

Transdisciplinarity and History in Secondary Education: Zacapu, Michoacán, Mexico

Written by Elida Araceli Vargas Díaz and Marco Antonio Vargas Quezada

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This article is presented as a result of a report of observations made in secondary education in its different modalities: federal, technical and *telesecundaria*. The purpose was to know the conceptions of students about infrastructure, school organization, social relations in the community, being a student, the concept of history, in addition to the teaching and learning of the subject. The methodology used is described in the regional diagnosis by making use of research techniques such as: observation, interview, and focus group. Subsequently, the epistemological paradigm used (phenomenological paradigm) is presented, contrasting with theories such as: the critical theory of education, the theory of context and the theory of social practices. The results of the regional diagnosis highlight relevant elements to consider in teaching and learning: coexistence, leisure moments, reflected through an educational proposal in history, in the modality of face-to-face education developed in a general secondary school. This was conducted during the month of December 2019 and the execution of the proposal in January 2020. The purposes, competencies, didactic sequences, strategies, evidence, and evaluations were undertaken through a transdisciplinary and decolonization approach.

Among the results obtained from the applied educational proposal, the following stand out: most of the students modified their conception of history acquiring new forms in their learning, linked the classes with current realities, promoting the reflection of history as present and future. In addition to knowing different representations of the world and associating decolonization with words such as: liberation, reconstruction, revolution, independence, autonomy, among others. Finally, the study addresses an interesting topic with an innovative methodology: transdisciplinarity in history shows the results of pedagogical interventions, which translates into relevance due to the application of decolonial pedagogy, especially in the current post-COVID situation. The findings, as well as their methodological application, can be linked and transferred to other educational spaces in other regions of Mexico, even apply to other subjects of the secondary educational level. It can be argued that this study applies a creative, dynamic and transferable methodology.

Theories, Concepts and Epistemological Paradigm

The theories of this study emphasize the school, the context and the teaching and learning practices of history at this educational level, among them are:

1. The critical theory of education (Gimeno 1995).
2. Context theory (Van Dijk 2001).
3. The theory of social practices (Bourdieu 1980).
4. Transdisciplinarity.
5. The concept of decolonization.

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The critical theory of education (Gimeno 1995) studies educational phenomena as an alternative through its approaches, from the curricular field, addressing teaching-learning as a process, makes use of other pedagogies including alternatives, proposes dialectical relationships, gets supported on the coherence of phenomena and events, contemplates actors participating in the educational processes – authorities, teachers, students, school community – and constantly seeks social transformation. The critical theory of education was an important explanatory source of these realities through dialectical relations present in the schools studied. The contributions of this theory are important, especially at the end of the diagnosis of this research-intervention, since it allowed the initial purposes to be raised from alternative pedagogies that seek social transformation. In this case in the subject of history from decolonization. This is understood as self-liberation in self-determination, in politics and in the social dimension of people to question the forms of authority and to allow sharing from new community and social models that correspond to their needs from the awareness of their conditions.

Context theory (Van Dijk 2001) considers explanations of the process of adaptation of discourse to the communicative situation from reception and interpretation. The context in this theory is dynamic, due to changes during communication, where updates and adaptations arising in social reality or in the interpretation of discourse are common. Thus, the context influences the development of discourse. The context generates models built by everyday experiences through consciousness, from the situations given in the realities by interactions, times, places, acts, among others, which are manifested in individual mental representations from discourse.

The theory of social practices (Bourdieu 1980), necessary for understanding the educational phenomenon under study, assumes everything social as the practices that are carried out, which are integrated by practical knowledge (practical knowledge and skills), senses (teleo-affective elements, cultural valuations and repertoires) and materialities (tools, infrastructures and resources). These practices are links between saying and doing.

