### REPORT

# MIDDLE -TERM EVALUATION OF THE HUMANISTIC TECHNICAL GRADUATE PROJECT- "JESÚS MAESTRO" -10842

(FINAL VERSION)

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#### **Executive Summary**

This report is the product of the middle term evaluation obtained from the Humanistic Technical Graduate Project in the process of being implemented at the school "Jesús Maestro, of Tiquipaya district (BTH-JM), with the financial support of the Cristina Evangélica Lutheran Church (ICEL), where quantitative and qualitative techniques and instruments were applied, the data for the writing of this document were categorized and tabulated. This with the purpose of diagnosing the project situation, its weaknesses and shortcomings, but also its strengths for the benefit of secondary school students, mainly.

The innovation of the middle term diagnosis is that, despite the social, political and public health contingencies, the report has a participatory and community contribution from the different educational actors.

The report focuses on the relevance of the BTH project in the technical training of high school graduates as a contribution to the development of the local productive potential of the students and the productive matrix of the country.

The partial achievement of several results is verified, some in a higher percentage than others in the process of achieving what was planned, but which, conditioned by the pandemic, are encountering certain difficulties.

Value the community participation of parents in the implementation of the project, which constitutes a good sign of the appropriation of the Project and an empowerment to guarantee its sustainability.

The articulation of content and methodology between the humanistic and technical areas of the BTH remains to be worked on with greater decision and commitment.

The work carried out in the attention to the pedagogical training processes and the formation of the Management Committee are considered as strategies to achieve sustainability of the P-BTH-JM, whose challenge is to continue strengthening both strategies.

In this way, the team of consultants, through the members of the BTH-JM Project and the Management Committee, make this report available to ICEL, the municipal, educational authorities, institutions and organizations committed to local and comprehensive development., especially of Tiquipaya's municipality student population.

#### Introduction

Historically, Bolivian education has been discussing the relevance of implementing a technical and humanistic education. After some attempts in efforts of the last century, the current Education Law (070) in its Art., 14, paragraph I affirms that Productive Community Secondary Education "Articulates humanistic education and technical-technological education with production," and in its paragraph II it mentions that "it is oriented to the formation and obtaining of the Diploma of Humanistic Technical Bachelor, ..."<sup>1</sup>.

Subsequently, in 2014, the Ministry of Education, on October 20, 2014, approved a Regulation of the Humanistic Technical Baccalaureate of the Regular Education Subsystem, which regulates the operation of educational units that process their adherence to this form of high school.

The educational community of the Jesús Maestro educational School, due to the tradition of years of work, saw the need to manage the implementation of the Humanistic Technical Baccalaureate (BTH) and thus achieve recognition of a full educational unit to provide comprehensive training to its high school students. An Administrative Resolution of April 04, 2017 authorizes the operation of the BTH with two specialties: Gastronomy and Risk Management and adaptation to climate change.

For this purpose, the parents of the Jesús Maestro educational School, covered by the loan agreement between the Municipality of Tiquipaya and the Evangelical Lutheran Christian Church (ICEL), request the ICEL representatives to prepare of a Humanistic Technical Baccalaureate Project, Jesús Maestro (P-BTH-JM). Said project was prepared and approved in 2018 for execution from January 1, 2019 to December 31, 2021.

After a year and a half of implementation of the (P-BTH-JM), a Mid-Term Evaluation is planned, in order to identify achievements made so far to continue strengthening them and the weaknesses that hinder the achievement of some planned results and indicators, to pay more attention and seek strategies that allow the successful implementation of the Project.

The current situation demands a technical and humanistic education at the productive community secondary level, which allows young people and young women to work according to the demands and productive vocations of their region. This being one more step in comprehensive education to contribute to their development and that of their community.

Therefore, the present evaluation is basically circumscribed in the expected results and achievement indicators of the P-BTH-JM, the findings and analysis of which will be developed in this Evaluation report.

Also note that the evaluation itself and this report are being conditioned by the health contingency and quarantine in the country, which hindered the methodological deployment and the application of certain more appropriate and pertinent instruments designed for the evaluation.

<sup>1</sup>This arbitrary cut of the text of the Law responds to the focus of the mid-term evaluation, of course the mentioned paragraphs express many other elements that make up the Law and the Political Constitution of the State. However, some of these aspects will be discussed in the analysis.

The report document gives account of: the purposes and objectives of the evaluation, from the guidelines set forth for this consultancy. The methodology that has guided this evaluative work. The findings described, both process and results proposed in the

Project. The analysis and discussions that arise as a result of certain knots of reflection identified in the findings section. And finally it shows up the conclusions and recommendations of the evaluation, the bibliographic references and the annexes, as evidence of the work carried out.

