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Panamerican University, Mexico
Lina Higuera-Rodríguez,
University of Granada, Spain

*CORRESPONDENCE

Susana Fernández-Larragueta
✉ sfernan@ual.es

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Training university teachers in an urban context to educate future teachers in rural Mayan environments: an international cooperation project

Susana Fernández-Larragueta*, María José Martínez-Martínez
and Johana Muñoz-López

Department of Education, University of Almería, Almería, Spain

This article is part of an International Cooperation Project funded by the Andalusian Agency for Development Cooperation of the Junta de Andalucía, Spain in collaboration with the Mayan Technological Institute (ITMES) in San Juan de Chamelco-Cobán at the University of San Carlos de Guatemala: 2018UC006 “*Maestras y maestros para niñas y niños mayas en zonas rurales diseminadas: formando los formadores.*” (*Teachers for Mayan girls and boys in remote rural areas: training the trainers*). This cooperation project arose from the need of the university unit attached to the University of San Carlos to develop a university degree program in teacher training in bilingual infant and primary education that would consider the characteristics of the communities these new professionals would impact rural Mayan communities. In this sense, ITMES is particularly interesting for three reasons: (1) the unit is attached to the University of San Carlos, the only public university in Guatemala, as a response to the Guatemalan Constitution that indicates the need for a Mayan University; (2) the unit’s distinctive development for the formation and empowerment of Mayan culture; and (3) because its organizational structure combines receiving face-to-face instruction on weekends in the urban campus of San Juan de Chamelco-Cobán, while during the week, students carry out their personal, professional and educational activities in rural areas. Thus, a double dimension has been addressed through this international cooperation project, which has the complex task of training professionals who will work with children in rural areas but who will be trained in San Juan de Chamelco-Cobán, an urban area, the commercial and economic hub of the region, On the one hand, as will be developed further in this article, the selection and initial psycho-pedagogical-curricular training, attention to cultural, gender, and sociological diversity, of university teachers who, in the future, will be entrusted with the implementation and development of a university curriculum in teacher training aimed at and from the inclusion of children from Mayan rural communities. On the other hand, while considering the center’s organizational structure, establishing the fundamental psycho-pedagogical and organizational principles with an inclusive curricular plan will allow the training of teachers whose actions will be carried out in rural Mayan environments. As a starting hypothesis, we consider that in order to provide quality, responsible and inclusive education to children from rural Mayan environments, and beyond the traditionally technical contents that support the training curriculum legislated by the Guatemalan government, it is necessary to approach this reality by linking vitally constructed knowledge and technical contents, so that they can be formulated and reformulated in a relevant way and thus generate powerful knowledge. Thus,

there arises a necessity to equip a team of professionals, prospective university teachers, who are sensitive to Mayan needs and attention to diversity, with a deep and relevant knowledge of psycho-pedagogical and curricular aspects, and with a sociological contextual knowledge of the needs of the post-modern, neoliberal and digital world. To this end, our methodology encompasses three levels: (a) the selection of a group of professionals to be trained; (b) contextual analysis of the training needs of the selected group of professionals, thereby facilitating the adaptation of the training program to their individual needs and circumstances; and (c) semi-structured and in-depth interviews with seven female and nine male leaders of Mayan communities. These leaders were selected using a non-probabilistic intentional sampling method, which was collaboratively determined with the ITMES team. During these interactions, we extensively explored their perspectives on Mayan identity, as well as their perceptions of the educational system and its impact on the formation of their identity as a person and as Mayans. Through the integration of these three components, we have obtained invaluable insights into (a) the evolving training needs of the instructional team and (b) the socio-educational pressures experienced by Mayan women, and the significance of “Mayan being” as an aspect of identity. This emergent data has informed the development of a comprehensive psycho-pedagogical, curricular and sociological training plan that underpins the content of this article. Thus, for the selection of the training team, the following aspects were considered: knowledge of Mayan culture and experience in rural Mayan contexts and relationship with the educational-school world. The selection resulted in a total of 29 candidates, 18 women and 11 men, with whom the training was carried out. Regarding the initial training plan for university teachers, and after the contextual analysis, we consider it necessary to correlate three dimensions: (1) the psycho-pedagogical nature of the technical dimension. In this sense, the plan has addressed aspects related to the conceptualization of teaching, and of learning and the development of the fundamental aspects of the curriculum; (2) the idiosyncratic dimension of rural Mayan communities, beyond being a transversal axis, has also been incorporated into the plan. We incorporated analyses related to gender, in general, and gender in schools, making a triangulation with the emerging knowledge from the interviews and the conceptualization of inclusion and Mayan identity as the backbone of a quality education; and (3) the post-modern sociological dimension of today’s societies. Finally, a flexible and emerging training plan of the Mayan idiosyncrasy has been designed that allows its applicability in other similar sociological contexts, adapting the plan to the individual training needs of each context.

KEYWORDS

international and comparative education, teacher training and developing, intercultural education, Mayan culture, gender and coeducation

1. Introduction

The Universal Declaration of Human Rights (UDHR) ([Declaración Universal de Derechos Humanos, 1948](#)) was a milestone in history promulgated by the United Nations (UN) to vindicate the rights and opportunities of all people without discrimination based on socioeconomic, gender, disability, or sexual orientation grounds ([Azorín-Abellán et al., 2017](#)). Among the backbones of the UDHR is Article 26, which makes the right to education explicit since education is considered a practice of freedom ([Freire, 2012](#)) to achieve the emancipation of all people to mitigate the oppression of Human Rights by the hegemonic powers in some geographical areas.

Thus, the right to education has become one of the primary objectives of the UN, which it continually promotes as a way to break

down socioeconomic and socio-cultural barriers that limit children’s access to educational institutions in some countries, calling for inclusive and compensatory educational policies that favor free primary education.

Thus, the new Sustainable Development Goals (SDGs) of the 2030 Agenda continue to prioritize education in the fourth goal: *Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all*. The aim is to continually remind UN member countries that the UDHR must be the guiding document on which international and national educational policy-making must be based to safeguard the right to education for all girls and boys.

However, the international demands of the UN in the management of educational policies are not always well received, as they are, among other factors, sometimes conditioned by the distribution of economic

resources, which hinder their achievement. A clear example of this is the country of Guatemala. The Committee on the Rights of the Child is concerned about the lack of adequate educational infrastructure and human and technical resources to meet the demand for education and the low school retention rate in general, as well as the exclusion of Mayan, Garifuna, and Xinca children with regards to the availability of education services adapted to their culture, history and languages (*Informe del Comité de los Derechos del Niño, 2010*). A discriminatory situation that has continued since the “scorched earth” policy of 1980 promoted by Cano-Contreras et al. (2018) that, even today, as can be seen in the study on Investment in Indigenous Peoples in Guatemala, transcends the political disposition of the State of Guatemala to ensure the constitutional compliance of providing education to all its inhabitants.