Transdisciplinarity is considered a research strategy, which transcends the disciplines of knowledge, with articulated, interpretive, pertinent and holistic approaches that generate support between disciplines of knowledge, or between common or similar areas. Transdisciplinarity conceives “the object of study” as everything susceptible to rationality (proposed from classical science to current science), time stages that make it necessary and valid but insufficient to approach the aforementioned “objects of study” from the fragmentation of disciplines for their understanding in the realities of current times. These authors propose the need to explore different interactions between education subjects in order to face complex problems. A core aspect proposed is dialogue or communication through habitual discourse.

Transdisciplinarity is a relevant concept in the necessary change of education today, since it strengthens the education of reason, by observing and interpreting, as well as modifying, based on complexity (Morín, 1988), universality and consciousness. Transdisciplinarity as a concept, its meaning and orientation, is to go beyond the disciplines of knowledge, to understand the world, its social and natural phenomena and the people themselves. By articulating these elements from a perspective of unity and integration of the disciplines in dynamic, open and flexible scenarios, we are able to aspire to transform.

From the concept of decolonization, we look for another perspective, that applies to the societies that were colonized. This is an issue that has been taken up by intellectuals who place themselves in a decolonizing perspective. There are authors who proposed the construction of a comprehensive view from those who suffer, that is, the colonized.

The starting point of recent socio-cultural processes by focusing on visibility and gradual recognition such as decolonization, favor the academic-social and integral formation of people, in this case students from the basic levels. Thus, it is necessary to conceptualize decolonization, which is conceived as the process of self-determination, freedom and independence that transcends diverse elements of human life such as the political in a colony or territory in relation to the foreign nation that dominates it in a condition of socio-political-economic-cultural dependence.

It is intended that from criticism, science achieves epistemological decolonization in the life of people, as well as from the economic and political structures that sustain the dominant system. It is also proposed to decolonize the

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cosmovision of all the different communities, to recover our own epistemology of Latin America and to detach ourselves from those Eurocentric epistemologies that limit us in recognizing ourselves as full human beings, with capacities and human potential without limits. In addition to the recognition of the processes of colonial theft, of genocide, of looting, among other situations, that demerit us as human beings. Decolonization poses resistance not only in persisting, but in the creation of the new, of the necessary, of one's own alternative; in the knowledge, recognition and transformation of the current situation towards other worlds that at this time are possible because of self-determination; to achieve freedom with our aspirations.

This intervention proposal contemplates the educational level of *Secundaria* (7th to 9th grades) as established in the 2011 Curriculum of SEP (Public Education Secretary in México), the subject to be trained in the subject of history considers: the use of language to interact in various social and cultural contexts, that the student identifies problems, formulates questions, makes judgments, proposes solutions and decides. In addition to using information from different sources to interpret and explain social, economic and cultural processes. It is also about understanding and contributing to democratic life, in addition to knowing and valuing the characteristics and potentialities of the human being. It attends to diversity through recognition and respect.

A thinking, creative, empathetic, imaginative, critical, reflective, initiative-oriented, responsible individual is proposed. An individual understanding of past, present, and future realities, an integral socio-political-cultural-economic being. An individual who participates in the construction of a democratic citizenship focused on human development based on historical-formative processes and supported by human values and principles, considering personal, natural, collective and contextual possibilities.

The decolonization of thought in this proposal contributes to the achievement of the proposed purposes of formation, especially because when thought is decolonized, the individual participates in a process of personal and collective self-determination in the space in which they develop and move as in the family, the neighborhood, the community. In relation to what dominates them and creates that dependence in various areas: political, social, economic.

These elements also allow us to provide elements of epistemological decolonization of life, of the structures and superstructures that perpetuate capitalism as the dominant system. Decolonization of thought favors the recovery of processes to generate our own knowledge that allows us to interpret and understand the world from yesterday, today, and tomorrow.

