



Model United Nations: a constructivist tool

Modelo de Naciones Unidas: una herramienta constructivista

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Abstract

In the following document, the research about the study case of the Model United Nations (MUN) in a group of students of the Master's Degree in Education: Environment Education Field (MECEA) of the National Pedagogy University (UPN) Mexicali is presented. This research is relevant for the education study field, specifically from a constructivist approach and from the critical pedagogy, because it is analyzed the importance of MUN as a pedagogic tool to foster knowledge and capabilities in the students, developing a critical consciousness. The research has been conducted entirely with a qualitative focus of study case with an ethnographic method, including instruments as participatory observation, semi-structured interviews and field journal. The main findings reached are that in the study case analyzed, MUNs have shown to be a useful pedagogic tool to foster and practice knowledge about environmental education, environmental impact, international cooperation, the 2030 agenda, as well as necessary capabilities for an environmental educator, such as negotiation, public speaking, formal language and debate. Aspects of the MUN like roleplaying, Zone of Proximal Development (ZPD) and the interactions between participants in a diplomatic

frame have proven to be crucial for the results that these exercises foster in the participants.

Keywords: Education, constructivism, MUN, capabilities, environmental education, pedagogy.

Resumen

En el presente documento se presenta la investigación realizada sobre el caso de estudio del Modelo de Naciones Unidas (MUN) en un grupo de estudiantes de la Maestría en Educación: Campo Educación ambiental (MECEA) de la Universidad Pedagógica Nacional (UPN) Mexicali, Esta investigación presenta relevancia para el campo de estudio de la educación, específicamente desde un enfoque constructivista, así como desde la pedagogía crítica, ya que se analiza la pertinencia de los MUNs como herramienta pedagógica para fomentar conocimientos y capacidades en los educandos, desarrollando una conciencia crítica. La investigación realizada ha sido conducida enteramente con un enfoque cualitativo de caso de estudio con un método etnográfico, incluyendo instrumentos como la observación participativa, entrevistas semi-estructuradas y diario de campo. Las principales conclusiones a las que se llegaron son que en el caso de estudio los MUNs han mostrado ser una herramienta pedagógica útil para fomentar y poner en práctica conocimientos sobre educación ambiental, impacto ambiental, cooperación internacional, la agenda 2030, entre otros, así como capacidades necesarias para un educador ambiental como la negociación, el hablar en público, el lenguaje formal y el debate. Aspectos del MUN como el juego de rol, la Zona de Desarrollo Próximo (ZDP) y

las interacciones entre participantes dentro de un marco diplomático han mostrado ser cruciales para los resultados que estos ejercicios fomentan en sus participantes.

Descriptores:Educación, constructivismo, MUN, capacidades, educación ambiental, pedagogía.

1. Introduction and state of the art

In pedagogical studies, one of the great theoretical proposals is the constructivist one. In a current scenario, this theory has become central in different educational models around the world. This document presents the result of the use of the United Nations Model (UNM) as a constructivist tool for learning and putting knowledge and skills into practice in a group of students in the Master's in Education: Environmental Education Field (MECEA) the National Pedagogical University (UPN) in Mexicali, Baja California (BC), Mexico.

Considering that this research is carried out within a postgraduate framework of environmental education, it is important to consider the concept of environmental education, which is understood as:

The educational action by which the educational community tends to become aware of its global reality, the type of relationships that humans establish with each other and with nature, the problems derived from these relationships and their root causes ... (Tamayo cited Aguirre Ibarra & Mata González, 2011, page 61).

Other central aspects in environmental education are encouraging citizens to have intercultural awareness, global awareness and to be agents of collective social change (Mata González, & Aguirre Ibarra, 2007).

The discussion about the postulates and the essence of constructivism that are discussed in this document, come mainly from the proposals of Vygotsky, as well as Piaget as a complement. On the other hand, the postulates of critical pedagogy are analyzed based on Freire's postulates.

Constructivism proposes that people create their own learning, so that knowledge is not imposed from outside the individual, but is formed within. In constructivism students must structure situations where they participate actively through social interaction (Schunk, 1997).

