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**TOWARDS THE FORMATION OF INTERCULTURAL CITIZENSHIP. A STUDY ABOUT THE RELATIONSHIP BETWEEN TEACHER’S CULTURAL INTELLIGENCE AND INTERCULTURAL COMPETENCIES**

**Lourdes Mejía Trejo**  
Centro Universitario de Ciencias e Investigación (México)  
*lourdesmejiatrejo@hotmail.com* · https://orcid.org/0000-0002-6678-9871

**María Aurora Arjones Fernández**  
Universidad de Málaga (España)  
*maarjones@uma.es* · https://orcid.org/0000-0003-4415-7125

**Abstract.** The purpose of this study is to analyze the relationship that exists between teacher’s cultural intelligence and intercultural competencies in a High School located in the Northwest area of the United States. The compounded study —completed during 2019— hinges on a quantitative investigation through the application of the Cultural Intelligence Scale that measures four dimensions —cognitive, metacognitive, motivational and behavioral— of cultural intelligence. This scale was applied to the entire faculty of 75 teachers (43 women and 32 men) in the areas of Mathematics, Science, Social Science, English, Foreign Language and Physical Education. In the same manner, a qualitative investigation was completed to identify intercultural competencies. To effectively pinpoint the intercultural competencies of the faculty the development of 15 in depth interviews were used and completed based on the 3 principals of intercultural education proposed by UNESCO (2006, 2010). The results, warn that teachers have a high moderate level in metacognitive, motivational and behavioral dimensions, but low level in the cognitive dimension of cultural intelligence. Demographic variables contemplate, level of education: all teachers with a Bachelor’s degree present a superior scale in all dimensions of cultural intelligence compared to teachers with a Master’s degree. However, all teachers present low intercultural competencies.

**Keywords:** intercultural citizenship, cultural intelligence, intercultural competencies, intercultural education, teachers education, demographic variables.
HACIA LA FORMACIÓN DE UNA CIUDADANÍA INTERCULTURAL. ESTUDIO SOBRE LA RELACIÓN ENTRE LA INTELI-GENCIA CULTURAL Y LAS COMPETENCIAS INTERCULTURALES DEL PROFESORADO

Resumen. Este estudio tiene como objetivo analizar la relación entre la inteligencia cultural y las competencias interculturales de profesores en una preparatoria localizada en el noreste de los Estados Unidos. El estudio mixto —realizado durante 2019— se sustenta en una investigación cuantitativa mediante la aplicación de la Escala de Inteligencia Cultural que mide las cuatro dimensiones —cognitiva, metacognitiva, motivacional y conductual—, de la Inteligencia Cultural. Esta escala se aplicó a todo el equipo docente compuesto por 75 profesores (43 mujeres y 32 hombres) de las áreas de matemáticas, ciencias, ciencias sociales, inglés, lenguas extranjeras y deporte. Así mismo, se realizó una investigación cualitativa con el objetivo de identificar las competencias interculturales del profesorado, con el desarrollo de 15 entrevistas a profundidad. En el diseño del instrumento se consideró los tres principios de educación intercultural propuestos por la UNESCO (2006, 2010). Los resultados advierten que los profesores presentan un nivel moderadamente alto en las dimensiones metacognitiva, motivacional y conductual, pero bajo en la dimensión cognitiva del nivel de inteligencia cultural. Así, se contempla como variable demográfica, el nivel de estudios: todos los profesores con Licenciatura presentan una escala superior en todas las dimensiones de la inteligencia cultural comparado con los profesores de maestría. No obstante, todos los profesores poseen bajas competencias interculturales en su desempeño profesional.

Palabras clave: ciudadanía intercultural, inteligencia cultural, competencias interculturales, educación intercultural, formación del docente, variables demográficas.

Introduction

This research conceptualizes and systematizes the level of cultural intelligence, which is defined as the ability to function in cultural diversity. It reflects on the relationship between cultural intelligence and the intercultural competences of the teacher, since the latter integrate skills, resources-knowledge and attitudes to establish equitable terms in an environment of diversity, in order to resolve conflicts and interact in harmony. The standardized sample on which this research is drawn includes high school teachers in a school in Sumner, United States where the majority of the population is Caucasian (76.5 percent). In this regard, the survey conducted by the Center for Educational Effectiveness in 2017, generated these results:
The same survey identified the levels of assertiveness of teachers on the subject of diversity and communication with families. Thus, 83% of the teachers are aware of the cultural diversity of the student community, but only 27% would address, in their classes, issues such as diversity in religion, race and/or culture.