Total investment in non-indigenous populations in Guatemala is at 6.5% of GDP. In comparison, for indigenous populations, it is equivalent to 2.2% of GDP (*Informe del Instituto Centroamericano de Estudios Fiscales ICEFI, 2017*). The historical inequality experienced by indigenous people is made clear and visible in the chronic impoverishment of the same. In this regard, when we speak in *per capita* terms, indigenous people in Guatemala are at a considerable and growing disadvantage. Thus, for each *ladino* or *mestizo*, the Guatemalan State invests Q 6.87 per day –1 Quetzal equals 0.13 euros, as of September 2022, while for each indigenous person, the amount is Q3.09, a ratio of two to one. Poverty and public spending associated with indigenous people are inversely related: being the poorest and majority population group, indigenous people have a lower priority regarding public spending.

This lower priority implies significant socio-cultural discrimination since, as concluded by the UNESCO report of 2017, elaborated from the data handled and provided by the National Quality of Life Survey, more than 70% of the population of Guatemala lives in rural areas and is below the poverty line; 63.2% of the population is indigenous, and 54% of households are headed by young, single women, of whom around 43% cannot read or write and, of these, 12.32% are between the ages of 15 and 19 (*Informe de seguimiento de la UNESCO en la Educación en el Mundo, 2017*). Thus, poverty, coupled with rurality, low educational coverage, migration, working in the home and disinterest, are factors that significantly impact the more than 3 million indigenous children and adolescents. Of these, at least 1.6 million have not been enrolled in school at any level, which is equivalent to the exclusion of 53.2%, taking into consideration enrollment and net coverage.

In summary, taking into account the figures that describe the social and educational reality in this context, we have taken a critical look at the numerous obstacles that prevent girls and boys from exercising their right to study and benefit from education: poverty, geographic isolation and belonging to a minority; obstacles that increase when, for example, in the case of girls, they suffer gender violence, early pregnancies and other traditional attitudes related to the role they are obligated to fulfill in the space of their communities. These references notwithstanding, we are aware that the relationship between indigenous women, poverty, and school dropout rates is a constant that must be addressed and depends on the support of solid educational institutions that ensure the right to equitable and quality education (Fernández-Sierra, 2002, 2011; Bolívar, 2012; Belavi and Murillo, 2020). One of the main elements for support is teacher training, a topic on which our Research Group HUM- 413 “Counseling, Improvement, and Quality of Teaching” has been

working for more than a decade from different perspectives and which has become one of the goals of Goal 4 of the 2030 Agenda, specifically Subsection 4.c, which calls for the international collaboration of teachers from other countries in favor of inclusive education to guarantee the right to education for all children.

Thereby, the purpose of undertaking this collaborative project at the Instituto Tecnológico Maya de Alta Verapaz is for future teachers to learn about the context of indigenous people living in rural areas and their needs with the aim of providing indigenous youth with an educational opportunity based on the priority aspects established by the Andalusian Cooperation and Development Plan: the extension of knowledge, the overcoming of superstitions that enslave people, the reduction of inequality, gender equity and respect for the cultural and environmental diversity of the rural context in which they develop. It also aims to guide boys and girls to overcome the obstacles that constrain their role within the indigenous communities and thus become active and free people who participate fully in decision-making processes. To this end, we have launched the in-depth study of psycho-pedagogical and curricular studies and contextual analysis of the Mayan cosmovision to develop suitable educational institutions that meet the communities’ needs. They aim to play an active role in making decisions that affect their lives and, thus, promote their participation in the rural community so that they become the protagonists in the struggle for their rights.

While it is true that several causes lead to the inequality-poverty-illiteracy trinomial, from the project’s perspective, we limit the analysis to issues related to the educational offering available to Mayan children in the department of Alta Verapaz. As highlighted in the previous sections, a high percentage of students in this space, mainly girls, have an increasingly ephemeral link with the educational system. There are several causes for this; on the one hand, as we have been arguing, the inequalities in income distribution destined to cover the needs of Indigenous Peoples; and on the other, as a consequence of the inoperability of schools as institutions from which to strengthen the relationship between students and the environment in which their community actions are carried out and, thus, to respond to the issues and enigmas that arise in the heart of this population nucleus. Schools, in this context, are understood as spaces detached from the daily life of these indigenous communities, in which, as we have previously pointed out, children, mainly girls, from a very early age move away from the school scenario. Therefore, in order to reduce the social, cultural, economic and educational gap between the *ladino* and indigenous populations and between rural and urban areas in Guatemala, it is necessary to have solid school institutions with teachers who are sensitive to the reality of the socio-cultural and environmental characteristics and needs of these children, to guarantee a quality and inclusive education that promotes learning opportunities.

Based on these data and considering the particularities and cultural diversity of the indigenous communities of Alta Verapaz, our proposal has focused on the education and training of people sensitized to the socio-cultural and environmental characteristics of the rural and Mayan context with a dual purpose: on the one hand, to assume the organization and delivery of a university curriculum for teacher training for Mayan children, for which the University of Almería (UAL), through this project, has supported their training and advice; and, on the other hand, through the study of rural Mayan communities with Mayan leaders, support their training and advice. We have approached, as rigorously as possible, the socially relevant problems that contribute, on the one hand,

to school dropout and, on the other hand, to the poor school retention of girls and boys who, as the initial statistical data show, have had no contact with the school institution or have dropped out.

Thus, through this project, we have promoted, through the training of teachers specialized in Mayan community education, the involvement of education professionals whose purpose is to improve the living conditions of their children, promoting the enrolment and permanence in the educational system of the girls and boys of the department of Alta Verapaz. Likewise, we have involved people from these communities who are knowledgeable about the Mayan culture to actively participate in the creation of the cultural contents of the curricula, presenting their proposals based on the principles and needs of the socio-cultural and environmental contexts in which the project will be developed.

For this to be possible, it is necessary to adequately train teachers in these areas, reflecting on the extent to which initial teacher training programs can respond to the challenges and needs that teachers will face in their professional practice. Due to the technocratic epistemic-pedagogical assumptions that sustain and the inadequacy of such training plans (Torres-Santomé, 2019), it is a priority to rethink the training of university professors who train future teachers specialized in rural Mayan communities, so that they, questioning the validity of the social, anthropological and cultural influences that they have internalized during their socialization process, can transcend their vision of their own culture. They will be able to transcend their technical vision and role as executors of a pre-established curriculum and, in a cascading mechanism, contribute to the access and permanence of Mayan children in school and the development of their own cultural identity. They can also contribute to improving school retention, helping them become agents of participation and change in their communities, claiming their rights and playing an active role in making decisions that affect their lives.

Thus, in this article, we present the work developed for the selection and training of a team of trainers of future teachers specialized in rural Mayan environments carried out within the framework of an International Cooperation Project financed by the Andalusian Agency for International Cooperation and Development (AACID). This training plan, whose ultimate purpose is for schools to become spaces that offer young Mayan men and women real educational opportunities, has materialized in several dimensions: at the psycho-pedagogical and curricular level through the discovery and revaluation of Mayan culture, particularly highlighting its linguistic diversity as a priority element in their cultural identity; in the deep and specialized knowledge of the rural communities where future teachers will develop their work; and also, in a broader and more global sense, in the knowledge of the Mayan language and culture. In a broader and more global sense, in the knowledge of the post-modern, neoliberal and digital sociological context that characterizes and affects contemporary societies, beyond the contextual particularities of each community and, finally, and prominently, in the issues associated with gender, given the double vulnerability of Mayan girls in these contexts.