Constructivists declare that thought takes place in situations (which Piaget calls cognitive conflicts) and that people construct knowledge based on their experiences in these situations (Bredo cited in Schunk, 1997). According to this theory, motivation depends on the cognitive activity when interacting with social factors and the forms of teaching, including means of support and language (Sivan cited in Schunk, 1997).

Although Piaget and Vygotsky have opposing ideas, they converge on the essence of the constructivist model, where the student discovers a range of knowledge, skills and opportunities, fostered by the teacher's guidance, through situations or controversies.

For Piaget, learning becomes tangible when learners experience a cognitive conflict and assimilate it to build or modify internal structures. The pedagogue argued that it was necessary to provoke controversies so that the student obtained learning, since, for him, development occurs when the cognitive structures of the syudent collide with the stimuli from outside. This situation is encouraged by posing problems to students, so that they can solve them (Schunk, 1997). It is important to highlight that when raising problems for students, knowledge

and skills that have been previously transmitted by the teacher are put into practice. Piaget also poses the need for social interaction, so that the learner understands that there are different points of view, making them become less egocentric (Schunk, 1997).

For his part, Vygotsky argues that the interaction of social, historical-contextual and individual factors results in the development of the individual. For Vygotsky, the importance of interactions lies in the fact that they allow individuals to transform their experiences based on their knowledge, to restructure the knowledge they obtain and previously had. Vygotsky argues that it is impossible to separate learning and development from the context in which they are inserted (Schunk, 1997). This postulate has a close relationship with the postulates of Freire (1970), since, for the Brazilian, to educate is to create a situation where the individual learns to become aware of their environment by himself, with the aid of the educator that functions as guide. Vygotsky and Freire converge on the fact that the student through interactions with his environment is the one who must become aware and learn. The educator, based on these postulates, works as a guide, does not impose knowledge, but supports the learner's awareness of their reality according to their perception, which for both authors must be critical.

One of Vygotsky's main arguments is that knowledge is constructed through the internalization of mental actions and processes that occur through social interactions (Schunk, 1997). This postulate is extremely relevant for this work, since in the UNM (which will be explained later) social interactions have a crucial role in the learning and skills practiced and generated in the exercise. In this line it is important to revisit the postulates of liberating education proposed by Freire (1970), which the pedagogue presents as a problematizing education, which seeks to generate awareness among learners, with dialogue being a central element to create awareness, stimulating reflection about the conjunctures

and historical processes that have led us to these conjunctures. This postulate also reinforces what Piaget proposes in a constructivist model; that students present situations or controversies that lead them to generate awareness with the aim of achieving a more comprehensive learning, in a more practical way.

One of the central aspects for this document on the constructivist model is the Zone of proximal development (ZPD), this concept is analyzed extensively in the works of Vygotsky and is discussed below, including its importance for the case study of this investigation. The ZPD can be defined as the zone that comprises the range or spectrum between the current level of development of an individual, determined by the independent solution of problems, and the level of development that can reach (potential), determined by means of the solution of problems with the support of a guide, these being a teacher or individuals with a higher level of ability (Vygotsky cited in Schunk, 1997).

The learner internalizes knowledge and/ or abilities due to interactions with other individuals with which he takes part, creating a cognitive change. In the ZDP, learners use their own perception and understanding of social interactions to translate these experiences into meanings, integrating an understanding of situations, which allows them to perform tasks that they could not independently perform.

In a ZPD, the participating individuals (in a given context) obtain greater learning, knowledge and/or abilities by stimulating and supporting interactions with the other participants (Kempston, & Thomas, 2014). As can be analyzed, a crucial part of the ZPD is what relates to social interactions; Vygotsky's constructivist postulates have this concept in a central consideration, since interactions are what allow individuals to achieve greater development as individuals.