Cultural diversity in schools is a reality in the globalized world, it is a consequence of the migrations of social groups that seek new opportunities. In this sense, Afolayan (1994), in his article *The implication of cultural diversity in American schools*, analyzed the factors responsible for cultural diversity in the United States and how they determine the performance of teachers. The author highlights the need for educators who are sensitive to multicultural issues. He even highlights that the success of schools and educators depends on understanding differences in gender, race and culture.

Therefore, teachers can be intercultural assemblers, and develop skills and capacities in students that allow them to understand their cultural context and respect it (Gordon, 2007). Thus, this research prioritizes the need for teachers capable of addressing these issues, especially in the social and political circumstances of the United States between years 2015-2017 mainly according to the policies that have been developed in recent years in the matter of migratory flows (Costello, 2017; Uddin, 2018).

For its part, the Southern Poverty Law Center, dedicated to the fight against prejudice and hatred in Montgomery, Alabama, in its After Election Day study; *The impact of the 2016 Presidential Election* in our Nation’s Schools surveyed more than 10,000 educators, counselors, and administrators in the US. The most relevant results are:

- 90% of educators considered a negative impact on the school climate.
- 80% described high levels of anxiety and worry about the future of families representing minorities.
- 50% of the teaching staff declared an increase in ethnic insults.

Table 1

*Cultural diversity at the Sumner School*

<table>
<thead>
<tr>
<th>Cultural diversity</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Hispanics</td>
<td>12.4%</td>
</tr>
<tr>
<td>Mix of two breeds</td>
<td>7%</td>
</tr>
<tr>
<td>Asian</td>
<td>2.2%</td>
</tr>
<tr>
<td>Native American</td>
<td>1%</td>
</tr>
<tr>
<td>Afro-American</td>
<td>0.6%</td>
</tr>
<tr>
<td>From the Pacific Islands</td>
<td>0.3%</td>
</tr>
<tr>
<td>Total</td>
<td>23.5%</td>
</tr>
</tbody>
</table>

*Note: Source: Based on survey conducted by the Center for Educational Effectiveness (2017)*
• Although 65% of the teachers stated that the administration shows willingness to solve it, 40% affirm that they do not have action plans in the event of incidents.

• 25% of the teachers described the incidents as related to the political rhetoric of the president-elect.

As a consequence of the Southern Poverty Law Center research, Costello (2017) developed the work: Teaching the 2016 Election: The Trump Effect, which describes the emotional consequences of immigrant students in the classroom. Anxiety, fear, and discouragement were the most common. However, Costello points out that 43% of teachers and administrators think that it is a political situation that should not be discussed in class.

**Teacher characteristics**

Although cultural identity is not represented only by ethnic-racial origin, it is one of the most outstanding cultural characteristics in the United States. As a starting point, we will consider the scenario in which the future teacher is trained. For example, in the universities where they study, they are optional subjects: cultural diversity in the classroom, social and racial justice in the classroom, cultural differences and other similar subjects. Another sample is the ethnic / racial profile of the teacher and students described in the following table.

**Table 2**

*On Ethnic Diversity Among Teachers and Students in the United States of America*

<table>
<thead>
<tr>
<th>Ethnic diversity</th>
<th>From teacher</th>
<th>From the student</th>
</tr>
</thead>
<tbody>
<tr>
<td>Caucasian</td>
<td>82%</td>
<td>49%</td>
</tr>
<tr>
<td>Afro-American</td>
<td>7%</td>
<td>15%</td>
</tr>
<tr>
<td>Hispanic</td>
<td>8%</td>
<td>26%</td>
</tr>
<tr>
<td>Asian or Pacific Islander</td>
<td>2%</td>
<td>5%</td>
</tr>
<tr>
<td>More than one race</td>
<td>-</td>
<td>4%</td>
</tr>
<tr>
<td>Native American or Alaskan</td>
<td>1%</td>
<td>1%</td>
</tr>
</tbody>
</table>


**Regarding the academic training of the teacher**

Irvine (2003, p. 79), in his work Diversity in Teacher Education, notes: “African Americans, Hispanics, Asians, Native Americans, poor white students and working class students often bring to school a distinctive set of cultural values, beliefs and norms that are not coherent with the cultural norms of the middle class, nor with the guidelines and behavior of the schools”.

In addition to this proposal by Irvine, Gay (2000), in his research work Culturally Responsive Teaching: Theory, research and practice, establishes as a characteristic of...
culturally sensitive teachers. Because the academic performance of ethnically diverse students will improve when taught through diverse cultural and ethnic filters (Au and Kawakami, 1994; Gay, 2000).