2. Materials and methods

This work is part of an International Cooperation Project funded by the Andalusian Agency for Development Cooperation of the Andalusian Government (AACID) between the University of Almería

(UAL) and the Instituto Tecnológico Maya (ITMES) entitled “Teachers for Mayan girls and boys in remote rural areas: training the trainers.” The primary purpose of this project was to train a mixed team of trainers, providing them with pedagogical skills to design and implement a curriculum contextualized in the Mayan idiosyncrasy so that they could, in turn, prepare teachers committed to rural education in Alta Verapaz, the context of the project, and who would be especially sensitive to the most vulnerable female group. We have responded to this objective by addressing its dual dimension: on the one hand, and an aspect of development in this article. The aim of this article is the selection and initial psycho-pedagogical-curricular, cultural and gender diversity and sociological training of university teachers who, in the future, will be responsible for the implementation and development of this university curriculum in teacher training oriented to and based on the inclusion of children in rural Mayan communities. Conversely, in collaboration with this chosen team, the core psycho-pedagogical and organizational principles of an inclusive university curriculum for teachers training in rural Mayan environments.

As a cooperation project, the methodology was founded on the decision-making generated to assume the realization of the two fundamental results explained. Thus, we have positioned ourselves methodologically in the naturalistic and interpretative research paradigm (Guba, 2008) since our interest has been to inquire into the holistic, dynamic and contextualized reality and to understand and interpret it through the meanings shared and elaborated by the people who are part of it (Guba and Lincoln, 1994) since only through the understanding of social and/or educational phenomena is it possible to carry out successful actions that can have an impact, producing profound changes, in the contexts and the individuals involved; and always from the constant negotiation with the participants, both in the development of cooperation through the collection and triangulation of information and in the decision-making to be carried out, which has allowed maintaining the ethics of the research. This positioning has allowed us to consider the subjective representations and perspectives of the participants, as well as the complexity that characterizes every educational act.

In accordance with such postulates, we have proceeded methodologically in three levels to select professionals and build a training plan appropriate to their psycho-pedagogical-curricular needs, attention to cultural and gender diversity and sociological. Firstly, conduct a documentary analysis for the selection of the personnel in training to select the best team that, in the future, would carry out the training of male and female teachers. In this sense, categories and criteria for selecting the team of future trainers were developed jointly by the UAL and ITMES managers, taking into account as criteria the knowledge of Mayan culture, the integration of women and the technical-pedagogical dimension. Likewise, their training needs were analyzed and adapted to the knowledge (Pérez-Gómez, 2010) that this group requires. Secondly, conduct semi-structured and in-depth interviews following a selection process intentional non-probability sampling. A total of 16 people, nine male Mayan leaders and seven female Mayan leaders engaged in their rural communities were selected. Their participation was made feasible through collaboration with the ITMES team, who also assisted with Mayan language translation. Through semi-structured and in-depth interviews we have obtained information that allows us to “understand the perspectives that the informants have regarding their lives, experiences or situations, as they express them in their own words” (Taylor and

Bogdan, 2010, p. 101). This approach allows for the comprehension of certain aspects inherent to the Mayan cosmovision through these stories, providing insights into the gender dimension within the Mayan real, and analyze the effect that the school system has had on the construction of their identity. This understanding aids in acknowledging and incorporating these facets into the training curriculum. Thirdly, develop a training plan taking into account the above points. In this development, and through a process of tracing emerging themes and categorization (Fernández-Sierra and Fernández-Larragueta, 2013), we analyzed, on the one hand, the data obtained in the documentary analysis of the selected (Item 1) and, on the other, the data obtained from semi-structured and in-depth interviews and informal conversations (Item 2), to identify, assess and include the perspectives of the Mayan people concerning gender, their identity, culture, and their socio-educational needs in the training plan.

3. Results and discussion

Next, we present the results that have emerged in the framework of the project development related to the selection and training of future university teachers in rural Mayan contexts, namely: the formation of a team of trainers knowledgeable about the socio-cultural and environmental contexts of the Mayan Communities and the design of a pedagogical-cultural training plan and digital resources for the trainers of teachers in rural Mayan Communities.

3.1. Formation of a team of trainers who are knowledgeable about the socio-cultural and environmental contexts of the Mayan communities

In order to successfully form a solid team of future trainers involved in the educational task they will be entrusted with, that is, to train future teachers who will work in rural Mayan contexts, it was necessary to carry out a deliberate selection process defined by various criteria to identify and select candidates with the necessary professional profile for the training. The initial results were not only determined by the proposal of candidates but also by the elaboration of a list of categories agreed upon by the teams involved in the project, which facilitated their selection and which we present below:

- a) The team of trainers should be made up of at least 50% women. Considering the central value that the gender dimension occupies in the project, not only from a pedagogical perspective, it was established as an indispensable criterion to form a team through which an equal representation of both genders was guaranteed, thus promoting opportunities in the work and professional performance of women in academic and scientific careers, given their particular vulnerability in the context, as well as access to the university faculty, where their presence is lower than at other educational levels and with respect to their male colleagues.
- b) Candidates must be university graduates with a degree related to the contents of the school curriculum or students in their last year of the Bachelor's Degree in Education. The psycho-pedagogical, curricular, didactic or sociological training of teachers at any educational level is relevant if we focus on these professionals' teaching quality. If we also refer to the profile of university professors of future teachers, they must have deep and relevant knowledge about such training so that they can, in turn, guide and build their educational practice according to the training needs of future teachers. In this regard, it was established as an essential criterion for the candidates pursuing a degree related to Education.
- c) The selection of candidates would be determined by analyzing and evaluating the merits presented in their curriculum vitae (CV), weighted out of 100 points. In the case of graduates, a score of 60 out of 100 points had to be achieved, while in the case of students, the minimum required points were 40. The aspects assessed in the CV submitted were: (a) completion of academic training; (b) teaching and research experience; (c) knowledge of Mayan culture and language; (d) other merits such as mastery of educational ICTs, or participation in civic organizations, associations and/or socio-cultural movements; and (d) interviews to contrast the curriculum submitted and deepen the profile of the candidates and their involvement and commitment to the project. The evaluation of each of the sections was as follows:
 - Academic training: in this section, the candidate is awarded a maximum of 25 points out of 100. In the case of students, the academic record would be appointed a maximum score of 10 points; to have completed, or currently studying for, a degree related to Education, such as a Bachelor's degree in one of the following education-related fields: Pedagogy and Educational Administration, Pedagogy and Curricular Planning, Infant and Preschool Education, Education and Learning, etc. (all valued at a maximum of 10 points); completion of a postgraduate degree in Education (5 points); Doctorate in Education (5 points); and/or accredited permanent or continuous training and development (5 points).
 - Teaching and research experience: this section accounts for a maximum score of 25 points out of 100. Those with preschool/primary, secondary or university teaching experience are awarded 10 points. However, the maximum accrued points possible for teaching experience at the three specified levels was 15 points. Those involved in the field of research or who have participated in research studies and projects are awarded 5 points. Additionally, those with relevant publications in Education receive another 5 points.
 - Knowledge of Mayan Culture and Language: a score of 20 points out of 100 is awarded. Thus, 10 points are given for oral and written proficiency in a Mayan language spoken in the context in which the project will be carried out; 5 points for accredited knowledge of Mayan culture, history and context; and another 5 points for participation in organizations or associations that promote Mayan education and culture.
 - Other merits will be taken into account, such as the mastery of Educational ICTs (3 points); participation in civic organizations, associations and/or socio-cultural movements (4 points) and other activities and knowledge that could contribute significant knowledge and/or experience to the project (3 points).