Continuing with the discussion of theoretical postulates relevant to the case study of this document, it is necessary to return to the postulates of Freire (1970). The Brazilian peda-

gogue proposes a pedagogy of "becoming aware", which must use a critical and dialogical method and must use innovative techniques to ensure that the individual reaches the goal of critical pedagogy which, according to Freire, is emancipation. Developing a critical conscience implies political participation for the Brazilian, since it implies a capacity for decision and commitment to society. As can be seen, the postulates of critical pedagogy have a strong collective focus, seeking that students seek the collective benefit and not the individual, so the dialogical aspect becomes even more important. In this same line, Freire (1970) considers active methods to generate an awareness in the students, where a critical capacity is developed in the individuals through collective debate, through challenging situations that are posed by the educator. This interaction is proposed as a dialogical relationship, not an imposition of ideas; a horizontal relationship of discussion of ideas to arrive at more comprehensive and inclusive reflections.

Combining the development of a critical conscience, it is proposed that it begins with an inner awareness of each individual; of its essence as a product of a historical process developed to the present (Gramsci cited in Rockwell, 1999). However, it is important to clarify that Rockwell (1999), taking up Vygotsky's postulates, emphasizes that external perceptions are not assimilated or determine entirely the learning and/or knowledge of individuals, but that individuals create their own knowledge and generate a particular consciousness combining the perceptions of their context and their previous knowledge and ideas, however the pedagogue declares that the cultural representations of individuals constitute an important part of critical thinking.

Rockwell (1999) states that learners internalize the tools and knowledge perceived in their social contexts. However, the pedagogue argues that critical thinking is not only an abstract cognitive skill, but, for her, it is a matter of real thought. The author's claim that it is a real thought, not an abstract cognitive issue.

This means that it is constructed through the perception and elaboration of reality through the individuals involved, that is, the critical conscience is not only an issue that the educators present to the students and they take notes. For learners to develop a critical awareness it is necessary that they carry out practices and exercises that allow them to carry out these elaborations with the context, so that they themselves, with the help of a guide (who would be the educator), build this awareness.

In this way, instead of considering critical thinking as a purely abstract cognitive process, Rockwell (1999) presents it as a cultural practice, which is constructed in a particular way depending on the context. For this reason, critical consciousness cannot be pigeonholed only in a context of formal education, but can be developed in non-traditional spaces, where alternative interpretations of reality are represented or discussed. But this discussion leads to questioning: What kind of educational instrument or practice can make learners build this critical consciousness? One answer to this questioning may be the UNM.

In the UNMs, one of the most developed skills is critical awareness and decision-making, this assertion is made since a master's thesis research has been carried out in which the capacities fostered by the UNMs are analyzed, among other issues (Márquez Duarte, 2018), therefore the postulates of critical pedagogy sustain the importance of exercises such as the case study that is analyzed in this document. Likewise, the dynamics of the UNM that is explained below, has a constructivist component in its center.

The United Nations Models (UNM) can be defined as simulations to learn the forms and objectives of international cooperation and international decision-making (Patterson, 1996). On the other hand, if UNMs are analyzed as a political simulation, they can be understood as a model of a part of reality, usually a situation of decision making and conflict resolution, with the objective of learning about the interaction and processes of the simulated situation (DiCamillo,

& Gradwell, 2013). A third way of understanding the UNMs is as simulation models; these are a replica or operational model of reality, which seeks to recreate a situation. By doing so, it is possible to know the process of choosing the involved actors and learn from said processes (Díaz, 2016; Patterson, 1996). These models allow participants to learn about realities that are different to their national reality, and also allow them to contrast problems and possible solutions, making it possible to find new ways to resolve international situations based on dialogue, consensus and peace (HMUN, s/F).

From an educational approach, the UNMs contribute positively to citizen education in the school, making a difference in terms of knowledge of public issues, from local to international level, their values and the motivation to exercise citizen participation, this type of training is also known as democratic schooling (Coviello, 2010; Print, 2007).

For the purposes of this document, the following concept is used for the UNMs based on previous academic work (Márquez, 2017): "simulation" events of International Organizations (OI) and/or legislative bodies. In these models, the participants represent the Ambassador of a country or NGO or a legislator, where they present an official position (result of a previous investigation), with which, through dialogue, debate, persuasion, they seek to reach a project of resolution, the first stage being a worksheet.