Development and Methods

The study was carried out in the state of Michoacán, Mexico (Inegi, 2020), has 113 municipalities; five of them make up the Zacapu Region in the area of education and are: Zacapu, Coeneo, Huaniqueo, Panindicuario and Jiménez. It should be noted that the state has a population of 4,748,846 inhabitants that represent 3.8% of the total of the country. The population distribution is the following: 71% in urban areas and 29% in rural areas. Average schooling in the state is 8.6 years of study, which represents a little more than 8th grades. Indigenous language speakers aged three and over are considered 3 out of every 100 people. With data of March 2023 the state of Michoacán's well-being indicators were lower than Mexico's average.

As a contextual framework for this study, three territories were considered:

The first moment of diagnosis was carried out in the town of Zacapu, head of the municipality. Zacapu is a municipality of 73,455 inhabitants, located in the state of Michoacán. 2.79% of the population is Indigenous. The second moment of diagnosis was carried out in Colonia Eréndira, Municipality of Zacapu, Michoacán. There are 915 inhabitants in Colonia Eréndira. 11.26% of the population is illiterate (10.35% of males and 12.04% of females). The average level of schooling is 5.46 years (5.02 in men and 5.81 in women). The third moment of diagnosis was carried out in Las Colonias, Municipality of Jiménez, Michoacán. In Las Colonias there are 938 inhabitants. 6.08% of the population is illiterate (5.71% of males and 6.40% of females). The average level of schooling is 5.73 years (5.70 in men and 5.76 in women).

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A qualitative methodology was used. The following elements are part of the methodology:

Problematization. We started with basic questions, questioning reality as established (Freire, 1970) to make an analysis of the educational phenomenon. In this case, of Transdisciplinarity in the subject of History. Archival research was conducted too. The main research instrument and techniques used were based on educational interventions as field research (Márquez Duarte, 2019). Transdisciplinarity is considered a key element in addressing decoloniality. In Mexico, colonial content is approached through fragmented knowledge across disciplines or subjects, which limits students' perspectives, as they only encounter these topics within the scope of History. Moreover, these topics are analyzed superficially in the free textbooks, without fostering critical thinking or encouraging deeper reflection. The following dimensions of Transdisciplinarity were considered for deciding what data we needed to gather through the fieldwork:

Prior knowledge. What do you understand about these concepts: Transdisciplinarity, History, among others?

Expressions of the educational phenomenon. How is Transdisciplinarity conducted or lived in school, is it possible to apply it? It is worth mentioning that research techniques were used such as observation (ten direct non-participant observations), interview (six, structured interviews). It should be noted that at the time of conducting interviews, the students became annoyed and ignored), survey (eight questionnaires) and focus groups (19 groups. This research technique was implemented by replacing the interviews, since it contemplated a greater number of participants, who were considered excluded). To collect data from teachers, direct-non-participant observation and a survey were used, through a questionnaire with open questions.

Interpretative dimension. Why conduct transdisciplinarity in school? The purpose of the application of the concept in reality for the purposes of educational transformation is raised.

Comprehensive initiation to the phenomenon and practicality. How can I practice transdisciplinarity from critical thinking in school and through which strategies, techniques, didactics, instruments? The necessary elements for its application and development are contemplated.

Design of the improvement plan towards transformation in practice. In what or with what topics can I contribute to the construction of a proposal for educational improvement with transdisciplinarity in History in the school. Along with pertinent formative concepts and topics? This section establishes what is a priority and what is necessary to be considered in order to address the educational phenomenon.

The results of this study show a complex, articulated, dynamic and directional relationship between the context – school, management, regulations – teachers, students, plans and programs, representations and social practices. It is expressed that the spaces that students dislike are the classrooms and those of greater attention are sports fields and gardens. The school is conceived by the student in a comparative duality: big or small, pretty or ugly, where recess is of utmost importance for emotional stability – if there are two recesses it is excellent.

For students (Informants of focus groups 1 to 13) the spaces they like the least are the classrooms – spaces in which they spend more time during the school day – in addition specific classes such as Mathematics and History were mentioned. Another place that they dislike are the restrooms, since in schools they are usually dirty and in poor condition. On the contrary, the spaces they like the most are open learning environments such as basketball courts and gardens. They mentioned that they felt free to shout, run or play without being disturbed. What students are most looking for, regardless of the gender to which they belong, are spaces for conversation or play.

