

Sachdev (2011), language teachers, teacher trainers and curriculum developers admit to have difficulties in teaching and implementing ICC.

Therefore, the purpose of this study was to test European student teachers intercultural skills to manage their future professional context, to find out weaknesses and, eventually, to establish those aspects which must be reinforced by training institutions and teaching professionals. For that, we designed a questionnaire based on the INCA (Intercultural Competence Assessment) Project, a European project funded by Leonardo Da Vinci II, whose aim was to define a framework for the assessment of ICC<sup>4</sup>. It was specifically designed for and addressed to employees in the engineering industry working in multicultural contexts, but offers general tools for the evaluation of ICC. For the INCA team, ICC "enables you to interact both effectively and in a way that is acceptable to others when you are working in a group whose members have different cultural backgrounds" (INCA, 2004: 3). From the point of view of the assessor, it defines IC in relation to six dimensions: tolerance of ambiguity, behavioral flexibility, communicative awareness, knowledge discovery, respect for otherness and empathy. For each dimension, three competence levels are described: basic, intermediate and full. In addition to the assessor guidelines, there is also an assessee manual in which these dimensions are synthesized as openness, knowledge and adaptability, related to attitudes, knowledge and skills respectively. Openness includes tolerance of ambiguity and respect for otherness. Knowledge comprises knowledge discovery and empathy. Finally, adaptability involves behavioral flexibility and communicative awareness. This three dimensions of ICC guided the design of the questionnaire, and their effect on the general ICC profile, what this profile is like and if factors such as sex, nationality or having been abroad have an influence on subjects' profiles are the questions we aimed to answer in the present work.

### 2.- Methodology

As mentioned, the study was based on a questionnaire designed following the INCA (2004) criteria for the assesse. It was made up of a set of identifying questions to gather sociolinguistic and academic information from the subjects (Figure 1) and another set of questions which described a hypothetical professional situation and four response options to choose from. Three of those options corresponded to the INCA profiles, basic, intermediate and full competence; and we added a fourth one labeled as neutral.

<sup>&</sup>lt;sup>4</sup> The INCA project can be found here: https://ec.europa.eu/migrant-integration/index.cfm?action=furl.go&go=/librarydoc/the-inca-project-intercultural-competence-assessment

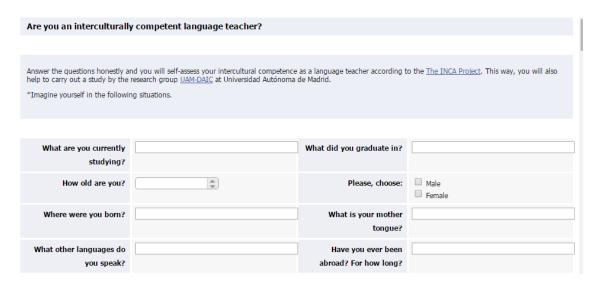


Figure 1. Identifying data

The total punctuation of the questionnaire is 44 points. To guarantee significance between profiles, instead of dividing punctuation into quartiles we decided to increase the ranks to mark the difference between consecutive profiles. Hence, each rank was defined using the criteria 25% plus its half, that is, 25%+12.5% (Table 1).

Profile	Punctuation
Neutral competence	0-17 points (37.5%)
Basic competence	18-28 points (62.5%)
Intermediate competence	29-39 points (87.5%)
Full competence	40-44 points (100%)

Table 1. Survey ranks

The questions described hypothetical intercultural situations to which respondents had to choose their most likely behavioral reaction. Every question inquire into one of the three INCA dimensions. The question on Figure 2 corresponds to the assessment of *knowledge*, and aims at measuring pre-service teachers' information about other cultures. As displayed in the image, the first answer stands for a neutral level of ICC, that is, showing no interest at all in intercultural encounters. The second answer means intermediate skills, according to which the individual shows certain degree of experience and/or training regarding intercultural encounters and is prepared to an extent to deal with and adapt him/herself to new situations. Choosing the third option as a response indicates a basic profile and involves that the individual is willing to interact successfully but has not yet the experience or knowledge to manage the situation. Finally, the fourth answer denotes a full profile according to INCA criteria, meaning that the individual is ready to manage intercultural encounters and has a wide repertoire of strategies to deal with them.

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Pregunta 15	In your department, you've just changed the textbooks you use. The new ones have a much more intercultural approach and provide quite a lot of information about cultures, some of which are far from yours. What would you think above all?
	○ Indifference. They're just another type of book.
	Curiosity to find out more about these cultures.
	○ Insecurity, because there are many things I don't know.
	Calm, because a large amount of information sounds familiar.