As it is perceived by the presented definition, the participants of these simulations assume a specific role, with which they have to play throughout the UNM. This characteristic means that the participants have to investigate the relevant information to be able to fulfill the assigned role and they can have an experience of greater learning within the simulation. This type of simulations have the distinction of being "role play". Role play simulations allow participants to put themselves in the place of others and have a broader view of the situations addressed. This

fosters the development of empathy for alternative perspectives and ideas, as well as previously unknown points of view, in this way the participants increase their understanding and that of others. The role of role-playing in UNMs has been highlighted in previous research, paying attention to its usefulness as a pedagogical tool (Agarwal, 2014, Chasek, 2005, Kempston, & Thomas, 2014).

A subject that is highly practiced in the UNMs is the process of cross-cultural understanding, as well as the practice of the diplomatic protocol, including the processes of the simulated organisms, these issues generate an extremely valuable learning experience for the participants (Márquez Duarte, 2018; Obendorf, & Randerson, 2012). The idea of cross-cultural understanding refers to the understanding and empathy between people of different cultures, factors that foster tolerance, negotiation and cooperation. Within this logic, cross-cultural understanding goes hand in hand with the vision called "global citizenship". Global citizen as a focus, is one that consists in creating an awareness in individuals of promoting a social change, without imposing a vision of how that change should be, this is achieved through the creation of safe spaces to analyze and experience other forms of think in others and interact with others. It is about empowering individuals to have a more comprehensive and inclusive vision of the world, without imposing a vision (de Andreotti, 2014). In such an internationalized outlook, global citizenship has taken on great importance within the international society, favoring education with a global vision.

Likewise, within environmental education, Rodríguez (2011) declares that the processes of socialization in the school generate awareness in students about the relationships of the individual and their context; in this way the UNM, by the role of social interactions in it, becomes a constructivist pedagogical tool very useful in environmental education.

2. Method

As it has been previously addressed, in the UNM, the participants represent a specific role, in this case study, the participants were students of the master's degree in education; environmental education field (MECEA) of the National Pedagogical University (UPN) Unit 021 in Mexicali, Baja California, Mexico and represented the ambassador of a country. The students were informed about the committee to be simulated and the topic more than a month in advance, as well as the rules to be used in the simulation. They were also asked to submit an official position paper, based on a previous investigation on the subject and the specific role of each of them.

The simulated committee was UNESCO (United Nations Organization for Education, Science and Culture), which is one of the committees of the United Nations (UN). As students of environmental education, UNESCO was chosen because it is the committee in charge of all the educational issues of the UN, and to focus the exercise on their master, the topic of the simulation was: Relevance of environmental education within the framework of the 2030 agenda of the United Nations Organization. The group was composed of seven adult students who had never participated in a UNM, and I served as moderator du to being the group's teacher.

The rules that were used in the simulation were as follows (it is worth clarifying that the rules may vary slightly from simulation to simulation, since this UNM was done in class, with an approximate time of two and a half hours in total, the rules were adapted in order to achieve the best performance in the specific context of the group): 1. Formal attire or, as the case may be, typical clothing of the country. 2. The language is formal and grandiloquent words are prohibited. 3. The use of the 1st. person singular is forbidden, that is, it is forbidden to say "I think", since a country or delegation is being represented not a single individual. The allowed form of language

can be "Mexico considers that ...", "We analyze the situation ..." 4. To speak, one must raise the placard and wait for the committee moderator to give you the floor. 5. The time limit for each participation is one minute (maximum), in the case of reading positions it is two minutes. 6. In order to communicate between delegates, diplomatic notes are used, direct communication between delegates is not allowed, except for the simple caucus. 7. There are two main types of procedures: moderated Caucus and simple Caucus. In the moderated caucus, the participants raise their placard for the moderator to give them the floor. In the simple caucus, participants can get up and talk with other participants more informally. 8. To approve a worksheet, a vote is taken, which is approved by simple majority. 9. To approve a preliminary draft of a resolution, a vote is taken, which is approved by a qualified majority (2/3 parts).