- Finally, interviews would be conducted to contrast the CVs submitted (awarded a maximum score of 20 out of 100 points). These were used to evaluate the applicants' commitment and involvement with the project and to analyze the candidates' training and educational approach in concordance with the project's objectives.

Based on the abovementioned criteria, the selection of candidates for the training was carried out, resulting in a total of 18 women and 11 men, all with links to the Mayan context, all proceeding from one of the Mayan peoples -Q'eqchi, P'òqomchi, Kaqchiquel, and Achi'- and in the pedagogical or educational-scholastic spectrum. However, beyond this selection, a triangulation process was carried out between the data of the selected candidates and a series of qualitative criteria that, as researchers, we considered necessary to contemplate to form a team that could undergo the pedagogical, sociological and curricular processes contemplated by the project. Thus, the following aspects were also taken into account:

- a) The relevance of context: from knowledge of Mayan culture and language to political and socio-cultural participation.

We believe that, in order to provide quality, responsible and inclusive services to children in rural Mayan environments, teachers must be knowledgeable about this reality to link vitally constructed knowledge and technical content so that relevant learning can be developed (Pérez-Gómez, 2022). In coherence with such considerations, future trainers must also know and understand the socio-educational context in which their students will work so that they can develop contextualized training that contributes to overcoming the current theoretical-practical dissociation in schools and universities (Pérez-Gómez, 2007) and moves away from the dominant reductionist visions and technocratic tradition. Thus, the team of future trainers is made up entirely of people who are knowledgeable and involved in the Mayan reality, its culture and language. Indeed, the team mainly comprises students studying intercultural bilingual education teaching, primary intercultural education with an emphasis on bilingual education, secondary school or language teachers or graduates in intercultural Bilingual Education, and other degrees such as primary intercultural education with an emphasis on bilingual education. In addition, among the most relevant activities presented in their CVs, their interest in Mayan spirituality, sports, art, dance, painting, folklore and Mayan culture, in general, have been predominant.

Indeed, the spheres of culture, politics, economics, or justice are always closely linked to that of education. However, most teachers have been "learning to think and analyze the educational system in a fragmented way, without trying to see the interconnections that exist with other realities outside the school" (Torres-Santomé, 2006, p. 82). In this regard, some authors such as Giroux (2001), through his proposal of teachers as transformative intellectuals, have highlighted the need to directly insert the school institution in the political sphere, promoting the participation and commitment of both students and teachers in the fight against political, economic or socio-cultural injustices. In this sense, he has favorably highlighted the involvement of the team of trainers who have received instruction in, among others, the political and institutional strengthening of the Mayan peoples and their social and economic development, in rural health,

agriculture, sustainability and environmental issues, in the persistence of Mayan culture, in their support and development of productive projects in the community, or the promotion of rural enterprises.

- b) The incorporation of men and women from Mayan communities into the team.

The team of future teachers has shown a high degree of participation, involvement and interest in the development of the project by mainly, but not exclusively, teaching professionals and education students belonging to rural Mayan communities: all future trainers belong to a Mayan people, specifically, seven are P'òqomchi, eighteen are Q'eqchi, one Kaqchiquel, and three Achi'. In this aspect, the need to involve members of the Mayan communities as well as experts in this culture in the project has been met.

- c) The impact of gender on team composition. Weaknesses and strengths.

The need to include and involve women in the team of trainers has been met, with women outnumbering their male colleagues. A total of eighteen women were selected from the twenty-nine candidates. In relation to their professional activity, their relationship with teaching in different fields and levels predominates. On the other hand, the participation of women who, although not dedicated to teaching, nor completed a university education-related degree, have been selected because they are considered women of impact in terms of gender, culture, and the Mayan rural space. Some of their professional activities include working in the field with the *Vamos Adelante* Women's Association and supporting the Ombudsman's Office for Indigenous Women, training women in political participation, specializing in violence against indigenous women and children and/or as *técnico de género* (gender specialist) for cooperatives with women's participation, supporting productive gender projects, working on public policies for women and actions for the prevention of violence and crime against women and girls. This work contrasts with the majority of the remaining team members who do not show particular interest or concern for issues related to gender and gender in schools, a central element of the project and which has been incorporated not only transversally but also as specific content in the training plan.

- d) Training needs related to the theoretical, psycho-pedagogical, curricular and sociological basic knowledge of future trainers of trainers.

Although many of the candidates, 13 are practicing teachers at different educational levels and fields, among the most relevant aspects to have emerged are some critical training needs of future university teachers in technical, psycho-pedagogical, sociological and curricular issues. These needs can be explained if we consider that teacher training programs have traditionally dispensed with reflective processes that place the construction of solid theoretical knowledge that is linked to practice at their center. Instead, they are more inclined towards prescriptive and transmissive training that distances itself from uncertain, singular, dynamic and complex work contexts. Faced with this situation, to respond to the needs posed by the urgency of the classroom, teachers turn to the beliefs, implicit

theories and teaching and learning models unconsciously learned during their school years. Teachers do so without the possibility of contrasting it with the theoretical knowledge acquired during the years of training because, as it is conceived, theory becomes mere rhetoric, only valid for passing exams that are later discarded. For this reason, one of the fundamental qualities or competencies expected of teachers at any educational level is that they become reflective professionals (Schön, 1992), understanding reflection as informed consciousness (Pérez-Gómez et al., 2015), so that they can develop their authority or pedagogical leadership, being able to question their own practices to improve them and seek explanations for the decisions they make in contrast to theoretical and declared knowledge to provoke significant and relevant teaching and learning situations (Torres-Santomé, 2006).