Yuan (2018), in his study Preparing Teachers for Diversity, highlights the importance of a reform to traditional teacher training programs. It is recommended to cultivate collaboration and mutual responsibility for teaching-learning between students and teachers (Gay, 2010). Thus, as we have seen, the scientific literature in the last decade has focused on the need for cultural intelligence in teacher training.

**Cultural intelligence, essential in the classroom**

Indeed, cultural intelligence does not imply knowledge of each culture but rather requires that teachers develop skills such as the ability to listen, reflect on the meaning of behavior, seek relevant information and advice that allow adaptation to the multicultural context.

Cultural intelligence promotes a learning model in which each student contributes their own culture and abilities. In this way, they develop more confidence in their abilities, no one is belittled for approaching the circumstances from different cultural paradigms and, even, learning improves (Elboj Saso et. Al., 2004).

People of different ethnic and cultural backgrounds enrich the learning process in different ways. Earley and Ang (2003) considered that intelligence goes beyond cognitive abilities; For this reason, inspired by the concepts of Sternberg and Letterman - developed in the eighties-, they formed the concept of cultural intelligence with four dimensions: metacognitive, cognitive, motivational and behavioral.

The metacognitive dimension refers to the level of cultural awareness that is formed during interactions with people from different cultures, it uses a consolidated level of knowledge to investigate interaction rules in multicultural environments. Thus, people with a high level in the cultural dimension can question their beliefs and adjust their behavior.

The cognitive dimension is based on a high cognitive process. As well as in the knowledge of norms, practices and interpretations of different cultures, acquired in personal and educational experiences. It should be noted that cultural norms and values are different, since you have to consider age, the relationship of power and influence, the relationships between individuals. The cognitive dimension influences people's thoughts and actions.

For its part, the motivational dimension is the resource that moves individuals to act or not at specific times. In the concept called: cultural intelligence, motivation is constituted by the product of values, personal goals and self-confidence.

However, all the knowledge acquired and developed by the metacognitive and cognitive dimensions does not guarantee the adaptation of the individual inserted in a different cultural context; however, all knowledge is useful if the person is motivated for integration. In this sense, the scientific literature takes into consideration that education for interculturality must expressly value students in their cultural environment in order to build their education towards interculturality from this point of view.

Finally, the behavioral dimension is the individual's verbal and non-verbal ability to interact with people from other cultures, especially when communication is face-to-face. It also includes the right flexibility in the dialogues.
**Interculturality and its impact on the classroom**

Interculturality is a permanent process of relationship, communication and learning between people and groups with different knowledge, values and traditions. It is aimed at generating, building and fostering mutual respect, for the full development of the capabilities of individuals, over and above their cultural and social differences.

It is clear that diverse cultures seek to defend and strengthen their identity, relationships, beliefs and worldview. However, his vision will not necessarily be shared by another group, in the face of that an education that helps conciliation and respect is required.

Leiva (2011) in her work *Intercultural education: An educational commitment to build a school without exclusions*, mentioned the constant increase in students of immigrant origin. She indicated the need for schools to face the challenge of intercultural coexistence. Leiva even considered that intercultural education promotes school inclusiveness. Let us remember that in 2002, among the conclusions offered by the monograph on Inclusive Education of the Revista de Educación, we specifically want to bring up the experience of the school mediator in Quebec (Llevot, 2002). As well as the observations that Xavier Besalú proposed to us, that same year, in *Cuadernos de Pedagogía* on the success and failure of different students when he insisted on the direct relationship between the school, social and personal failure of the “different” student and the necessary communication intercultural in the classroom (2002).

In recent years, Peñalva and López-Goñi (2014) considered in their study Citizen Competencies in teacher-students education, that initial teacher training should develop intercultural competence, taking into account a combination of capacities such as: a positive attitude towards cultural diversity, the communicative capacity to handle conflicts in intercultural situations, and how both the vision and the interpretation of reality influence to achieve intercultural citizen competence.

In this regard, in 2002 UNESCO specified in its normative instruments as a result of the events of September 11, 2001. This declaration reaffirmed the conviction that intercultural dialogue is the guarantee of peace. that culture is the center of social cohesion. Its conclusions are the result of the work: UNESCO Guidelines on Intercultural Education. Speaking of Competences (2006, 2017), these three principles were recurrent during the investigations, since they were considered in the development of the qualitative instrument.
Table 3

The Three Principles of UNESCO, considering intercultural strategies in the classroom as well as the professional profile of the teacher