The UNM was given a weight for the qualification of the subject, so that the work and effort put towards the UNM was reflected in their grades and that there was a greater incentive for the preparation of part of the students. Since there was a class with the group per week, with a duration of approximately 2 hours and 45 minutes, a full session was dedicated to analyze and discuss two academic articles about the UNM as a pedagogical tool, so that the students could understand the pertinence of the exercise in their training, as well as so that they had a more integral understanding of it. In that same session, the rules were explained, which the students already had written about a month before, likewise, the countries that each of them would represent in the simulation were distributed. This session was held three weeks before the simulation. Two weeks after that session, approximately half of a session (one hour and a half) was spent in clarifying doubts and performing a simulation test so that the students were better prepared for the exercise. The criteria that were taken into account for the individual evaluation of the UNM participants were the official position document, the number of participations, the quality of the participants and the diplomatic behavior and adherence to the rules.

To perform the case study analysis, an entirely qualitative research model was used, with a strong ethnographic approach (Creswell, 2003), using participatory observation tools (with the support of a field diary), as well as semi-directive interviews. Some of the interviews were conducted in person and others were done in writing, sent and received by email, on dates after the UNM. Of the seven participating students, six of them answered the interview questions.

It is important to argue that the type of study that was carried out is that of a clinical subtype case study, since specific cases are analyzed in a limited fashion in a bounded situation, this type of study is used to analyze individuals from complex groups (such as UNM), the validity lies in the intensive study of the cases (Gomm cited in Márquez Duarte, 2018).

It is worth noting that traditionally the UNMs are made for students of higher or upper secondary education. Previously, I participated as an organizer in UNM at both levels, but this case study constituted the first UNM carried out at the graduate level, a factor that gives relevance to research and that has determined certain results of the research.

3. Analysis and results of the case study

The UNM was held in a session, dedicated entirely to the exercise, with a duration of approximately two hours and 30 minutes.

As first observations of the exercise it was perceived that the students dressed in formal clothes, all read their official position; they had good proposals and the discussion was diplomatic and respectful. Regarding the perceptions of the participants in general about the UNM, there were varied opinions, however, the general topics that were mentioned by the students were related to reach agreements, to know other points of view, to work collectively and know the OI processes.

One of the participants declares that "Something else that I found very interesting was the contributions of the classmates, to know a little about the situation in China, Brazil, Germany ... I realize that the perception of people is different" (Participant 1, personal interview). What was stated by participant 1 is relevant to this research, since it is translated as the development of cross-cultural understanding capacity, which has been discussed before, and is a valuable capacity for an educator, since the educator has to know how to interact and train students from different cultures at the same time, while generating empathy. Regarding the issue of reaching agreements and working collectively: "... I felt that some colleagues were going to have problems, but apparently it was not the case, everything went very well, and I think I learned a lot, how to reach an agreement to reach an objective for the benefit of all" (Participant 2, personal interview). In this case, participant 2 highlights the cooperation that was developed by the participants, in a diplomatic manner, seeking to make decisions for a collective benefit, without imposing ideas, through social interactions, as previously discussed with the Constructivists postulates, especially Vygotsky. Being able to dialogue and make decisions together are extremely valuable personal and professional skills, especially as an educator, since being in front of a group is necessary to know how to mediate and achieve an environment with the least possible conflicts.

One of the questions that were asked to the participants was about the concepts and/ or knowledge that they put into practice in the UNM, since, being in the second half of the master's degree in environmental education, one of the main objectives was that they put in practice the knowledge obtained in the classes so far, in subjects related to environmental education. In this topic the participants declared that they put into practice their knowledge and preparation on environmental education, environmental impact, international cooperation, the 2030 agenda, dialogue and protocol/rules that are followed in OI and international summits. Regarding this questioning, it is important to emphasize that dialogue (negotiation and tolerance), as well as following rules/protocols (discipline) are considered as capacities that can be developed by participating in UNM, which differ from knowledge, taking into account that capabilities are defined as follows: "The capacity of a person reflects the alternative combinations that the person can achieve, and from which he or she can choose a set" (Sen, 1993, p.31). That is, the capabilities are "the combination of alternatives of the realizations that an individual can accomplish to achieve his well-being and achieve the desired development" (Márquez Duarte, 2018, p.50).