The issue of school's exits also annoys them. They want to end the school day earlier for various reasons, for example, some teenagers work in block factories or in agricultural fields. The break is not enough for the activities they want to carry out, such as: eating, talking with classmates, since, in adolescence there is a concern for social affirmation (Krauskopf, 2010). The students also consider that physical education schedule should be expanded further, since it is part of the needs that arise from hormonal changes in adolescence (Informants from focus groups 1–13).

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In teenagers the concept of "Student" is not clear, they believe that "it is the one who attends school" and "learns", most consider themselves students at specific times depending on their activities -to do or not to do homework-, the purposes of being a student are varied, they project themselves into the future with a sense of need and responsibility. There is confusion about the meaning of being a student, it is considered that a student is one who attends school, who learns and "acquires" knowledge. However, an important group of students did not know what a student is (Focus group informants of 14,16,17,19). But, when asked if they considered themselves students, the majority answered yes, although they did not have a clear and built concept of what a student is. The minority who answered no, commented "Sometimes I am, but no, I don't go to class and I don't do all the homework" (Informant 95).

According to informants, among the characteristics of a good student are: attendance, academic average, discipline, responsibility, respect and fulfillment of the assigned tasks. On the contrary, the characteristics mentioned of a bad student were: lack of attendance, lack of interest, lack of respect, and not doing the assigned tasks and activities. Also, it was common to mention names of classmates when asking the question about the characteristics of a good and a bad student.

In addition, there is no concept of history in students due to ignorance, devaluation and prejudices about the term. Most do not consider it useful, since they assure "this subject is obsolete". The learning and teaching of history is attributed by the students. In some cases to the student in particular and in others to the teacher, establishing a strong and significant relationship between them. On the other hand, the concept of history for students is unknown, is devalued and prejudices are given towards the term. They mention that history is a subject where past events are talked about; wars, revolutions and the formation of Mexico are discussed. As an example, some students pointed out that "when you study history, you don't have a job" (Informant 95). For most of them, history is not useful, it is obsolete. They comment "They should not even give us history anymore because that is useless" (Informant 110). However, a minority considered history as important, since they could compare the time between the past and the present, and above all to understand "Mexico" as it is now (Informants 97, 99, 105).

Another issue that was discussed by informants is that students attribute the learning and teaching of history to the emotional state of the teacher and the tasks assigned by him/her. Teachers use traditional teaching methods such as transcribing the textbook into the notebook, dictations and making summaries. They also attribute learning to students, highlighting the problems of disinterest and lack of attendance. Moreover, a strong significant relationship between teachers and students was identified. What students like for the learning of this subject is that the teacher explains showing an attitude of joy and interest. However, some students mentioned not understanding when the teacher talks about history. On the other hand, what they do not like for learning the subject is reading, dictation, transcriptions, and being yelled at and scolded by the teacher (Informants of focus groups from 14-19). Finally, among the recommendations for teaching and learning History in *Secundaria* were patience, the use of technological resources such as the projector or computer, short videos, comic strips, newspapers and albums, timelines, and models (Informants 138-142).

Regarding the teaching methods and dynamics, students shared that they would like more use of visual resources such as videos, films and the making of models. On the contrary, what they do not like are the negative emotions expressed by the teacher when teaching history, such as anger, yelling, scolding. They also dislike the assignment of summaries for evaluation and the continuous transcription of the book to the notebook, among others (Focus group informants from 14-19). Likewise, learning obstacles are attributed to students by teachers due to the lack of class attendance, disinterest, not doing homework. Teachers commented "they do not know how to read, they never do homework, they do not want to work, it seems that you are alone as a teacher" (Informant 140). It was also mentioned that students show rejection of social sciences, arguing that subjects such as mathematics or physics are valued more.