Figure 2. Example of knowledge question

Figure 3 is an example of *openness* question, where the respondent shows to what extent he/she is capable of respecting and understanding different values from those of his/her own.

Pregunta 13	Your school takes part in a Comenius programme and you are the person responsible. The first thing you do is attend a meeting in Reykjavik, Iceland, with teachers from other countries. A speaker exceeds the speaking time limit for 15 minutes and you see how some people apologize and leave. What would you think?	
	<ul> <li>The speaker may realize he is causing a problem, but he may not know how to fix it.</li> <li>Nothing. I guess they have something to do.</li> <li>The speaker should finish his talk and apologize for exceeding the time limit.</li> <li>The speaker should respect the people leaving.</li> </ul>	

Figure 3. Example of openness question

The questionnaire was digitalized using the web-based application QuestBase (http://www.questbase.com) which provides easy access, facilitates data management and allows for immediate feedback to the respondent's about their IC profile. The participants were 113 students of Education from 6 European institutions –Eötvös Loránd University (Hungary), Institute of Education (University of London, UK), University of South Bohemia (Czech Republic), Saxion University of Applied Sciences (The Netherlands), Çukurova University (Turkey<sup>5</sup>) and Universidad Autónoma de Madrid (Spain).

The independent variables were the nationality of the subjects, sex, number of foreign languages spoken, having been abroad and how long, and having received specific training on IC. The dependent variables were the punctuation in the questionnaire and partial marks related to *openness*, *knowledge* and *adaptability*.

Data were organized in an SPSS database and frequency and descriptive statistics were used to give an account of the sample. Although the dependent variables are scale variables and the number of participants is 113, the distribution of the sample is not normal, according to the Kolmogorov-Smirnov Test (p < 0.05)<sup>6</sup>. Therefore, the tests used for the analysis are nonparametric.

Regarding statistical tests, we applied Chi-square test to establish the distribution of categorial variables (as distribution of sex according to nationality or having been abroad); Wilcoxson test to observe differences between two related samples and Mann-

<sup>&</sup>lt;sup>5</sup> Turkey is included in this study as it is a transcontinental Eurasian country.

<sup>&</sup>lt;sup>6</sup> We assume a confidence interval of 95%.

Whitney U test for two independent samples; and Kruskal-Wallis H test to establish if there was a relationship between several independent variables.

### 3.- Results

Regarding descriptive statistics, the mean age was 22 years old ( $\overline{\mathbf{x}}$  = 22.7, s = 3.2) and the sex distribution was 20.4% males and 79.6% females. Figure 4 shows the figures related to the number of foreign languages spoken by the participants: only 2% spoke four foreign languages and 40% just one. Almost half of them spoke two languages apart from their mother tongue and 73.5% had been abroad (24.8% for weeks, 38.9% for months and 9.7% for years). Just 3.5% of them affirmed having received training on ICC.

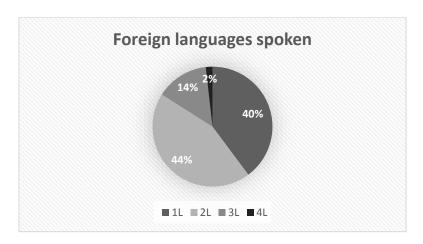


Figure 4. Foreign languages spoken

The results related to INCA profiles (neutral, basic, intermediate and full competence) can be seen in Figure 5, according to which 85.0% of respondents displayed an intermediate level of ICC. Punctuation mean for the whole sample is 35.1 out of 44 (s = 3.7).

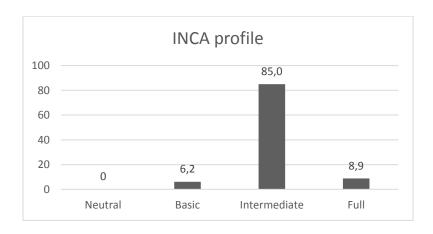


Figure 5. INCA profile results

The Chi-square test result (p > 0.05) proved that there was no difference between males' and females' punctuation in relation to nationality, the number of foreign languages spoken and having been abroad.

Concerning the punctuation in partial marks related to *openness*, *knowledge* and *adaptability*, Wilcoxon test proved that there was a difference between means (p < 0.05), this being higher in *adaptability* and the lowest in *openness*. According to Mann-Whitney U test, there was no relationship between sex and ICC. Surprisingly, having been abroad and IC training made no difference in their ICC.

Finally, concerning the possible significant differences in final or partial marks grouping subjects by their nationalities or the number of foreign languages they spoke, the Kruskal-Wallis H test revealed that nationality affected punctuation, but not the number of foreign languages. Figure 6 presents the different punctuations in relation to nationality.

