# Przegląd Badań Edukacyjnych Educational Studies Review

ISSN 1895-4308 nr 43 (2/2023), s. 5–22



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# Motivation and Learning Conceptions That Matter When Considering Global Citizenship Education

http://dx.doi.org/10.12775/PBE.2023.025

#### Abstract

35 undergraduate students enrolled in a Primary Education Program participated in an innovation activity consisting of creating an ideal school and promoting a global citizenship education. The students completed a survey in which they evaluated the lessons they received from their peers in terms of motivation and the type of activities carried out in terms of the learning conception promoted. We followed a quasi-experimental pre-test-post-test design using a Wilcoxon signed-rank test. Results observed a significant increase in only in meaning motivation. Although no significant shifts in learning conceptions were found, there was a trend toward interactive and applicative learning approaches.

Keywords: learning conception, motivation, global citizenship, value-creating education.

#### Introduction

Global citizenship education (GCE) is becoming one of the current trends in this 21st century, even it is one of the educational priorities according to the Global Education First Initiative (United Nations, 2012). The UNESCO stated the need of promoting student's engagement in the creation of democratic culture in schools as future contributors to a sustainable world (UNESCO, 2015; Santamaría-Cárdaba & Lourenço, 2021). Recent systematic reviews on global citizenship show how it is being studied and operationalized in higher education through various means such as studying abroad, faculty and student perceptions and also coursework (Masaro, 2022). Caruana (2014) suggested re-conceptualizing global citizenship as a concept embracing diversity, belonging, community, and solidarity, and utilizing student diversity as a resource. Bosanquet (2010) examines the meanings of global citizenship in higher education and highlights the inclusion of related concepts such as intercultural awareness, inclusivity, sustainability, and community engagement in graduate attributes statements. Through CGE we can develop ethical and philosophical values such as respect for the dignity of life and the desire for the well-being of humanity that will facilitate a stance of dedication to building the happiness of oneself and others (Garrison et. al., 2014).

The inclusion of GCE as an innovation of current educational curricula is usually taken as one way of facing the social uncertainties we are living in (Tarozzi & Torres, 2016). However, in order to meet these demands, is becoming increasingly important considering transformative forms of education that "allow learners to critically understand the multiple social, cultural, economic and political forces that shape their lives; to (re)consider their own identities; to participate in the community at a range of levels, based on principles and values such as social justice, human rights, and intercultural understanding; and to work together to make the world a more equitable and sustainable place than the one they have inherited" (Lourenço, 2021, p. 2). To pretend to promote a GCE without considering the type of teaching and learning that takes place in the classroom could be contradictory and even counterproductive. That is why, by creating a project called "your ideal

school," implemented during the Psychology of Education course (academic year 2021–2022), we aimed to put into practice the promotion of CGE and to share the results of the experience as a possible example of it. This project included the need not only to conceive what the ideal school would be like, but also specifically what type of sessions would be taught in terms of the pedagogical methodology of that school.

# Operationalizing value creation in our understanding of the teaching and learning process

According to Nuñez et al. (2021) generating a sense of global citizenship constitutes, together with dialogue, value creation and creative coexistence, the foundations of a Human Education. In this line, we believe that an education for global citizenship need teachers capable of reflecting on and engaging with the context in which they find themselves. One way of demonstrating such commitment involves the possibility of creating learning situations in which students can create value. Ikeda declares that "value creation is the capacity to find meaning, to enhance one's own existence and contribute to the well-being of others, under any circumstance" (Ikeda, 2021b, p. 6). In this process of creating value in an educational situation, the teacher is essential in bringing that meaning by developing a dialogic scenario based on the respect of person's dignity or humanity (Nuñez et al., 2021). In this sense we question that it is possible to build value from a content-based teaching or a transmissive approach. The work of a teacher would then have more to do with creating an education that works for social justice offering challenges that transcend the management of skills or knowledge (Bourn, 2022). According to Namrata (2020) a value-creating global citizenship education involves an integrated view of life that allows us to responsibly understand how our actions are bringing about change in our context, and therefore how education can help bring about change in our society.

One means of implementing this humanistic notion of education that creates value is through the idea of motivation. The work of McClelland (1973), originally oriented towards the development of a concept of competence, provides three different motivational variables to consider: (1) the kind of social relationships and other affective elements which appear during the

classes, (2) the learning outcomes in terms of conceptual and competence achievements and finally (3) the possible impact or meaningfulness of the experience and its relationship with the promotion of the participant's development. Therefore, we have evaluated the motivational value of a learning experience by differentiating these three elements of motivation: affiliation, achievement and the meaningfulness of a specific session and the learning subject as a whole. We assume that a balance between these three motivational areas is needed in order to complete successfully any learning transition. In addition to this, attending to this kind of emergent and 'pattern-like' motivational processes has been an interesting resource for us in order to evaluate our student's meaning making processes from a motivational perspective, so closely related to the possibility of creating value.