One of the most important aspects of the UNM to analyze its usefulness and effectiveness as a pedagogical tool with a constructivist approach is to know what capacities it fosters in the participants. In a previous investigation (Márquez Duarte, 2018) it is proved that the UNM promotes a series of capacities in its participants, so it was pertinent to know what capacities it fostered in the specific case of this research (students of the MECEA). In the aforementioned research, that the UNMs can promote a total of 19 capacities were noted, these 19 capacities were those indicated by the interviewed individuals (18 students or university graduates). Since the case study of the present research is from a group of adult graduate students, 15 capacities were selected from which the participants could select those that they believe were promoted by the UNM. The following chart shows the capacities indicated by the MECEA students:

Chart 1. Capacities fostered by students in MECEA students

	Frecuencia	Capacidades	Frecuencia	Capacidades	Frecuencia
Public speaking	5	Organization	2	Research	3
Negotiation	4	Discipline	4	Cross-cultural understanding	2
Teamwork	4	Debate	5	Self-confidence	4
Tolerance	3	Formal language	6	Decision making	3
Working under pressure	2	Writing formal documents	1	Empathy	4

Source: Own elaboration with results of the field work.

The most popular skills developed among the MECEA students were: the formal language, followed by the ability to debate, as well as speaking in public. On the ability to speak in public, for example, one of the students points out: "To speak in public, in my opinion, one requires prior knowledge, organization, discipline, research and formal language" (Participant 3, personal interview). The student states that the UNM fostered the ability to speak in public, and that in turn this capacity requires research capacity, formal language, discipline and organization,

so this capacity building was transversal, not in isolation between one or another capacity.

An important aspect about the UNM is the interaction of the participants, due to this the students of the MECEA were asked if they considered that the interaction with the other participants in the UNM had effects on their experience, indicating the reason for their response. It should be noted that all the interviewees stated that the interaction in the UNM had an effect on their experience as participants. Some of the students' responses about the effect of the interactions were: "Yes. The exercise allows us to

see not only from our perspective, but also from the other's perspectives" (Participant 4, personal interview). "To perform the exercise, it required the collaboration of almost all participants; this led us to work as a team and with a proactive attitude" (Participant 3, personal interview). "Yes, since it helped me to listen to the different positions and situations that other nations are living" (Participant 5, personal interview).

What the students refer to about the interaction is relevant to the research, since it evidences the constructivist approach of the UNM; as discussed in the state of the art, the solution of problems collectively, with a guide (in this case the moderator) is a clear example of the constructivist postulates, especially of Vygotsky. One of these postulates is the ZPD, which was previously discussed and materialized in the simulation dynamics of the UNM, where the learners themselves through dialogue, debate and teamwork come to propose solutions to the defined problem, always with a guide (moderator). Likewise, by touching on issues such as generating empathy, cross-cultural understanding and teamwork, which are useful and required skills as a human being, as well as an educator, the UNMs constitute relevant pedagogical tools, especially as an environmental educator. In this regard it is important to highlight the symbolic interaction approach (Goffman, 2006), since it can be used as a basis to analyze the changes that the UNMs generate when modifying behavior (Márquez Duarte, 2018). This approach is explained as the role or roles that each one of us adopts as individuals in certain scenarios and/or situations. In the UNM the specific role of delegate is assumed, which determines the behaviors, knowledge and skills developed in the exercise and which, as Goffman states, are internalized in the individual, even if the UNM ends.

A final question asked to the students of the MECEA was if they would change any aspect of the UNM to generate more learning/utility. At this point, most of the interviewees pointed out that what they would change is the time of preparation and the previous tests. They stated that they would have liked to have more sessions and more time to rehearse the UNM and prepare better for their participation in it.

It is worth clarifying that it is considered (with the results obtained in the research) that the UNMs can function as an articulating exercise of an adequate training for educators, in this case environmental. To support this argument, the Delors report (1996) presents interesting postulates; the report highlights the four pillars of education: learning to know, learning to be, learning to do and learning to coexist. Of the four pillars, the pillar of learning to live with others/coexist is of special relevance for this research. In this pillar, an education that allows to solve conflicts in a peaceful and harmonious way, promoting the knowledge of others, is sought. This is difficult to achieve since a large number of individuals tend to belittle and have prejudices against those who are different from them, reacting with aggression to the "other" as a result of ignorance and fear of that "other". In the UNM, cross-cultural understanding is encouraged as discussed above. This capacity seeks empathy and harmonious coexistence to avoid and resolve conflicts, therefore helpiong the task of educators, especially by the pillars pointed out by Delors.