The teachers also consider it important that the teaching of history contributes to the understanding of the current world. They believe that it is the solution to current problems, the participation of students in the subject of history was also mentioned. The teachers of this subject show a pedagogical discourse based on inclusion and cooperative participation, and that at the time of educational practice -praxis-, their appreciation is diffuse -it goes astray-

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(Informants 138–146). The mastery of the contents by teachers is usually fluid, however, they show confusion in terms such as “capitalism” and “humanism”. The information used during the session is addressed in the textbooks. However, there is no homogeneity in the textbooks they use in different schools, since they work with different editions, plans and programs, based on the official educational reforms: Some use the ones for 2006, some others the 2011 ones, or the 2017 ones. Some others use the Alternative Plan of Section XVIII of the teacher's union.

Proposal for Intervention

The educational intervention proposal was developed from in-person fieldwork by observation during the month of December 2019 and the implementation in the month of January 2020 at the “Melchor Ocampo” school, located in Zacapu, Michoacán, during the 2019–2020 school year, with the groups: 3°A, 2°A and 3°B, morning shift.

The initial purposes of the proposal contemplate the creation of a welcoming environment for teaching and learning of the subject at this educational level. As well as the promotion of an environment of teacher-student trust, which is based on respect and accompaniment to strengthen knowledge, recognition, the appreciation of meanings, practices and the application of didactic strategies that respond to the context of the student.

Secondary education in Mexico presents limitations, biases, and ideological content that follow a colonizing perspective, showing political, economic, and social domination through the exploitation of resources and the imposition of its culture, institutions, and values. In the History subject, European historical periods are addressed, with a limited space dedicated to the analysis of the cultural resistance of Indigenous peoples, social movements, and the recovery of Indigenous knowledge.

In addition, it is important to develop aptitudes, skills, abilities and competencies in students in order to contribute to the formation of thinking, reflective, emancipated, autonomous, critical individuals, and finally to evaluate the proposal in three phases: diagnostic (initial or basic knowledge about the subject of study), continuous (which is applied in the development or process of the study) and final (as its name indicates, it is carried out at the end of the study), with the singularities of self-evaluation (self-evaluation, of me, myself), co-evaluation (evaluation of another person towards me) and hetero-evaluation (the one carried out by the teacher towards the students).

Thematic Axes of the Proposal

By creating thematic axes we propose to conduct history teaching from a perspective as part of Latin American decolonization (Dussel, 1990). The thematic axes are presented in four blocks: “Transdisciplinary History”, “The Student's Cosmovision”, “From the Zacapu Region to Latin America” and “From Latin American Decolonization to the Rest of the World”, each block was carried out under competencies, contents, transdisciplinary learning and decolonization, and contemplated in three moments by didactic sequence, resources and evaluations. For example, in the block “From the Zacapu region to Latin America”, four topics were addressed: Zacapu de Mier, Michoacán de Ocampo, Mexico and Latin America. The competencies to be developed were argumentation of the chosen problems from a historical perspective in three periods: pre-Hispanic, colonial and current, in addition to the understanding of social reality from a delimited geographical context. The conceptual contents addressed in the aforementioned block are: Latin American colonization and decolonization, Zacapu, Michoacán, Latin America, garbage, feminism, migration and the year 1492. The procedural contents included argumentation on problematic points, synthesis of information, criticism of the problems of social reality. The attitudinal contents were: listening to opinions, interest in participating and solidarity towards other students.

To understand these complex concepts, everyday situations are used to explain them first in a familiar context, and later extend them to other areas. In the case of seventh grade, there were limitations regarding the complexity of the concepts, but efforts were focused on helping students identify them and establish connections with their reality. In contrast, in higher grades, these concepts can be addressed in much greater depth, allowing them to be linked to a universal approach from the point of view of problematization.