However, this is not easy at all, as it is also related both to the potential and to the limitation of the meaning-making processes performed by the relationship between the students and their teachers. The quality of the teaching-learning process will create the conditions to increase the likelihood to achieve certain kind of quality in the value associated to the teaching-learning experience. In order to describe and understand many of the teachinglearning dynamic which take place in the class we have found useful the model proposed by van Rossum and Hamer (van Rossum & Hamer, 2010; 2012; Hamer & van Rossum, 2015; 2017). According to them, there are six different implicit learning conceptions. These conceptions are (c.1) increasing knowledge, (c.2) memorizing, (c.3) reproductive understanding/application, (c.4) understanding and reflecting on the subject matter, (c.5) widening horizons through dialogue and (c.6) growing self-awareness (van Rossum & Hamer, 2010). The first two conceptions focus on memorization emphasizing the reproduction of information. Conceptions three and four move from the reproduction to the (re) construction of knowledge. From the third conception, people conceive knowledge as something to apply in real life, a learning-teaching conception that allows people to solve problems or find solutions by means of fixed recipes. This kind of learning does not change the way in which people construct their learning; rather it is particularly focused on teaching people new information and skills, providing what Kegan (2000) calls informative learning.

The change from a third conception towards a fourth one reflects a key change from a reproductive to a constructivist way of conceiving learning. It is in the fourth conception when students take "a larger responsibility for their own learning to think for themselves" (Hamer & van Rossum, 2017). This fourth conception defines a meaning making characterized by the notion of self-authorship, the development of which is one form of transformative learning (Kegan, 1994; Baxter-Magolda & King, 2012). This fourth conception gives rise to the last two conceptions (c.5 and c.6) which describe a shift from knowing to being, from asking how to know to asking how to be. This way of learning has been labelled as self-transforming, since reality is transformed through our action.

The need of self-reflection, critical discourse and problem-solving projects are some of the strategies mentioned for teaching innovations whose purpose included the possibility to promote higher complexity in the learning of the students (Nichols et al., 2020). In the context of GCE innovation programs, teaching strategies aimed at providing reading assignments, planning lessons, and implementing GCE concepts in authentic classroom settings are generally encouraged (Lourenço, 2021). These mentioned examples of innovation from Hamer and van Rossum perspective would be demanding at least a fourth learning conception, where the competence to reflect and make sense of their learning experience is facilitated. This would be in line with Cranton (2002), when she states that there is no single methodology that guarantees a qualitative change in the way we learn, although essays, personal reflections, and assigned readings get the highest association with the transformation of our process of learning.

We consider that in the context of higher education it is common to take into account at least the possibility of promoting learning from a fourth conception based on reflection and aimed at building new understandings, not to mention more progressive internal meaning-making processes as it has already been evidenced in college development research over a period of four to five years (Baxter Magolda et al., 2012; Pizzolato et al., 2012; Barber et al., 2013) or even in the context of specific learning experiences (Sze et al., 2010; Nogueiras & Iborra, 2017).

# **Our study**

Our study is based on the experience with the group of students of the bilingual modality (course in English) of the subject Psychology of Education, belonging to the Primary Education Teaching Degree, at the University of Alcalá. This course was taught during the second semester of the first year, for a group of 35 students, aged 18. Its main purpose was to investigate the psychological processes involved in the teaching and learning of teachers and students from 6 to 12 years old. The contents include a review of the main educational paradigms, the identity of the teacher, educational conceptions, an approximation to the different types of learning (collaborative, experiential, expansive, transformational, visible) and an exploration of basic psychological processes such as intelligence, motivation, memory, attention, self-concept and self-esteem. All this is also framed in the context of the Fourth Education Revolution and the current influence of digital and artificial intelligence. The competencies worked with the students are the following:

- Design, plan and evaluate teaching-learning processes, both individually and in collaboration with other teachers and professionals at the center.
- 2. Design and regulate learning spaces in contexts of diversity attending to gender equality, equity and respect for human rights which shape the values of civic education.
- 3. Reflect on classroom practices to innovate and improve teaching. Acquire habits and skills for autonomous and collaborative learning and promote it among students.