4. Conclusions

The UNM carried out with MECEA students has been a pedagogical exercise with a constructivist approach that has allowed us to study a specific case of its application as an instrument to generate learning and, above all, capacity development in its participants. Although the UNM have been carried out as an educational exercise with students for some decades now, they are usually carried out with students of high school and college, so the case studied, being a group of graduate students, is a peculiar and interesting case that yields clues and conclusions that contribute to knowledge in the field of education.

As it was seen in the previous section, the field work showed that the students declared having learned knowledge related to subjects of their study program (environmental education), as well as the dynamics of the UNM, which, as previously discussed, has a strong constructivist focus. Beyond knowledge, the development of skills that students declare to have obtained in the UNM is extremely valuable. Among the most developed skills by the MECEA students are: formal language, debate, public speaking, negotiation, empathy and teamwork.

As can be seen, developing a global and intercultural awareness and citizenship, the interactions between individuals and their context, collectively finding solutions to problems, as well as transforming themselves into agents of change are main points that are worked on in the UNMs and that have been addressed in this paper. Likewise, as discussed above, the UNMs are beneficial for the development of capacities such as cross-cultural understanding, global citizenship, empathy, dialogue, negotiation, among others, which, as analyzed in the case study of this research, are extremely important for an educator, and especially for an environmental educator, since what is promoted by the UNMs is in line with the environmental values that represent the essence of environmental education, such as dialogue, plurality, empathy and coexistence (Aguirre Ibarra, & Mata González, 2011, Rodríguez Pinson, 2011).

In this same line, it is worth highlighting the usefulness of the UNM as a tool for the integration of social interactions between individuals in the school, as well as the development of critical awareness.

On this subject it is important to return to the postulates of Freire analyzed in the state of the art: The UNMs, being a pedagogical tool where awareness and critical capacity is developed in individuals through dialogue, debate and negotiation, allows learners to generate their own knowledge and understanding of social, political and economic situations, so that the UNMs materialize as an "active" method (as proposed by Freire), where students develop their own consciousness through situations that are posed by the educator, without the knowledge or the specific point of view about the context or the situation of the educator being imposed, since the educator only acts as a moderator, allowing the UNM to become a space where the students themselves generate awareness, skills and knowledge from their interaction and their own understanding, arriving at more comprehensive and inclusive reflections, and constituting itself as a method that helps the participants to become agents of change.

Another consideration in the conclusion of this work is to recapitulate the importance of role play in the UNM and the ZDP from a constructivist approach; As can be seen in the fieldwork section, the fact that the participants had to represent specific roles (Ambassador of a country) and interact with others who also had roles generated knowledge and positive learning in the students, supporting the discussion presented in the previous section on how the UNM is a constructivist tool, following the postulates of both Piaget and Vygotsky.

As final thoughts on the UNM, it is worth highlighting that, in this case of study, although the UNM lasted only 2 and a half hours (and a 15-minute break), it was possible to negotiate and write a worksheet, which is the outline of a draft resolution document, so called because in the UN resolutions are reached to attack the problems in the international community. A clear example of a draft resolution is the Declaration as a result of the UN Sustainable Development Summit, from which emerged the 17 Sustainable Development Goals (SDGs) in 2015.

It is important to clarify that this research has been a specific case study, so the results should not be generalized to apply to any other case study. However, this research serves as a basis for more research with more cases of study and greater resources (material, human and time), with the aim of continuing to analyze UNMs as a pedagogical method, from a constructivist and critical pedagogy approach.