<table>
<thead>
<tr>
<th>Principle I</th>
<th>Intercultural education respects the cultural identity of the learner.</th>
<th>For the teacher to promote interculturality in the classroom, he/she needs strategies:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• Based on the development of culturally appropriate pedagogical methods.</td>
<td>• Familiarization with the cultural heritage of your country.</td>
</tr>
<tr>
<td></td>
<td>• That allow the development of practical, participatory and contextualized learning techniques in collaboration with cultural institutions, as well as study trips and other activities.</td>
<td>• Aware of the educational and cultural needs of minority groups.</td>
</tr>
<tr>
<td></td>
<td>• Familiarization with the cultural heritage of your country.</td>
<td>• Ability to adapt content, methods and materials to the needs of minority groups.</td>
</tr>
<tr>
<td></td>
<td>• Deep understanding of the intercultural paradigm in education.</td>
<td>• Rights-based pedagogical approach.</td>
</tr>
<tr>
<td></td>
<td>• Critical awareness of the role of education in the fight against racism and discrimination.</td>
<td>• Competences to design, apply and evaluate school programs at the local level.</td>
</tr>
<tr>
<td></td>
<td>• Necessary skills to incorporate students from &quot;dominant&quot; cultures in the pedagogical process.</td>
<td>• Necessary skills to incorporate students from &quot;dominant&quot; cultures in the pedagogical process.</td>
</tr>
<tr>
<td></td>
<td>• Ability to take into account the heterogeneity of learners.</td>
<td>• Ability to take into account the heterogeneity of learners.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Principle II</th>
<th>Intercultural education teaches each learner the knowledge, attitudes and cultural competencies necessary to participate fully and actively in society.</th>
<th>Necessary teacher profile:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• Based on pedagogical study programs that impart knowledge to the majority groups about the history, traditions, language and culture of minorities.</td>
<td>• Familiarization with the cultural heritage of your country.</td>
</tr>
<tr>
<td></td>
<td>• That allow to impart knowledge of society to minorities.</td>
<td>• Awareness of the educational and cultural needs of minority groups.</td>
</tr>
<tr>
<td></td>
<td>• That help to eliminate prejudices.</td>
<td>• Ability to adapt content, methods and materials to the needs of minority groups.</td>
</tr>
<tr>
<td></td>
<td>• That allow incorporating different cultural perspectives.</td>
<td>• Rights-based pedagogical approach.</td>
</tr>
<tr>
<td></td>
<td>• That lead to a full range of reading, writing and speaking.</td>
<td>• Competences to design, apply and evaluate school programs at the local level.</td>
</tr>
<tr>
<td></td>
<td>• Familiarization with the cultural heritage of your country.</td>
<td>• Necessary skills to incorporate students from &quot;dominant&quot; cultures in the pedagogical process.</td>
</tr>
<tr>
<td></td>
<td>• Deep understanding of the intercultural paradigm in education.</td>
<td>• Ability to take into account the heterogeneity of learners.</td>
</tr>
</tbody>
</table>
Principle III

Intercultural education teaches all students the knowledge, attitudes and cultural skills that allow them to contribute to respect, understanding and solidarity.

- Treat the heritages, experiences and contributions of different ethnic groups with equal importance.
- That they teach in an egalitarian context.
- That the actions are consistent with the values that are taught.
- That include interdisciplinary projects between academic areas and/or institutions to solve common problems.
- That they develop international networks of students, students and researchers.
- That they develop skills for mediation and conflict resolution.
- An openness to permanent professional training aimed at promoting awareness of the positive value of diversity and the right to be different.
- Have a critical awareness of the role of local communities for a learning process.
- Have knowledge of civilization and anthropology.
- Acquire social and political competencies that facilitate the formation of participation in the management of schools.
- Ability to develop an effective intercultural pedagogy.
- Promote intellectual openness and the ability to interest learners in learning and understanding others.
- Have empathetic observation techniques.


About this study

It was from 2017 when the migration of people from other states - such as California and Florida - headed to the city of Sumner, in Washington. According to the Sumner Statistics (2015), the ethnic groups of this city located in the northwest of the country are made up of: 86% Caucasian, 9.7% Hispanic, 2.6% declare having more than two races, 1.1% Asian.

The guiding question for this research was:
What is the level of Cultural Intelligence of the teachers and the relationship with their intercultural competencies that allow addressing cultural diversity in the classroom?

Underlying the following questions:
1. What is the level of Cultural Intelligence of the teachers at Sumner High School?
2. What is the relationship between the teacher's demographic variables and the dimensions of the cultural intelligence scale?
3. What is the relationship between the level of Cultural Intelligence and the teacher's intercultural competencies?
4. What are the strategies that would help increase the level of Cultural intelligence of teachers to strengthen their intercultural competencies?

Method

The opportunity offered by the development of this research is the characteristics of the teachers, since they work in a classroom with minimal cultural diversity. It is also essential for this research to understand the relationship between the dimensions that
make up cultural intelligence with the intercultural competencies of teachers who work in contexts with little student cultural diversity.