As far as we are concerned, one way to develop these competencies would be for our students to participate in the teaching innovation project called "The Ideal School." In it, the students, from the perspective of five first-year subjects (Didactics, Developmental Psychology, Educational Psychology, Sociology of Education, Organization of Educational Institutions) have to devise, working in groups, an ideal school project connecting what they have learned in those subjects. In addition to conceiving the location of the school, its structure, educational offer, type of relationship established with the family and the social environment in which the school is located, aspects of its

architectural and decorative design, they have also to specify their educational paradigm as well as making explicit their educational conceptions. A twohour lesson was given by six groups illustrating their conception of the teaching and learning process. Below is a brief description of the session from a methodological point of view. The first group gave a session on sex education. It combined four different group activities but did not include a final sharing activity. The second group emphasized emotional development within the classroom by engaging students in activities where they shared genuine personal experiences with the entire group, while sitting in a circular formation. The third group concentrated on examining the link between nutrition and health. They conducted various activities while considering the range of options accessible to diabetics, vegetarians, or coeliacs. Like the first group, there was minimal time for reflection at the end when combining the various activities. The fourth group presented on the significance of sensory modalities in processing information. The initial segment provided transmissive information while the latter part comprised multiple sensory activities, each concentrating on a unique sensory modality. Unfortunately, there was insufficient time to deduce any conclusions or deliberate on the experience at the termination. The fifth group delivered an outdoor workshop on capoeira. Initially, they elucidated fundamental concepts, followed by a guided experiential practice. Participants worked together in pairs and groups, while receiving specific mentoring. Finally, Group six explored the theme of the Olympics through a series of interactive activities, characterized by competition yet lacking a unifying element and an integrating activity to finish.

Considering all this, and in the context of this communication, we aimed to achieve the following research objectives:

- 1. To evaluate changes in students' conceptions of learning after having participated in the course, analyzing their performance as teachers.
- 2. To verify to what extent, it is possible to bring about a change in these learning conceptions.
- 3. To evaluate the degree of coherence of the educational proposals and their potential to create value in the selected contexts of action.

Our main research questions were as follows:

- 1. Is it possible to generate a change in the teaching conceptions of students that facilitates the adoption of global citizenship in the period of a semester?
- 2. Will Students who participate in the intervention improve their scores in the learning conception indicators, comparing the end of the course with their scores at the beginning of the course?
- 3. From a perspective of attention to diversity, will the conceptions of learning among the different groups vary from practical and instrumental conceptions (c.3) to dialogic conceptions of a reflective and inquiring nature (c.4 and c.5).
- 4. What type of motivation (achievement, affiliation, and meaning) is most important in order to promote global citizenship?

#### Method

## **Participants**

The sample for our study was made up of thirty-five participants belonging to six different groups. The 68% of the students were female and the remaining 32% were men. The 85% of the students were between 18 and 19 years old, with the remaining 15% between 20 to 26 years old.

#### Instruments

For the quantitative analysis of our study, we used a purposely designed scale with a Likert scale from 1 to 5, using Google Forms, assessing the following motivational variables:

- 1. To what extent do you consider that you have learned what they wanted to teach you? (Achievement)
- 2. To what extent did you feel involved/interested in the lesson? (Meaningfulness)
- 3. How funny was the lesson? (Affiliation)

The last item focused on learning conceptions, selecting the method that had been used during the teaching/learning session from among six options related to each of the six learning conceptions.

- 1. Select what was most prevalent (Learning conceptions).
- 1. Transmission of information.
- 2. Transmission of information by asking a question to check for understanding.
- 3. Interaction and practice to apply what was being taught.
- 4. Reflect on what has been learned, through a dialogue.
- 5. Dialogue, to even get to other topics and discuss different perspectives (on the topic at hand or similar).
- 6. Deepening of relationships based on deep mutual knowledge.

It is important to note that the perspective we are prioritizing is that of the student participating in the training session not that of the student in charge of designing and implementing the training session. Therefore, we are giving importance not to what one as a teacher thinks one does, but what the students perceive as learners.

# Design

This study was carried out using a quasi-experimental, pre-test-post-test design. Baseline data were collected at the beginning of the subject, during the performance of a teaching session conducted by every group, where they could choose how to teach a formal lesson to their classmates. Finally, post-test data were collected on the last week of the subject program, where every group could have again the opportunity to teach a formal lesson belonging to their Ideal School.

Before administering the questionnaires to the groups of participants, they were informed about the objectives of the instruments employed and how the results would be used, and they provided their signed informed consent. Participants were also assured that data collected would be kept confidential and would only be used for research purposes.