Regarding the gaps found in the initial training completed by the graduates and active teachers, it should be noted that almost half the team, 13 people in total, have not completed their university studies in Education. Furthermore, although some candidates, seven in total, have been selected for their relevance in the professional, social, political, cultural or community sphere of the Mayan rural context, they have not received specific training and/or do not have teaching experience (2 people). Therefore, the training team, although it stands out positively for its involvement in Mayan rural contexts and knowledge of the idiosyncratic characteristics that define the people of these communities, is also characterized by a significant deficiency in terms of curricular, psycho-pedagogical and sociological experience, making it difficult to question the validity of prevailing educational practices and inhibiting possibilities of transformation. Consequently, special consideration has been given to the development of a training plan that will focus, from a critical perspective, on psycho-pedagogical, curricular and sociological issues, to the extent that these contribute to forming a theoretical and formative basis of quality, restoring the intellectual status of the teaching profession.

3.2. Designing and implementing a pedagogical-cultural and digital resources training plan for teacher trainers in rural Mayan communities

After studying the training needs of the team selected, and in order to develop a training plan that would combine the idiosyncrasies of the Mayan community with the contents of an updated education, three dimensions were established around which to develop the proposal: (1) The post-modern sociological dimension of our current societies; (2) the idiosyncratic dimension of rural Mayan communities, gender issues and gender in school; (3) the psycho-pedagogical and curricular dimension.

The training plan has addressed these three dimensions through different blocks: (a) The citizen of the future: what to do, where to start from; (b) the art of teaching and (c) the curriculum. The first two blocks establish the epistemological bases for building practical action. To this end, the level of analysis and reflection has not been limited to the teaching, pedagogical position and degree at the university level but has also had an impact on the postulates and pedagogical principles for the future teacher who will work with boys and girls in Mayan rural environments. In contrast, the third proposed block was

intended to stimulate the theoretical construction of the concept of a curriculum while, at the same time, the team of future trainers, tutored by the team of experts from the University of Almeria, built the curriculum framework for the future education degree for teachers whose professional life would be developed in rural Mayan contexts.

Despite the division into large blocks and the linearity with which we present the training proposal below, it was not conceived in a fragmented manner but instead designed to be eminently open, emergent, consistent with our initial epistemological postulates, which refute the linear or standardized condition of thought development and construction of knowledge. In this sense, the design of the training plan implied that the training actions should be developed from a participatory, active and cooperative pedagogical perspective so as to favor the collaborative construction of knowledge.

3.2.1. Block 1: the citizen of the future: what to do, where to start from

In a more or less explicit way, every educational approach involves formulating a response as to its purpose, the purpose of schools, other educational institutions in general, and educational practice. The problem is that, despite the existence of opposing pedagogical and political positions, the discourse on educational goals has been formulated under a common language, manipulated and emptied of content, which seems to have installed a social consensus, a form of hegemonic common sense that hinders reflection, criticism and examination of the meanings underlying such discourses. In this regard, the first need behind any formative process consists of learning to identify and formulate the appropriate questions so that it is possible to reconstruct an intelligent, ethical, contextualized, critical and argued answer to the educational fact from its origin and necessity. Thus, the first question we have posed responds to the type of citizenship we want in the future, that is, what do we want for the children of today who will be trained by teachers in rural Mayan environments and who, in turn, will be trained by our future trainers of trainers, the university teachers.

Thus, we established a first block and first theme, which addressed the role to be played by the university/school, as an institution at the service of the community, in constructing the citizen of the future. Within this, two principal axes of analysis were established: 1.1. The diverse society in which our university is located, the transversality of gender and interculturality as revolutions before the neoliberal steamroller, and 1.2. The objective and purpose of a university of quality.

3.2.1.1. The diverse society in which our university is located: gender mainstreaming and interculturality as revolutions in the face of the neoliberal steamroller

The alarming school dropout rate among Mayan children in Guatemala has been exceptionally high among girls, who are doubly vulnerable because they are both Mayan and girls. Given its relevance in the project, we approached the gender dimension and, specifically, gender in schools not only as a transversal axis in the whole proposal but also as specific content in the training plan on which to reflect, analyze, debate, question, etc. so that we could form a team of trainers sensitized to such issues. To this end, we developed a module called *Conquering Equality: Coeducation at School*, which would serve to address the ideological perspectives underlying the idea of equality and discrimination, as well as the implications that understanding

them in one way or another would have on the school/university and the act of teaching. In this sense, the stories we build of the Mayan women experts and leaders of their communities would be especially taken into account since we consider that the coeducational needs of the Mayan population cannot be considered from a universalist and homogenizing vision of the idea of equality or coeducation, but from the diversity of experiences associated with the inequalities that affect women and girls, in society and at school.

Not only gender but also Mayan identity and culture occupy a particularly relevant place in this project. One of the distinctive features of contemporary societies is their configuration as plural and heterogeneous spaces in which culturally diverse human communities live and coexist. Spaces that are also threatened by the advance of neocolonialism, neoliberalism and globalization with their eagerness for the totalitarian imposition of a single model of thought and social, economic, political and cultural life that responds, in effect and exclusively, to the interests of the dominant groups that hold power. In this sense, the school and the university, as spaces of social transformation, must promote a model of Intercultural Education that starts “from the recognition and respect for diversity, through exchange and dialog, in active and critical participation for the development of a democratic society based on equality and justice” (Sales-Ciges and García-López, 1997, p. 46). This requires, among other things, the strengthening and empowerment of minority cultures, which have been historically punished. As we intended to elaborate a training plan that would consider the idiosyncratic principles of the Mayan communities, we decided to incorporate another module on Mayan identity and culture, called “The essentiality of the Mayan cosmovision: reinterpreting interculturality beyond linguistic literacy.” However, beyond establishing the fundamental elements that constitute the Mayan identity, the aim was to resolve and seek confluence on the terminological divergences regarding the idea of interculturality, glimpsing the variety of concepts used to designate it and the political, social and pedagogical implications of the different meanings attributed to it. For this, we propose the need to first delve further into the processes of identity construction (Maya) within a globalized context, valuing the role of culture and the arts in the construction of identities and the active role of individuals in their identity construction and then address the concept of Intercultural Education, assessing and analyzing, among other aspects, the success or failure of the educational policies of the Guatemalan state in the implementation of an Intercultural Bilingual Education, concerning the development of a critical Intercultural Education that favors the socio-educational inclusion of Mayan boys and girls.

Indeed, the school and the university as social institutions are not removed from the dominant political, economic, social and cultural structure. On the contrary, they simultaneously exercise a double function of reproduction and production. As education professionals, this double dimension, on the one hand, forces us to consider how the current sociological context, and the values that define it, influence and condition the configuration of school institutions, the relationships that take place in them and the different elements they constitute and how they contribute to the reproduction of the prevailing social order. On the other hand, to the extent that we recognize their possibilities of production and social transformation, it allows us to build a more optimistic and courageous educational discourse, which pushes us to trace eager horizons and

build new paths in search of a qualitatively better, fairer and more democratic world.

Along these lines, our training plan started from the need to contextualize the school/university in a broader and more global framework of analysis and interpretation, considering the current, post-modern, neoliberal and digital sociological scenario. To do this, we propose another specific training module to analyze the concept of postmodernity and its defining characteristics, from the very construction of its meaning to the active role played by information and communication technologies. The module was called “Post-modern globalization that transforms the traditional vision of modern knowledge in the University and how ICTs amplified its effects.”