The possible learning outcomes for students are to acquire a vision of the different regions in the continent to

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establish similarities and differences between them, identify the problems of the continent and appropriate the historical terms within the periods. It is worth mentioning that this block was addressed in three sessions of 60 minutes, through a didactic sequence. As an example: the topic of Zacapu de Mier was started with a technique based on questions, the development of the topic through a comparative reading, and the creation of a poster as a final activity. For this activity the following teaching materials and resources were used: flipcharts, cardboard, color sheets, printed images and paint. The evaluation was diverse, complementary and situated depending on the technique used, where it abounded the identification of elements, writing of texts, interpretation and criticism of the contents.

The following are the results on the transdisciplinary proposal in history of secondary education, Zacapu region. The topics addressed in the session were established through a consensus, the students dimension problems that can be found in many places, despite the fact that the thematic axes were geographically delimited, they even mentioned world problems. They said, "some problems are radical feminists, garbage in Zacapu, teenage pregnancy in Mexico and why we are the first place in the world on this issue (Student 1 of 3rd grade), or overpopulation in Asia, among others."

The diagnostic evaluation included the performance of learning styles tests and personality tests on students. In regards to learning styles, the kinesthetic learning style predominated. Based on the results of the personality test of Myers-Briggs it is pointed out that, in the high school students participating in the study, diplomatic and sentinel personalities abound. Diplomats have a focus on human relationships, empathy and harmony; they value cooperation and seek to understand and help others. While sentinels focus on security, stability and order. They are practical, responsible, and tend to be pillars in their communities. They value tradition and structure.

It is also worth mentioning that the students were asked for an initial narrative on: How and what had they learned in the subject of history in the previous school cycles? An activity that was carried out by 23 students from 3° A, 26 students from 3° B and 24 students from 2° A. In the initial conduction of the activity, the teacher mentioned "And be careful that you say that you do not like History, we had already talked with you that the teacher-intern would come". Thus, the students had already received instructions and that had an impact on the narratives, since they expressed great interest in history that was not appreciated during the observation. In general, summaries, explanations by teachers, readings, transcriptions, models, exhibitions are mentioned, some students copied syllabuses from textbooks, they even mentioned that there were topics that they already knew from elementary school.

Block 1. Transdisciplinary History

The students were asked to carry out research on history, its characteristics and the sciences that are related to it. They were asked to research in digital repositories such as Redalyc, Dialnet, Scopus, among others. When reviewing the activity, few students had heeded the indications, students of 2A expressed their interest because they said "I did not know that there were more search engines than Google". This task was reported by 17 students from 3A, 24 from 3B and 26 from 2A.

In addition, a brainstorming session was carried out using questions about the narrative, it is worth mentioning that few students participated and the others kept their eyes fixed on the teacher intern. They mentioned: "We don't have confidence and I'm shy" (Student 10-2° A) "We're very embarrassed" (Student 13-2° A). Afterwards, an explanation was made about the different types of history and when asked for their opinions, the students in some cases refused to participate.

To end the first block, the students shared their general opinions, which included, that they were getting to know different ways of learning history, different ways of doing activities and tasks. They highlighted their rejection to write a lot, they requested simple explanations on the topics, assigning an important part of likeness for the subject of history based on the way of explanation of the teacher intern. They even mentioned some techniques that they would like to apply like "The traffic light of history". They also expressed their dislike with the tasks previously assigned by the teacher.

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The activity called "True and False" was carried out in the school groups and the students were read different phrases from which they had to determine their true character and thus be placed on the left or right side of the room, as appropriate. Phrases such as "Ideas are part of the (political) superstructure", "The historical structure is when there are big changes (historiography)", "Keynesianism is when free education and health services (geopolitics) are granted" were read. These concepts were initially addressed with simple exercises that allowed students to identify the fundamentals of each one. Later, as the topics were developed, they could be analyzed and considered from different interpretations.

The students expressed that they liked the activities, because they laughed when they were located somewhere, they also showed attention to the place where the teacher intern was located. They usually followed their groups of friends, but some students defended their position, even if they were the only ones in the place, arguing "I believe this because I have known it" (Student 3-3° A), "I believe that time does change, it is relative" (Student 7-2° A). During the development of the activity, when the students were asked why they chose that place, they argued their decision mostly based on previous knowledge, they also mentioned "You just told us" (Student 4-3° A).