## **Data analysis**

As we were in this specific study interested in the effects of the intervention considering two moments (pretest and post-test) and given the ordinal level of measurement of our data we decided to use the Wilcoxon signed-rank test. This test is used in situations in which there are two sets of scores to compare coming from the same participants, being equivalent of the dependent t-test. We performed all statistical analysis with SPSS 25 software.

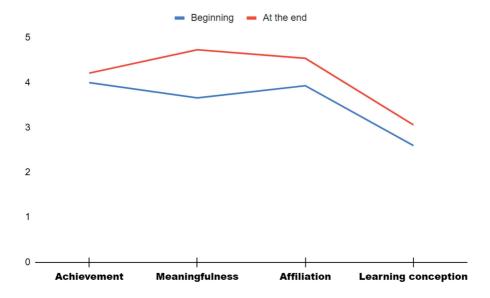
#### **Results**

We focus on a within group pre-post intervention analysis. Instead of focusing on variables we present the results focusing on all groups showing the outcomes in the dependent variables (motivation and perceived learning conception) comparing the initial teaching performance of the groups in February with their final teaching performance at the end of the subject in May of 2022. Rather than focusing on the variables, we present the results covering all groups showing the results on the dependent variables (motivation and perceived learning conception) and comparing the initial teaching performance of the groups in February with their final teaching performance at the end of the course in May 2022.

Table 1. Mean scores and standard deviations of the motivational and the perceived learning conception at both times

	Variables		TEST = 75)	POST-TEST (N = 75)		
		М	DT	М	DT	
Motivation	Achievement	4.00	1.19	4.21	0.85	
	Meaningfulness	3.66	1.17	4.73	0.57	
	Affiliation	3.93	1.22	4.54	0.66	
Perceived learning conception	Average of perceived Learning conception	2.6	0.48	3.06	0.65	

Source: Authors' research.



Graph 1. Mean scores and standard deviations of the motivational and the perceived learning conception at both times

Source: Authors' research.

Table 1 and its Graph 1 summarizes the mean scores and the standard deviations at each time (at the beginning of the subject in February and at the end in May).

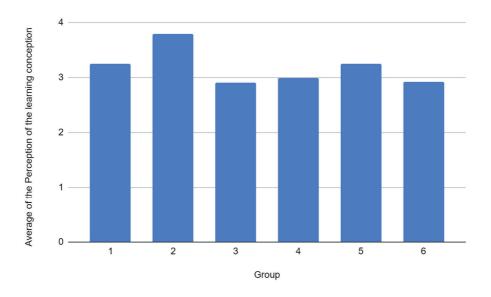
Although in general we see how scores are higher at the end of the course compared to its beginning, we only found statistically significant differences in the motivational variable of meaningfulness in the postest (Mdn = 5) than on the pretest (Mdn = 4), z = -2.15, p = 0.031, r = 0.24. So, considering motivation, we should remark that the main changes were found in the meaningfulness of the sessions in terms of its interest and relevance but not in terms of what was being learnt or what students were feeling, in terms of fun above all.

Table 2. Cross table with the learning conception variable and each group at the end of the course

		Group						Total
		1	2	3	4	5	6	- Total
Learning conceptions	2	4	2	1	2	1	4	14
	3	7	1	10	8	5	8	39
	4	3	10	0	0	1	0	14
	5	1	2	0	1	1	0	5
	6	1	0	0	0	0	1	2
Total		16	15	11	11	8	13	74

Source: Authors' research.

If we consider how the learning conception was perceived according to each group teaching methodology, we can notice that there are differences among them. Groups 1, 2 and 5 are evaluated with a wider range of conceptions. Group 1 fluctuates around the third and the fourth conception, group 2 seems more stable around the fourth conception while the rest of the groups are more stabilized in the third conception. The obtained result in Chi squared ( $X^2 = 43.85$ , p. 002) show that this distribution is not random and then it is attributed to the difference between the groups in terms of the complexity of the learning conception implied in their lessons. The following chart shows the differences between the groups regarding the average in the perception of the learning conception they performed in their lessons. It is clear that at this second moment at the end of the course they were performing at a practical reproductive way of learning. Only group 2 seemed to be closer to a fourth reflective way of learning.



Graph 2. Perception of the learning conception

Source: Authors' research.

# **Discussion**

At the beginning of their book around the notion of Integrative Learning in the context of Higher Education Palmer & Zajonc (2010, p. 2) animate a conversation with the reader through the following question:

"How can higher education become a more multidimensional enterprise, one that draws on the full range of human capacities for knowing, teaching and learning; that bridges the gaps between the disciplines; that forges stronger links between knowing the world and living creatively in it, in solitude and community?"