The current sociological context, defined as Liquid Modernity (Bauman, 2016), Network Society (Castells, 2006), or post-modern condition (Lyotard, 2006), presents us with a new, uncertain, unstable, information-saturated and incomprehensible scenario. This new scenario is determined by the successive and accelerated changes and transformations sponsored by the exponential rise of communication and information technologies and a consumerist and individualist scenario, marked by the primacy of the market of inflamed neoliberal context and by the expansion and empire of business and economic thought and language in all spheres of a society that is increasingly plural, multiple, heterogeneous and culturally diverse. It is also determined by a new reality that has given way to pessimism and discouragement caused by the crisis of the “grand narratives” that guided modern societies and the philosophy of enlightenment with its paradoxical faith in knowledge, which not only failed to deliver on the promise of progress but also facilitated the greatest humanitarian disasters throughout the 20th century in the name, precisely, of Reason, Good and Truth. In this sense, the post-modern condition of our current societies has revealed the inexistence of an ontological truth, a uniform knowledge that can be approached from an instrumental reason. On the contrary, in our time, truth is represented as a web of experiences that imply the epistemic reconceptualization of knowledge as a dialectical construction in which meanings are negotiated and shared. In this regard, our formative intention lay, ultimately, in fracturing the reified, homogeneous and true concept of knowledge present in the modern school/university ideology, which is still highly valid in today’s societies. Hence, these new ways of understanding knowledge, as construction, exchange, and praxis, respond to our current society’s challenges, characteristics, and needs.

3.2.1.2. The objective and purpose of a quality university

In recent times, the discourse on the quality of school institutions has become increasingly relevant in the pedagogical-political sphere even though it has been characterized by excessive simplification, turning the discussion on the concept of quality into a merely nominalistic discourse, which has been used to benefit a specific conception of society (Santos-Guerra, 2003). In this regard, given the enormous influence of neoliberalism in all spheres of society, the discourse about the quality of educational institutions and, in particular, of universities, has been impregnated with business and mercantilist logic that reduces the analysis to observable, measurable and quantifiable patterns of performance, efficiency, effectiveness, prediction, and control. This logic, thus, ignores the complex nature of the educational event and other social, ethical, ideological and political dimensions of character that occupy a central place in the educational field and that hardly can be addressed from such

approaches. Against a technical-business perspective that understands the school and, fundamentally, the university as places destined to the preparation of individuals for their incorporation into the productive system, contributing to the reproduction of the status quo and promoting the “transfiguration of the student-citizen client-consumer” (Fernández-Sierra, 2011, p. 38), we believe that the quality of the school/university must be considered from a holistic perspective. From this perspective, universities and schools are understood as spaces for the deconstruction and reconstruction of scientific knowledge and that, starting from their educational function, are destined for the integral formation of citizens that can act with intellectual autonomy and social responsibility in an increasingly complex, unequal, uncertain and changing world.

In this regard, we have incorporated a specific theme through which to situate the origin of interest in quality in the university in particular and the school system in general by identifying and delving into the different existing perspectives around this concept, addressing the hegemonic conceptions that dominate the current scenario and analyzing the social, political and pedagogical projection of the most used approaches to, finally, establish the bases that would guide practical action towards a model of fair and comprehensive educational quality. The fundamental ideas on which we will work in this topic are: quality, that is, the technical management of quality versus practical action; the irruption of neoliberal ideology in educational quality; total quality in business and education and their strengths and weaknesses; and finally, the concept of educational quality and its relationship with the idea of social justice.

3.2.2. Block 2: the art of teaching

When teachers enter training programs, they have an image of themselves as teachers built up over time based on theories and beliefs about what it means to teach and learn, what it means to be a good teacher, or what their functions as professionals and the functions of the school are. This knowledge, developed during all the years in contact with the school and the teaching profession, albeit from the position of student, is unconsciously and uncritically incorporated knowledge that, despite the meagreness of the epistemological perspective, is firmly rooted, modeling and directing the frameworks of interpretation and action of teaching professionals. We consider that, in order to offer quality training to future teachers, it is necessary to penetrate this ideological network, the beliefs and models that teachers have built throughout their lives and that gives meaning to their professional practice (Pérez-Gómez, 2010) to promote a reflective attitude that allows them to question the socialization processes that they go through and carry out innovative actions that improve the quality of schools and universities.

Consequently, a specific block has been established within the intended training plan to, on the one hand, deepen the figure of the teacher, university or not, reflect on their position in the act of teaching, focus not only on techniques but also on its ethical dimensions, and, on the other hand, to question the setting (classroom/school/University) in which their professional practice takes place, conceiving it as a complex ecological space in which different interests, values, needs, interference, pressures and pedagogical and cultural traditions exist, beyond the visions that reduce it to neutral work contexts directed exclusively to technical-transmissive action. Thus, this block has developed two topics: the teacher and tutorial action.

3.2.2.1. The teacher

Being a teacher implies aspects beyond the mere methodological selection and application of a previously established curriculum. On the contrary, being a teacher requires being a responsible, critical and ethical professional who stands before the education process, assuming its challenges and the needs of today’s society, questioning the validity of and transforming their practices through reflection, analysis and decision-making. Teachers must also consider all the elements that define them as professionals, especially highlighting how they conceive teaching and learning processes, the classroom or the school, in order to construct their identity as teachers and improve their professional practice. In this sense, the purpose of this topic is to deepen in three dimensions:

- a) The classroom/school as a space for innovation in the face of socio-ideological acculturation.

School institutions are traditionally conceived as neutral spaces for transmitting a body of knowledge and a selection of cultural contents accumulated over time because they have been considered of value to humanity. In this sense, the knowledge that students have built before and parallel to their school life through their experience with the world, with their vital context, based on their interests, needs and experiences, remain outside the school experience. In this section, our formative interest consisted, on the one hand, in promoting reflection on how the school, as a social institution, far from being a neutral place, is instrumentalized for the legitimization of the political, cultural, social structures in force, fulfilling a function of socialization and reproduction of the prevailing social order and, on the other hand, how this contributes to the acculturation of the school, making invisible socio-cultural realities that do not correspond to the hegemonic models.

In light of such considerations, it was intended to incite in future trainers the need to promote innovation processes, thinking and building a school understood as an ecological space that starts from the uncertain and changing situations that determine life in the classroom, from the idiosyncratic characteristics of the contexts and the actors that shape them, as well as the knowledge of the students, their needs and problems that are individually and socially relevant to them, that is, a school conceived as.

“... a community of life, of democratic participation, of intellectual search, of dialogue and shared learning, of open discussion about the goodness and anthropological sense of the inevitable influences of the socialization process. An educational community that breaks down the absurd artificial barriers between school and society. A flexible and open educational center where the most active members of the community collaborate to recreate the culture, where one learns because one lives, because living democratically means participating, cooperatively constructing alternatives to social and individual problems, encouraging initiative, integrating different proposals and tolerating discrepancy (Pérez-Gómez, 2004, pp. 59–60).”