The research used a mixed methodology, in the quantitative area it was a non-experimental cross-correlational design, with the measurement of the dimensions of Cultural Intelligence, and the relationship between each of the dimensions: metacognitive, cognitive, motivational, and behavioral. by applying the Scale of Cultural intelligence, which includes 31 items.

The scale was applied to 75 teachers who make up the entire teaching staff of the school and represent the areas of Mathematics, English, Science, Social Sciences, Foreign Languages, Leadership, Technical Subjects, Arts, Physical Education and Special Education for students with disabilities.

Regarding the demographic characteristics, the following were identified: years of experience as a teacher, gender, educational level and ethnicity. In the qualitative study, 15 in-depth interviews were conducted and a minimum interview time of 60 minutes and a maximum of 90 minutes was estimated. The interviews were recorded on audio and video.

The design of the qualitative study was based on the experiences of the teachers to address the issue of diversity in their classroom and their intercultural capacities. This made it possible to compare the reality in his classroom with the Guidelines on intercultural education proposed by UNESCO, which were considered for the design of the interview guide (See Table 3).

The in-depth interviews were conducted 12 weeks after the application of the quantitative instrument, in order not to vitiate the results and obtain data subject to the reality of the interviewee.

The categories were the reflection of the reality of the interviewee, since at all times a reflection was made on the pedagogical strategies developed in his class. The categories represent the maximum validity, since the meaning associated with the statement of the problem was captured through the review and complete transcription of the 15 interviews carried out.
### Results

**From the quantitative study**

Table 4  
*Results Concentrate of the Cultural Intelligence Scale*

<table>
<thead>
<tr>
<th>Data</th>
<th>Math</th>
<th>English</th>
<th>Science</th>
<th>Social Sciences</th>
<th>Foreign languages</th>
<th>Leadership</th>
<th>Technical Subjects</th>
<th>Arts</th>
<th>Physical education</th>
<th>Education Special</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Metacognitive dimension</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Minimum</td>
<td>22</td>
<td>26</td>
<td>27</td>
<td>26</td>
<td>30</td>
<td>20</td>
<td>21</td>
<td>32</td>
<td>28</td>
<td>29</td>
</tr>
<tr>
<td>Maximum</td>
<td>47</td>
<td>45</td>
<td>40</td>
<td>43</td>
<td>49</td>
<td>35</td>
<td>41</td>
<td>37</td>
<td>46</td>
<td>40</td>
</tr>
<tr>
<td>Average</td>
<td>36.45</td>
<td>37.69</td>
<td>33.45</td>
<td>36.38</td>
<td>37.17</td>
<td>27.5</td>
<td>33.9</td>
<td>35.33</td>
<td>35</td>
<td>35</td>
</tr>
<tr>
<td><strong>Cognitive dimension</strong></td>
<td></td>
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<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Minimum</td>
<td>17</td>
<td>10</td>
<td>16</td>
<td>14</td>
<td>28</td>
<td>13</td>
<td>11</td>
<td>14</td>
<td>19</td>
<td>18</td>
</tr>
<tr>
<td>Maximum</td>
<td>42</td>
<td>50</td>
<td>45</td>
<td>38</td>
<td>52</td>
<td>18</td>
<td>35</td>
<td>46</td>
<td>41</td>
<td>37</td>
</tr>
<tr>
<td>Average</td>
<td>25.55</td>
<td>31.63</td>
<td>27</td>
<td>29.88</td>
<td>39.5</td>
<td>15.5</td>
<td>22.2</td>
<td>29.67</td>
<td>26.67</td>
<td>28</td>
</tr>
<tr>
<td><strong>Motivational dimension</strong></td>
<td></td>
<td></td>
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<td></td>
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<tr>
<td>Minimum</td>
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<td>30</td>
<td>27</td>
<td>33</td>
<td>32</td>
<td>41</td>
<td>24</td>
<td>47</td>
<td>34</td>
<td>30</td>
</tr>
<tr>
<td>Maximum</td>
<td>50</td>
<td>56</td>
<td>56</td>
<td>53</td>
<td>55</td>
<td>43</td>
<td>51</td>
<td>56</td>
<td>56</td>
<td>48</td>
</tr>
<tr>
<td>Average</td>
<td>41.09</td>
<td>42.56</td>
<td>41</td>
<td>44</td>
<td>46</td>
<td>42</td>
<td>40</td>
<td>52.67</td>
<td>45.67</td>
<td>38.8</td>
</tr>
<tr>
<td>Typical Dev.</td>
<td>5.356</td>
<td>7.958</td>
<td>7.785</td>
<td>7.329</td>
<td>8.672</td>
<td>1.414</td>
<td>9.214</td>
<td>4.933</td>
<td>11.06</td>
<td>7.918</td>
</tr>
<tr>
<td><strong>Behavioral Dimension</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Minimum</td>
<td>28</td>
<td>17</td>
<td>30</td>
<td>30</td>
<td>26</td>
<td>16</td>
<td>20</td>
<td>31</td>
<td>29</td>
<td>30</td>
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<tr>
<td>Maximum</td>
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<td>54</td>
<td>42</td>
<td>48</td>
<td>50</td>
<td>44</td>
<td>50</td>
<td>48</td>
<td>45</td>
<td>47</td>
</tr>
<tr>
<td>Average</td>
<td>37</td>
<td>38.19</td>
<td>34.82</td>
<td>39.25</td>
<td>40.67</td>
<td>30</td>
<td>36.2</td>
<td>41.33</td>
<td>37.33</td>
<td>37.2</td>
</tr>
</tbody>
</table>
Towards the Formation of Intercultural Citizen-Ship. A Study About the Relationship Between Teacher’s Cultural Intelligence and Intercultural Competencies