Bibliographical references

- Agarwal, J. K. (2014). Impact of Model United Nations Conferences on India's Youth. OIDA International Journal of Sustainable Development, 7(8), 6. (https://bit.ly/2TUhVZu).
- Aguirre Ibarra, M. C., & Mata González, E. (2011). La ética: Punto de encuentro de la educación ambiental y el ser profesional. *Espiral, Revista de Docencia e Investigación, 1*(1), 55-66. https://doi.org/10.15332/erdi.v1i1.106
- Chasek, P. S. (2005). Power Politics, Diplomacy and Role Playing: Simulating the UN Security Council's Response to Terrorism. *International Studies Perspectives*, 6(1), 1-19. https://doi.org/10.1111/j.1528-3577.2005.00190.x
- Coviello, A. (2010). When standardized test success represents survival: Creating opportunities for democratic participatory development in class 5-340 (PhD). Columbia University, New York. (https://bit.ly/2FwEgsM).
- Creswell, J. W. (2003). Research design: Qualitative, quantitative, and mixed methods approaches (Vol. 4). CA: Sage Thousand Oaks.
- de Andreotti, V. O. (2014). Soft versus critical global citizenship education. *Development education in policy and practice* 3(1), 40-51. (https://bit.ly/2vMkGng).
- Delors, J. (1996). Los cuatro pilares de la educación. En J. Delors (Ed.), *La educación encierra un tesoro* (pp. 91-103). Santillana. UNESCO.
- Díaz, U. D. (2016). Modelos de Naciones Unidas: una herramienta para la cultura de paz (Licenciatura). Ciudad de México: Universidad Nacional Autónoma de México.
- DiCamillo, L., & Gradwell, J. M. (2013). To Simulate or Not To Simulate? Investigating Myths about Social Studies Simulations. *The Social Studies*, 104(4), 155-160. https://doi.org/10.1080/00377996.2012.716094
- Freire, P. (1970). *Pedagogia do oprimido* (Vol. 21). Paz
- Goffman, E. (2006). *The presentation of self. Life as theater: A dramaturgical sourcebook.* Penguim Random House.

- HMUN (s/f). HMUN: About Us. (https://bit.ly/2HhGfmn) (20-11-2016).
- Kempston, T., & Thomas, N. (2014). The Drama of International Relations: A South China Sea Simulation. *International Studies Perspectives*, *15*(4), 459-476. https://doi.org/10.1111/insp.12045
- Márquez, F. (2017). Los Modelos de Naciones Unidas, su cooperación trasnacional y la participación ciudadana juvenil. *Muuch' Xiímbal: Caminemos Juntos*, (4), 193-226. (https://bit.ly/2FvKd9l).
- Márquez Duarte, F. (2018). Participación ciudadana juvenil en Baja California, México y California, Estados Unidos: el caso de los Modelos de Naciones Unidas. (M.A.). México: El Colegio de la Frontera Norte, Tijuana, B.C.
- Mata González, E., & Aguirre Ibarra, M. C. (2007). Desarrollo sustentable actual: una reconsideración desde la educación ambiental. *Espíritu científico en acción*, *3*(6), 26-34.
- Obendorf, S., & Randerson, C. (2012). The Model United Nations simulation and the student as producer agenda. *Enhancing Learning in the Social Sciences*, 4(3). (https://bit.ly/2Mf4Jvz).
- Patterson, J. R. (1996). Model United Nations simulations: An inquiry into active learning, role-playing, and role identification as they impact participants' sense of political efficacy (Ph.D.). USA: Ann Arbor. (https://bit.ly/2RX0ud8).
- Print, M. (2007). Citizenship Education and Youth Participation in Democracy. *British Journal of Educational Studies*, 55(3), 325-345. https://doi.org/10.1111/j.1467-8527.2007.00382.x
- Rockwell, E. (1999). Historical Consciousness and Critical Thinking: Reflections on an Indigenous Movement. *The Journal of Educational Foundations*, 13(3), 23.
- Rodríguez Pinson, M. C. (2011). Hacia una construcción de ciudadanía ambiental en la escuela. *Espiral, Revista de Docencia e Investigación, 1*(1), 13-20. https://doi.org/10.15332/erdi.v1i1.102
- Schunk, D. H. (1997). *Teorías del aprendizaje* (6a ed.). Pearson Educación.
- Sen, A. (1993). Capability and Well-Being. En M. Nussbaum & A. Sen (Eds.), *The quality of life* (p. 30). Oxford: Clarendon Press. (https://bit.ly/2VT0p9L).