- b) Learning in educational contexts as deconstruction and reconstruction of knowledge, as opposed to memorization.

Through the analysis and differentiation of the various theories on human learning that have dominated educational practice, this section sought to delve not only into what it means to learn and how humans learn, considering recent contributions in the field of neuroscience, but also into what we should or need to learn, taking into account the idiosyncratic characteristics that define the current, post-modern, neoliberal and digital context. In this way, we intended to move from rote learning, based on the uncritical accumulation of data, dates, algorithms and other types of information, towards the reformulation of the concept of learning as a process of construction, deconstruction and reconstruction of both cognitive and emotions that, consciously or unconsciously, govern our perceptions, interpretations, behaviors or decisions, through the exercise of “transforming the information that one receives and converting it into personal, autonomous and active knowledge to understand and act” (Pérez-Gómez, 2020, p.13).

- c) The concept of teaching, with emphasis on its mediation function as opposed to its conceptualization as a transmissive action.

In this section, we emphasize the meaning of teaching, not as a technical activity but as an activity fundamentally determined by its ethical and political dimensions, whether teachers are aware of it or not (Apple, 2019). Thus, having analyzed how ideological-political interests affect the life of the classroom/school, we have delved further and questioned the role of teachers as technicians and transmitters of knowledge to the extent that under this attributed function. Ultimately, a teaching perspective materializes that supposes, on the one hand, the invisibility of other realities, cultures and non-hegemonic knowledge by presenting selected cultural content as neutral and, on the other hand, it is configured as a form of “training that facilitates the formation of habits efficiently for the development of the activities that [human beings] carry out in an industrial society” (Gimeno-Sacristán, 1990, p.18) so that each one ends up occupying their place within the social fabric, enhancing the adaptive possibilities of people and not the creative ones, those of transformation or those of resistance.

On a different note, this section was intended to fracture the dominant perspectives that have conceptualized teaching and learning processes as being interdependent to value the reconceptualization of learning as a subjective and intersubjective construction of knowledge and not as a result of the teaching process. Likewise, we sought to reposition the teacher as an instigator, mediator and provocateur of learning to represent teaching as an action that seeks to enable the student to be the principal actor in the learning process, mobilizing their thoughts and explaining those theories, ideas and mental schemes internalized unconsciously through the socialization process, to confront them, question them and thus develop their practical thought (Pérez-Gómez, 2022).

Breaking with the ideas and beliefs associated with the figure of the teacher or, more specifically, with the concept of teaching is a difficult task. Hence, in this section, it was considered necessary to address, among other issues, the identity construction of the teacher, taking into account the contributions of the specialized literature within the framework of the knowledge and practical thought of the teacher (Pérez-Gómez, 2010). This also included reflecting on the elements and determining moments in the construction of their professional identity, the role of research as a binding link between theory and educational practice to advance in the construction of

knowledge and promote quality teaching and learning processes, and the practicum in initial teacher training as a privileged space for recreation and the construction of knowledge (Contreras-Domingo, 1987).

3.2.2.2. Tutorial action

One of the fundamental aspects in the configuration of a new model of a teacher capable of developing their professional task successfully, following the characteristics and needs of current societies, in general, and university contexts, in particular, is that they transcend from the perspective of a teacher to that of an educator-tutor (Fernández-Larragueta, 2012). The relevance that tutorial action has been acquiring, not only in compulsory stages but also in higher education as a priority function of teachers, has placed them in front of new challenges that can be specified in “(1) facing the diversity of university students; (2) accompanying them in their learning processes; (3) facilitate an integral development that prepares him/her for life” (Álvarez-González, 2008, pp. 73, 74).

In this sense, we proposed a topic dedicated to tutorial action, intending to delve into why it is needed as a relevant element of the teaching action and understand the possibilities and themes it offers to meet the holistic training of future professionals in university education. To this end, we aim to promote reflection on the psychopedagogical model in which tutoring is framed and the teacher model that underlies tutorial action (Fernández-Larragueta, 2012). This will be done by first analyzing the evolution and the guidance concept. Secondly, by placing the university space in the analysis framework, we will examine the concept and modalities of tutoring (Fernández-Larragueta, 2012). Finally, given the relevance and omnipresence of ICTs, we would consider the convenience of relying on these tools and digital resources as a means of improving communication, collaborative relationships and educational processes, valuing the presence of face-to-face and virtual environments for guidance and tutoring.

3.2.3. Block 3: the curriculum

Although we cannot affirm that the concept of curriculum encompasses the entire educational reality, we can say that it is one of the most extensive and dense central elements of meaning for its understanding and explanation. It is also the primary tool for regulating teaching practices. Therefore, the last of the three blocks that make up our training proposal is devoted to the curriculum. However, this third block combines conscious and coherent academic and theoretical decision-making concerning the curriculum, what it is and its elements, assuming that decision-making is based on the epistemology worked through the other two blocks. Thus, we would not only delve into the basic theoretical elements but also make a curricular proposal based on what we have learned and the pedagogical principles underpinning our cooperation project.

3.2.3.1. Curriculum concept

Every curriculum project embodies different interests and purposes determined by the various approaches and theories underpinning the significance of the concept of a curriculum. Thus, we can say that in our school systems, a technical curriculum approach prevails, strongly influenced by the pedagogy based on objectives emanating from positivist science and the economic and efficient perspective of the business world. It is presented to us as neutral, true

and absolute, thanks, to a large extent, to its linear and fragmented disciplinary design and its decontextualized and arbitrary structure that prevents us from seeing that, on the contrary, it is a culturally and socially constructed product that embodies much deeper meanings, of a political, ethical and ideological nature (Torres-Santomé, 2021). In light of this, our training plan is based on the need to understand how such interests have contributed to the definition and development of the curriculum and the implications derived from such assumptions in pedagogical practice, with a clear inclination towards the detriment of the quality of democracy of schools and the abandonment of their educational function through the arbitrary imposition of a cultural selection in which the question about what to teach is resolved as a purely technical question. Faced with this reality, our proposal focuses firstly on analyzing, questioning and unraveling the underlying meanings and interests behind this apparently neutral curricular approach that dominates educational scenarios and, secondly, confronting it with other perspectives that have shown their radical opposition to such approaches. Thus, we approach the concept of curriculum from critical parameters, focusing on issues of knowledge and power and the need to transcend towards a post-critical approach to the curriculum, which accepts and shares a large part of the concerns assumed by critical theories. The above notwithstanding, we start from a more current analysis in which static and uniform conceptions about knowledge and reality change and are diluted, within the framework of a post-modern sociological context and in which social theories on feminism, postmodernity, postcolonial or cultural studies acquire great notoriety and relevance in pedagogical practices and discourses, given the characteristics and demands of today's society (Da Silva, 2001). Finally, and starting with the next topic, we will start to implement the curricular proposal for future trainers, thinking and acting from an integrated, globalized and diverse curriculum.