Note: Source: Own elaboration, based on the results of the application of the Cultural Intelligence Scale.

Considering the average scores of the four dimensions of the intelligence scale, the results are presented in Figure 1, where the lowest level in the cognitive dimension and the highest in the motivational dimension stand out.

Figure 1. Average scores of the four Dimensions of the Teachers Cultural Intelligence Scale. (Own elaboration)

In Table 5, the results are concentrated considering the demographic variables, such as the level of studies, age, work experience, sex and ethnic group of the teacher.
Table 5
Concentration of higher scores considering demographic variables and dimensions of cultural intelligence

<table>
<thead>
<tr>
<th>Level of studies</th>
<th>Metacognitive</th>
<th>Cognitive</th>
<th>Motivational</th>
<th>Behavioral</th>
</tr>
</thead>
<tbody>
<tr>
<td>Degree significantly higher</td>
<td>Higher Bachelor's degree</td>
<td>Higher Degree</td>
<td>Higher Degree</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Age</th>
<th>Metacognitive</th>
<th>Cognitive</th>
<th>Motivational</th>
<th>Behavioral</th>
</tr>
</thead>
<tbody>
<tr>
<td>23-34 years high level</td>
<td>23-34 years high level</td>
<td>Ranges 23-34 years 45-54 years 55-64 years higher</td>
<td>23-34 years high level</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Experience</th>
<th>Metacognitive</th>
<th>Cognitive</th>
<th>Motivational</th>
<th>Behavioral</th>
</tr>
</thead>
<tbody>
<tr>
<td>6-10 years</td>
<td>less than a year</td>
<td>6-10 years</td>
<td>2-5 years</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sex</th>
<th>Metacognitive</th>
<th>Cognitive</th>
<th>Motivational</th>
<th>Behavioral</th>
</tr>
</thead>
<tbody>
<tr>
<td>Masculine</td>
<td>Masculine</td>
<td>Masculine</td>
<td>Feminine</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ethnic group</th>
<th>Metacognitive</th>
<th>Cognitive</th>
<th>Motivational</th>
<th>Behavioral</th>
</tr>
</thead>
<tbody>
<tr>
<td>Afro-American</td>
<td>top Asian lower Caucasian</td>
<td>top Asian lower Caucasian</td>
<td>Other</td>
<td></td>
</tr>
</tbody>
</table>

Note: Source: Own elaboration.

The most significant demographic data was the one referring to the level of studies. As can be seen in Table 5 and Figure 2, it is that teachers with a Bachelor's degree have better average scores than those with a Master's degree. With the exception of the cognitive dimension, it can be said that both groups have a slightly high metacognitive, motivational and behavioral ability and a slightly low cognitive ability.

Figure 2. Average scores of the four Dimensions of the Teachers Cultural Intelligence Scale, and educational level.
Analysis and discussion of the results of the qualitative study

According to the UNESCO guidelines regarding Intercultural Education, which are broken down into three principles, the results of this research are:

Principle I. Intercultural education respects the cultural identity of the learner. Therefore, education must be of quality, and adapted to their culture.

Teaching and learning strategies will be developed to consolidate respect for cultural identities; involving languages and values other than those used. Therefore, the teachers expressed that they do develop at least one of them in the form of an interview and carry it out at the beginning of the school year. They indicate that they do not have enough training on the subject.

In addition, teachers who implement strategies of integration or intercultural openness when listening to music from another part of the world; or, by saying their students' names in their original language, they share that students feel intimidated or made fun of every time they use these strategies. This expresses a low level of cultural and emotional intelligence on the part of the students.