Continuous evaluation is essential in any education process, especially because it allows us to ratify or reorient the approaches initially established in the proposal. A first exam was applied with open and closed questions as part of this type of evaluation, in which students were provoked to self-explain, they commented and shared whether or not they agreed with the answers of their classmates with phrases such as "That's not capitalism, that's money" (Student of 25-3° B). "If it says community, it is communism" (9-2° A student). There was also individual attention with some students because they said "Tell me if there, it's the letter J or the A" (Student of 28-3° A).

Block 2. The student's cosmovision

In this study it was considered relevant to know the student's cosmovision on the subject of history, in order to interpret and understand the vision and meaning of the world from their perspective.

An activity on the cosmovision was carried out in the proposal, in which the 3 groups obtained an average of 9.1 in the closed questions, while in the open questions they showed an abundance of opinions about AuthaGraph "It is a new map that looks very old and poorly printed and that is why it has that shape" (Student 28, 1, 12, 30 3° B). They show an affinity for the Mercator map since it is the one they have spent most of their school time with, they also commented "It is interesting to know that there is not only one way to see the world" (Student 3-3° A). Even the teacher of the history subject said "I want to know why I did not know that map, I had never seen it". Most of the students expressed confusion between wealth and power (Students 7, 15, 4, 9 2° A).

The proposal for educational intervention also contemplated the conduction of a discussion forum that addressed several points. Above all, how were the classes given by the teacher intern perceived? The professor of the subject commented "She talks about planning and even mentions that it does not come out as it should be sometimes, but the best experience she can have is to be here with you in the real, live practice".

Other comments also were shared like: "I like the way the teacher intern teaches us because she catches our attention and is not a very bad teacher, she makes us do and asks us things" (Student 1-2° A) "You wake us up more and talk to us with many details and you also bring signs so that it is understandable" (Student 4-3° A); "We have learned things that we did not know" (Student 27-2° A); "I was struck by the types of learning, because I think my group is very smart but perhaps we were stuck in that we only had to read, although many learn by listening" (Student 15-3° B).

The educational intervention, through practical activities, discussions, and the use of resources like the AuthaGraph, has a direct impact on the development of a more critical and expansive worldview among the students. It allows them to reflect on world representations, question traditional historical paradigms, and recognize that history can be viewed from multiple perspectives. Additionally, it fosters critical and participatory thinking, which is crucial for students to understand not only historical facts but also the power, economic, and cultural dynamics underlying them. This not only enhances their understanding of history but also enables them to take an active and critical stance in

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interpreting their surroundings and the world at large.

Block 3. From the Zacapu region to Latin America

In general, the 2A group maintained a receptive attitude and a lot of acceptance to the work, while the 3A and 3B groups showed laziness. However, after the introductory activity to the topics, games and individual counseling were carried out that improved these attitudes. They were asked for a poster that addressed the issue of garbage, which was made and submitted by 13 people from 3A, 16 in the 3B group and 21 students in the 2nd grade group.

The creation of posters for thematic exhibition purposes was also requested to be carried out, especially as a didactic means of graphic, schematic representation, to address the problem of garbage. Most of the posters considered the pre-Columbian era, the colonial era and the current era, only some students considered the future.

They also showed a clear differentiation between capitalism and communism, considering consumerism as an intervention of capitalism. They even mentioned that they did not believe they were part of the large production of garbage, but that the factories are the ones that produce it mostly. "It's just that, if I recycle, but the others don't, it doesn't do much good, but my mom doesn't understand that" (Student 17-3°B).

The students also wrote letters for pedagogical analogy purposes. In this sense, a letter addressed to a female historical figure contemplating the theme of feminism was requested as a closing activity of the block. The following students submitted the letters: 18 students in 2°A group, 12 in 3°B and 17 in 3°A.