3.2.3.2. Elements and design of the curriculum: a curriculum proposal

As opposed to technical rationality (Schön, 1992), and as we have argued, deliberations on the construction of a curriculum project are always of an ethical and moral nature. In this regard, through this theme, focused mainly on the action and construction of a curricular proposal, the selection of the procedural principles that would determine and regulate the teaching performance was initially defined, discovering the professional/personal limitations and shaping the ethical possibilities in the proposal. Secondly, given the weight that the concept of competencies has acquired in the current educational panorama, it was deemed necessary to consider the concept further, differentiating between neoliberal and educational competencies, understanding these as “complex and adaptive ‘know-how,’ that is, a knowledge that is applied not mechanically but reflectively, capable of adapting to a diversity of contexts and that has an integrating nature, encompassing knowledge, skills, emotions, values, and attitudes” (Pérez-Gómez, 2008, p. 80) so that conscious, informed and reflective decision-making could be encouraged regarding which competencies are necessary within the contextual framework in which the proposal would be developed. Thirdly, based on the reconceptualization of knowledge as a dialogical construction of exchange and negotiation of meanings that rejects any type of control or rigid confinement in academic disciplines that are disconnected from each other (Pérez-Gómez, 2022) and considering the contributions to the development

of a competency-based curriculum, it was intended to overcome the subject-based conception of school/university that fragments knowledge by building interdisciplinary topics under centers of interest, which backbone the curricular proposal, considering the theory worked on and the practicum.

Fourth, the concept of assessment was discussed as a process that goes beyond grading to measuring achievement and classifying and verifying knowledge acquisition. On the contrary, it needed to be conceived and used as an action aimed at learning and improvement, as a process that affects not only the students but also the teaching staff, promoting the transformation of practice. In this sense, assessment, far from being considered the final moment of the process, should be conceived as the beginning of a new, richer process (Santos-Guerra, 2003). Thus, it was necessary to consider what to assess, who to assess, as well as how, why and for what purpose within the proposal. Finally, different methodologies and didactic resources were presented that went beyond the master class and the omnipresence of the textbook as the backbone of life in the classroom, among which it is worth highlighting the Lesson Studies and their contribution to the development of practical thinking within the framework of teacher training (Pérez-Gómez et al., 2015), or the creation of virtual platforms as spaces for communication and knowledge construction, beyond repositories.

4. Conclusion

The constitution of an inclusive educational system requires, beyond mere educational policies that try to safeguard the integrity of all people, integral teacher training, where educational innovation and action research are the bases of their teaching performance and their professional development (Fernández-Sierra, 2002), as required by the SDGs of the 2030 Agenda.

A guiding pedagogical principle, an idiosyncrasy of our research group, becomes the backbone of this project that seeks to establish the formative and curricular bases of a university training plan that will train future teachers who will work in vulnerable contexts with Mayan children in rural areas. In this sense, action research becomes a powerful formative and constructive tool, which allows and favors, on the one hand, continuous reflection on the why and wherefore of what is done in classrooms, in schools and socio-educational contexts, and on the other, to promote and generate a rethinking of the professional culture of teachers, urging them to reflect and share reconstruction, favoring a culture of inter-educational and intra-educational collaboration, as a fundamental measure to generate innovation (Hargreaves, 2003; Azorín-Abellán and Arnaiz Sanchez, 2018).

The purpose of this epistemic position is to overcome the technical-neoliberal and assimilationist approach of the curriculum based on objectives, an approach in which the action of teachers is reduced to a simple didactic action, an instructive pedagogical thought that reduces educational work to the simple transmission of hegemonic, homogeneous and out-of-date culture. It is an approach that does not favor coordination or collaboration dynamics for educational inclusion since it distances itself from the socio-cultural realities of educational contexts (Fernández-Larragueta et al., 2014).

Thus, the training proposal built for this cooperation project is based on the necessary epistemic reformulation and reconstruction of pedagogical thinking, mostly related to the school biography of these

future trainers, who were selected as candidates for training. In addition, we understand that the best way to generate active processes of relevant learning and deconstruct pedagogical beliefs is to experience active teaching, learning processes and participatory research experiences that overcome the closed vision of knowledge, favoring critical, participatory, and transformative thinking. In this way, a deliberative commitment to the socio-educational situations of students from an inclusive paradigm is favored in teachers (current candidates and candidates) (Parrilla-Latas et al., 2018).

For this reason, one of the essential elements of the project has been the creation of work networks at the intra-educational and inter-educational levels to build a solid commitment between the participants, the candidates and the research team/teachers, that would allow them to reconstruct knowledge and their professional idiosyncrasies together, expanding in this restructuring the horizon of experiences, and knowledge to overcome the classic visions of coordination and/or cooperation between teachers and open up to new alliances in pursuit of a shared educational project (Civís-Zaragoza and Longás-Mayayo, 2015; Parrilla-Latas et al., 2018). Likewise, pedagogical leadership has been essential during this process to safeguard the concerns of teachers in the face of change, a leadership framed in a constructivist and deliberative current among all parties to the project, both in Almería and Guatemala, which has allowed a vision broader and more participative of the entire educational community, favoring the construction of common meanings that lead to a common and inclusive determination of schooling [Lambert et al., 1995, cited in Ainscow (2012), Oyarzún-Madonado et al. (2020)].

Finally, as we have been explaining, the strength of the training program designed and carried out in this cooperative project rests on two main factors. First, it is rooted in the participants' training needs, which not only fosters their engagement but also links new knowledge to the existing foundational knowledge. And second, it encloses a broad spectrum of knowledge, ranging from the closest and culturally related aspects of Maya culture to the more specific psycho-pedagogical and curricular elements, extending further to delve into the sociological space of neoliberalism and postmodernism. Furthermore, this training plan can serve as the cornerstone for an initial teacher training program in university settings characterized by socio-cultural and linguistic diversity, with necessary adjustments to account for unique idiosyncrasies of diversity. Such an approach extends beyond the universities in the Maya triangle, enveloping not just Guatemala, but also Southern Mexico, Belize, and Honduras, such as universities located in Quechua and/or Aymara contexts in Peru, or Rapanui in the Easter Island (Chile), given that we recognize that university faculty, irrespective of their disciplinary background (chemist, biologist, engineer, economist, historian, linguist, between others), require a profound form of education aligned with the principles we have laid out in this training.

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Data availability statement

The raw data supporting the conclusions of this article will be made available by the authors, without undue reservation.

Ethics statement

Ethical approval was not required for the study involving human participants in accordance with the local legislation and institutional requirements. The participants provided their written informed consent to participate in this study.

Author contributions

As PI of the project, SF-L has coordinated the actions, planning the training plan and justifying the development of the project, in addition to planning the conception and design of the study. MM-M and JM-L have collaborated in the construction of the theoretical framework and in the construction of the training plan, in its correlation with an epistemic framework. All authors contributed to the article and approved the submitted version.

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The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

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