In terms of activities that promote collaboration with cultural institutions, most teachers do not carry them out unless the study program so determines. And when students do not speak English as their mother tongue, teachers do not work in the student's native language. This shows little flexibility and ability to adapt content to the needs of minority groups.

Regarding training related to the curriculum and with students representing a cultural minority, the majority of the teachers declared that they had not taken any teacher training course. Only teachers who hold representative positions, within the campus, are required to train to improve their skills in adapting methods, content and materials for minority groups (example: Native Americans) and special education students.

Against this background, most of the teachers expressed that they create an environment of respect in the classroom. It is important to note that two responses were aimed at emphasizing that they do not teach cultural diversity as a topic, due to its difficulty and, for them, it is better to avoid it. On the other hand, a teacher stated that by hearing “taunts” or inappropriate comments in the classroom, he/she avoids to continuing and evades situation. These cases make palpable a lack of social competences, a weakness of coexistence between students from diverse cultural contexts.

Principle II. Intercultural education teaches each learner the knowledge, attitudes and cultural competencies necessary to participate fully and actively in society.

Social and English teachers teach: minority history, traditions, language or culture only when they are included in their school program. On the other hand, the Photography teacher designs his own school program and integrates or not integrates cultural diversity in each unit.

The rest of the teachers, from seven different areas, emphasize that if it is not part of the program, there is no reason to include those topics. Teachers of English, Science and Mathematics as well as Sports do not believe intercultural education is necessary. On the other hand, the Social Sciences teachers do, except for one who considered that this is not necessary, which denotes a disparity in accordance with their team work.

The participants acknowledge their poor understanding of the intercultural paradigm and ask for more training on the subject. The only two teachers who express having
extensive knowledge in the intercultural paradigm are from the English area, who have 21 years of experience as a teacher, and ten as a teacher and administrator. The other teacher is from the area of physical education, who has been a teacher for nine years and he/she mentions that being African-American is his strength.

There is the intention of the teacher to talk about these issues, but there is no formality or evidence of planning against racism and discrimination. On the other hand, five teachers representing four different areas stated that if it is not part of the curriculum they do not have to include it in their classes.

When defining intercultural competences, the UNESCO proposal (2006) was considered as a reference concept, which includes: respect for valuing others, self-awareness/identity, seeing the world from other perspectives, listening and participating in an authentic intercultural dialogue, as well as the capacity to adapt, the construction of lasting intercultural links and cultural humbleness.

In none of the responses did they include aspects such as: participating in an authentic intercultural dialogue, adaptability, building lasting intercultural links, and cultural humbleness.

On how to incorporate students from non-dominant cultures into the learning process, teachers say they do not apply strategies, but they speak of incorporating students - minorities - into the class by working with them individually, integrating them with groups of people to do them feel comfortable.

_Principle III Intercultural education teaches students cultural knowledge, attitudes and competencies, which allow them to contribute to respect, understanding and solidarity between individuals, between ethnic, social, cultural and/or religious groups and between nations._

Regarding the autonomous development of study plans that contribute to the discovery of cultural diversity and respect for cultural heritage, only the area of Social Sciences does so. All other teachers in this area assumed that they do not modify the content of the program based on the needs of the students, but instead follow the program dictated by the School District. The areas of English, Science, Mathematics, Special Education, Technical Classes, Arts and Sports indicate that if the subjects are not included in the program, they do not have to teach it or allocate time to address it.

The same situation occurs in other responses to Principles I and II. The lack of time during the course or the non-existence of the topics in the study programs are sufficient justification for the teacher not to include them in their regular classes.

According to the development of study plans that address the fight against racism and discrimination, the Social Sciences area is the only one that addresses them because it is part of the study program. Some teachers of English, Science, Mathematics, Special Education, Technical Classes and Sports even declared that if it is not part of the program there would be no reason to include it. It is noteworthy that the teachers of Foreign Languages, Technical Classes and Art speak about the issues of racism and discrimination existing in other parts of the world but not that exercised by the United States.

In addition, the development of a curriculum that addresses the awareness of cultural values that underlies the interpretation of situations and problems, as well as the ability to reflect and review information enriched by the knowledge of different cultural perspectives; the area of Social Sciences does it, because it is related to its central themes. The area of English and Foreign Languages say they address it superficially, the rest of
the areas interviewed affirm that if it is not part of the curriculum there is no reason or
time to address it.

So how does the teaching of the diversity of other cultures integrate American
culture; Virtually all Social Sciences teachers speak of different cultures, one in particular
and the Foreign Languages teacher emphasized his personal criticism of the advantageous
participation that the United States has had in other cultures and countries.