This question reflects the complexity and variability in our task as educators of future educators. The notion of competence introduced by Le Boterf (1994) appeared to embrace the complexity in the task of learning interested in integrating knowledge, skills and values with specific situations. According to this author, competences are necessarily performed in action. Only when

we reflect on our actions, we can try to understand not only the limits and possibilities of what we have been doing but also the limits and possibilities for ourselves as learners in a never-ending process.

Considering our second research question we found that students did not improve their scores regarding the learning conception indicators. We expected that most students would be situated around a reflective way of understanding learning, probably because most of our teaching methods encourage some kind of learning through reflection after reading selected bibliography, reflecting after experientially designed activities and critically thinking after being involved in situated activities such the Ideal School Project. Since most of these reflections are produced through dialogue with other peers in different formal stable and informal groups, and in active dialogue with teachers, we thought that a fifth dialogic way of understanding learning would also be promoted. In contrast to our expectations underlying our third research question we found a predictable variation among the groups but showing lower scores in terms of predominant learning conceptions. Regarding the descriptive results they just moved from a conception based on the transmission of information to approaches based on interaction and application of acquired knowledge. In response to our first research question, we note how moving along the different conceptions is not an easy task. It will probably require more time than is available in a term, or even in a yearly course (Rossum & Hamer, 2017). This would coincide with the results obtained by King, Pérez & Barber (2022) who showed how the meaning making of 81% of their participants became more complex by their fourth year of college. In addition, interestingly they found there was a variety of individual pathways ranging from modest development, substantial development no change, and even regression to less complex ways of making meaning. The analysis of the specific challenges and learning processes students experience and above all the quality of the support they receive from teachers, parents and even peers have proved important keys to understand these different pathways (Barber & King, 2014).

Considering our fourth question, we only found a statistically significant change in one motivational variable: meaningfulness. The change in teaching methodologies, promoted in the students, generated changes in the interest shown in the different activities. The involvement of the students, in this

sense, was greater, either because of the content of the activities, their varied methodology, the autonomy they were exercising or a sense of shared responsibility for their own and others' work. It is relevant for us that this aspect of motivation connected to the reasons and purposes of what we do is closer to a notion of value creation. Although premature, we interpret this result as an example of how to try to create value in our learning situations, creating a space where it is possible to explore different ways of learning and relating with others.

The quantitative results do not fully capture the nuances present in a learning experience such as the one we have presented. That is why we wanted to end by giving voice to one of our students, who in the final reflective assignment she had to hand in, expressed the following, when she had the opportunity to analyze her experience throughout the course:

I notice a big change in all of us comparing with September and also with February. Personally, I feel that I have matured and I feel proud of our final work, since it has been all taken out of our minds, creating a school that we consider the closest to ideal. It has been a project unlike any I have done in my life, and that is why I found it quite important and useful for this career. I think it's a big step in my teaching career, but also in my personal life, since I feel that I have acquired new knowledge and I have evolved mentally in the sense that I have learned to go deeply into different concepts and to see different perspectives of what surrounds me. This benefits me in terms of developing my mind. In conclusion, I am gradually overcoming my fears, I have learned to express myself in a way that others understand me without any problem. I feel that I have matured and that I have developed my mind. Thanks to this subject I give more turns to things, I analyze them more until I see different points of view and see that there are many paths.

This is good evidence of a student who is aware of her change which describe a being more mature not only as a future teacher but also as a person. This maturity involves a new way of learning through a deep reflection of chosen concepts she can manage instead of just getting new knowledge. The change also includes socio-emotional traits as she expresses herself in front of others in a more efficient way. Beyond a change in her learning conception, she could begin to direct her own learning in a more integrative way, including not only her own personal interest but also other's.

#### Conclusion

If we pretend to promote a Global Citizenship Education, we should encourage learning conceptions which include reflective and critical competences. Our experience is in line with some other initiatives emphasizing the importance of facilitating the engagement of students (Fukuda & Nishikawa, 2021; Oguro & Harbon, 2021) or the promotion of critical reflection through the participation in authentic learning activities (Lourenço, 2021). Although we are in line with these works, from a transformational learning perspective we have to be cautious and recognize how complex it is to facilitate contexts of inquiry that contribute to revise our conceptions of learning, not only to transcend reproductive models towards models of application and reflection, but above all towards models more focused on our integral development as human beings.

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