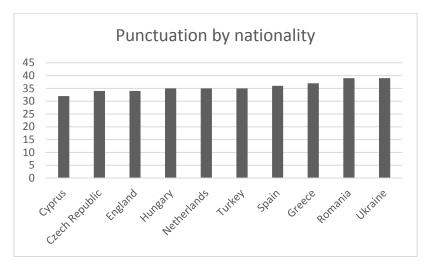


Figure 6. Punctuation by nationality

Concluding, the higher mean corresponds to Ukraine and Romania (39 points out of 44), closely followed by Greece (37) and Spain (36). The last position is for Cyprus (32) and then for the Czech Republic and England (34 points both). Though a 8.85% of the subjects reached the highest punctuation regarding the INCA profile (full competence), grouping them by nationality their means do not exceed an intermediate ICC.

### 4.- Discussion and conclusions

Getting back to the questions posed in the introduction, results shed some light. Firstly, regarding pre-service teachers' profile, the tested sample shows that most of them displayed an intermediate ICC. Taking into account the extensive use of information and communication technology and pluriculturality in Europe, it was expected a higher level

of ICC. Moreover, considering the university context of participants and their future profession, it is particularly disturbing that there is a percentage, though small (6.2%), of subjects that show a basic ICC. This results support other studies which measured ICC (Yuen, 2010) and indicate that it is necessary to intensify efforts in future teachers' training on interculturality, so they can be capable of successfully face increasing multicultural contexts. Indeed, uncertainty regarding interculturality is a widespread feeling among teachers-to-be and in-service teachers (Clouet, 2012; Young & Sachdev, 2011).

Although it was expected that those subjects who received training in ICC and those who spoke three or more foreign languages would show a higher ICC, outcomes proved that these two variables had no influence on their punctuations. Surprisingly, having been abroad neither seems to have a bearing on intercultural competence of subjects, contrary to the results of previous research (Martin 1987; Williams 2005). However, the findings related to sex agree with those by Hammer, Bennett and Wiseman (2003), who concluded that males and females showed no difference regarding ICC.

Regarding nationality, there seems to be a tendency to the increase in ICC in southeast Europe and a decrease as we move to the center and the north of the continent, except for Cyprus. However, differences are not high, and a deeper sociogeographical research would be necessary to establish definite conclusions.

The most relevant finding, according to our sample, is that the dimension where pre-service teachers displayed the lowest competence is *openness*. As mentioned above, *openness* stands for tolerance of ambiguity and respect for otherness. This is not a hopeful result and indicates a real need to work on these aspects as they are core components to achieve a full ICC. Teaching institutions must have into account the importance of making future teachers understand how ethnocentrism prevent them from acquiring knowledge of other cultures.

However, *adaptability* was the dimension in which pre-service teachers reached the highest punctuation, though it was predicted that they will display higher proficiency regarding *knowledge*, as this dimension can be more easily achieved through instruction. As *adaptability* involves behavioral flexibility and communicative awareness, the finding is encouraging since it means that pre-service teachers are aware of cultural differences and are willing to adapt their conduct and responses to interculturality demands. Nonetheless, it is not enough showing adaptability in the surface when a feeling of intolerance remains internally. Modelling *openness* may require experiencing and exposure to intercultural situations and it is probably the most challenging dimension to teach academically.

Both knowledge and skills are customarily addressed in traditional educational settings. And because they are quantifiable, they can also be easily assessed (and expressed in terms of grades or numbers). On the other hand, anyone who has been in a intercultural situation

knows that positive attitudes and awareness are just as important, if not more so, to intercultural success. (Fantini, 2000: 36)

Teachers should be capable of providing a safe learning environment; they should draw together and deal with differing experiences involving race, ethnicity and gender, to contribute to intercultural adaptation and adjustment. Having intercultural teachers will, in turn, benefit their students' development of intercultural knowledge, attitudes and skills, so that these students will become, in due course, interculturally competent European citizens.

Housen, (2002) establishes the objectives of European Schools, among which he mentions developing a pluralistic identity in pupils, helping them being proficient in at least two languages, and, what is more ambitious, maintaining the pupil's national identity together with developing a "supra-national European identity". To achieve these goals, it is necessary to prepare future teachers to accomplish this mission.

Although this work contributes to the explanation of ICC of European pre-service teachers, and points to some of the factors to take into account in teaching interculturality, the obvious limitations of the study impede generalizability of the findings. As further research, we aim at gathering data from a larger sample, increasing the number of European countries and improving the assessment tool, adding, for instance, interviews and group discussions that would allow for a qualitative analysis to obtain a more complete view.

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