In most of the letters, significant empathy was shown about the life and work of the female figures by the students. They commented on our current times and on how their contributions were useful today. A good learning exercise was carried out situated in reality towards the past time. An example of this is the letter from one of the participating students to Malinche: "The little I know about you seems to me something sad... You must have suffered a lot before the conquest as well as after. If only you knew how everything has changed..." (Student 35-3°B).

Block 4. From Latin American decolonization to the rest of the world

Addressing this issue was complex and for this purpose the "true and false" activity was carried out again, now focused on migration in Latin America. The students of 3rd grade did not participate during the explanation of the game, but demanded to begin the activity right away. In this activity, three students volunteered and mentioned the phrases: "Socialism cares about people" (Student 4-3°A), "Chains are not only material" (Student 3-3°A), "Capitalism expresses private property" (Student 15-3°A). In the 3rd grade B group, there was only one volunteer: "I want to know if all the phrases you told us today are true, because I believe they are" (Student 8-3°B).

Games also served as a contribution to knowledge, questions, diversity, learning and feedback to the proposal approach. In this case, a game was played based on the search for clues about neoliberalism and decolonization, in which arithmetic and writing operations were carried out.

The closing activities were carried out in two sessions. In the first of them, a co-evaluation was carried out among the students and an evaluation of the teacher intern, showing the students rushed through the 20 minutes granted for each test and expressing disagreement for being a short time. On the other hand, transparency was practiced because they had to show their responses with everyone.

In the second session, a response was given to a self-evaluation and an exam on learned content, where the time allocated was not enough and time had to be taken from other subjects. In these evaluations the students were more hurried than in the previous activities, but it is worth mentioning that they were willing to carry them out and above all to participate. The main results obtained in the evaluations show that most of the students modified their conception of history, acquiring new ways of learning it, linked classes with reality, reflected on history as present and future, as well as the relationship of the subject with other subjects: Spanish, mathematics, geography, English, among others, in addition to knowing different representations of the world and associated decolonization with words like: liberation,

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uprising, reconstruction, revolution and independence.

Transdisciplinarity in the learning of history: final considerations.

For the design, application and evaluation of the proposal, agreements had to be generated between the teachers involved and the students, thus generating a support network that allowed the development of the intervention proposal. As a possible way of teaching and learning history, it was considered relevant to address the contents through a transdisciplinary methodology of reality in secondary education. Since the students managed to build knowledge and share proposals through different areas, it began with a rejection of the methodology. However, it continued with a process of identification of contents and activities addressed in other plans, to finally understand reality as a whole. In this sense, we must work in a different way. When approaching History from a Transdisciplinary approach, we start, from the concrete, by considering reality and its problems, then, these problems are converted into problematic nuclei, in which the realities of the students are made visible and recognized, then those are addressed. Problems from different disciplines of knowledge and learning with the purpose of understanding and transforming.

Within the necessary conditions to approach history in a transdisciplinary way, it is first considered to have a cosmivision that analyzes and questions the Eurocentrism that is present in the plans and programs for basic education. As a result of the processes of colonization we need to think of the possibility of an alternative world within other worlds, in which we participate, resist and build autonomy. It is also important to have the freedom to establish a collaborative work plan between students and the teacher that allows adjustments to be made when they are considered necessary. There are always situations that prevent us, in one way or another, from following the planning.

Among the results and evaluations obtained, it stands out that most of the students modified their conception of history, acquiring new forms in their learning, linked the classes with the current reality, promoting the reflection of history as present and future, relating it through various subjects: Spanish, mathematics, geography, English, among others, in addition to knowing different representations of the world and associated decolonization with words such as: liberation, uprising, reconstruction, revolution and independence. To think about how an educational proposal for history can be developed after this exercise is a complex issue, which apparently has no single answer. In addition, this proposal was developed with great determination and support by students and the tenured teacher, who had an initial moment of uncertainty. This was enhanced to generate an environment of recognition of the senses and practices in the subject of history with a transdisciplinary methodology and a process of decolonization.

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