Answers about using the U.S. example as the "melting pot" they were mentioned
only by a professor of Social Sciences and one of English. Even three of the fifteen teach-
ers who defended the "American" culture as the most important because they are 100%
American. The above denotes a low critical awareness about the role that local and social
communities play in the learning process and in the construction of societies.

Most teachers develop study plans considering respect for different patterns of
thought, they use different teaching-learning strategies, modifying them according to the
class and the period of their classes.

Regarding the teaching methods taking into account the heritage, experience and
contributions of different ethnic groups, only the Social Science and Foreign Languages
teachers talk about the African American culture and the different political positions.
More than half of the teachers interviewed consider only the study program and since it
does not contemplate it, they also do not design methods that address different ethical
groups.

Only four interviewees carry out interdisciplinary work, coordinating activities
and projects with other areas, but they mention the lack of time and do not know how to
do it well. The teachers' responses stand out when they comment that the topics are so
different between the areas that there is nothing in common. They also mention the diffi-
culty of coordinating activities in their own areas, but doing interdisciplinary work, they
say, would increase the problems.

The results of qualitative research make sense when considering the degree of
training that teachers have on issues related to cultural diversity, human rights, equity,
and intercultural competencies. Thus, it is shown that only teachers who have a position
or activity added to that of teacher have at least one of the trainings.

Discussion and Conclusions

By way of conclusion, once the relationship between cultural intelligence and the
intercultural competencies of teachers in a high school has been analyzed. According to
the arguments extracted from the quantitative research of the Cultural Intelligence Scale
from the dimensions that comprise it, these are: cognitive, metacognitive, motivational
and behavioral. Based on the results obtained from the sample designed and described,
standardized, on a total of 75 teachers, 43 women and 32 men, from the areas of mathe-
matics, science, social sciences, English, foreign languages and sports, all active in a high
school in the northeastern United States of America in 2019. Assessing the results of the
15 interviews answered by this teaching team. We can conclude that high school teachers
in the northeastern United States of America show a cultural intelligence of a moderately
high level in the metacognitive, motivational and behavioral dimensions, but low in the
cognitive dimension. A second conclusion drawn from the demographic variable, educa-
tional level, observes that all teachers with a Bachelor's degree present a higher scale in
the four dimensions of cultural intelligence. However, all teachers offer low intercultural competencies in their professional performance. Therefore, our research adds to the conclusions offered for the Spanish context by Peñalva and López-Góñi (2014), we propose for the case of high school teacher training in the United States of America that intercultural intelligence be integrated into training in professional, social and personal competencies of the high school teacher. The teacher training in competencies for the development of cultural intelligence has been offered, in accordance with the social and political context of the United States of America since the last five years, an improvement that will optimize social coexistence in the classroom (classroom) as in the social and citizen context. To substantiate the conclusions presented, the results obtained in this research are detailed, extracted from the four dimensions that categorize cultural intelligence: metacognitive, cognitive, motivational and behavioral.

The metacognitive dimension shows that between the different teaching areas there are no statistically significant differences in the level of consciousness, in cultural knowledge and interaction with different cultural origins. Nor in being aware of intercultural interactions, in developing action plans before interacting with people from different cultures.

The teachers in the leadership area presented a moderately low level; and the rest of the teaching areas presented a moderately high level, but it is not considered significant.

The second dimension, the properly cognitive one, indicates that the teachers of the different areas showed the same level in this dimension, which constitutes the ability to know the legal and economic system of other cultures, to know some vocabulary in other languages; distinguish diverse religious values and beliefs, as well as habits, practices and forms of leadership from other cultures. This dimension is moderately low overall.

Third, the motivational dimension allows us to affirm that all teachers stated that they had a moderately high level in the dimension that includes the taste for interacting with people from different cultures, they feel safe when interacting with people who belong to a culture that is not familiar; they also value the status they would obtain by living or working in a different culture.

Finally, the fourth dimension of cultural intelligence, the behavioral one, shows that all the teachers in the different areas state that they have a change in their behavior when the intercultural interaction requires it, that they adapt to intercultural situations; that their verbal and non-verbal communication change to improve the interaction between different cultural groups adjusting to the cultural environment at all times. In general, this dimension is moderately high.

Bibliographic References


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(2021) MLSER, 5(1),115-132


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(2021) MLSER, 5(1), 115-132

Unesco (2010). Invertir en la Diversidad cultural y el Diálogo Intercultural. Informe Mundial de la UNESCO. [https://unesdoc.unesco.org/ark:/48223/pf0000184755_spa](https://unesdoc.unesco.org/ark:/48223/pf0000184755_spa)


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