#### 1. Context of the middle term evaluation

The general context of the study is located in the northern area of the Tiquipaya's municipality, third section of the Quillacollo province of the Cochabamba's Department, specifically in District 5.

The population is predominantly Quechua, with immigrants from Oruro, Potosí and La Paz, a situation that shows the presence of Andean cultural practices in coexistence with others. Without a doubt, these cultural practices are also expressed in the culinary experiences of food and the ways of caring for nature.

Technical Humanistic education is circumscribed in the productive model adopted by the National Development Plan, which is expressed in Educational Law 070 "Avelino Siñani and Elizardo Pérez", which seeks to transform the Educational System, linking with productive community processes in the country, having as antecedent the educational experience of Warisata.

In this context, the BTH-JM Project is being implemented, together with the Educational Community (2019 to 2021), as the second phase of the educational project initiated by the Lutheran Mission and the Evangelical Lutheran Christian Church (ICEL). Said implementation contributes to achieving the full concretion of the Humanistic Technical Graduate in this educational unit.

#### 2. Purpose and specific objectives for the evaluation

Framed in the National Regulations for BTH of the Ministry of Education, the project "Bachillerato Técnico Humanístico - Jesús Maestro, (BTH-JM)" in Tiquipaya has been implemented, for a year and a half, with two technical specialties, such as: 1 Gastronomy and 2. Environmental Management.

The Project seeks to contribute to the development of technical training processes in the regular educational system, complementing humanistic training for young students with productive technical training, aimed at developing the skills that allow them a better job placement in conditions of social equity to achieve a dignified and productive life.

The purpose of the evaluation is to analyze progress, achievements, good practices, difficulties, learning, relevance, cost effectiveness and sustainability of the project, Logical Framework Planning evaluating the status of its Indicators.

Likewise, it is required to evaluate the status of the Digni Indicators, based on the Empowerment tools and the impact of Gender and Empowerment in the Project.

Let us not forget that the middle term evaluation is a learning opportunity, to stimulate participation and innovation, seeking to achieve the objectives and results proposed in the Project; therefore, the evaluation results and recommendations are aimed at improving their performance, having the opportunity to make adjustments to Management Planning 2021.

#### 3. Objectives of the evaluation

#### 3.1. Overall objective

Execute the Middle Term Evaluation of the "Jesús Maestro" Humanistic Technical Graduate Project of Tiquipaya, aimed at improving the implementation of the Project.

#### 3.2. Specific objectives:

- Analyze the adequacy of the infrastructure and equipment for the implementation of an inclusive Humanistic Technical Graduate in the Jesús Maestro Educational School.

- Describe the development of validated curriculum for vocational humanistic technical education.

- To characterize the inclusive educational process of quality and warmth that teachers provide in vocational Humanistic Technical education.

- Identify the relevance of the Technical and Humanistic Graduate for the students' job opportunities or their possibilities to continue their higher education.

- Give an account of the administrative and financial situation of the school management and operations of the Technical and Humanistic Baccalaureate.

#### 4. Evaluation methodology

It gives an account of the methodological procedures carried out that guided the middle term evaluation of the P-BTH-JM implementation process.

The methodological approach of evaluation was framed in the perspective of qualitative research, because it will allow understanding the facts and phenomena that have been arising in that space and time of project implementation.

The qualitative approach prioritizes the obtaining of data that express the thinking, feeling and perceptions that all the educational groups and actors have about the execution of the project, without seeking a numerical measurement. However, based on the achievement of results and progress of the indicators sought in this evaluation, the quantitative technique was also used, using relevant and advisable instruments to the case.

The techniques and instruments used were:

- **Documentary review**, allowed to review the information related to the Project in process and implementation. For which, analysis sheets of written and / or digital documents were prepared.

- **Survey**, allowed to collect general information of students, parents<sup>2</sup> of 5th and 6th of secondary and secondary teachers<sup>3</sup>of the educational unit Jesús Maestro. For this, questionnaires were prepared based on the project indicators, expressed in the Logical Framework, where the DIGNI values are incorporated.

- **Interview**, an open and in depth interview was conducted with key actors in the project implementation process. This technique allowed obtaining information

<sup>&</sup>lt;sup>2</sup>The health emergency situation and factors beyond our control, despite making all efforts, it was not possible to collect all the parent's ballots. Therefore, we worked with the collected ballots, from which the findings of the implementation of the P-BTH-JM will be inferred.

<sup>&</sup>lt;sup>3</sup>It is striking that of the 22 teachers only 3 completed the surveys, which suggests that teachers in the humanistic area have not yet prioritized technical training.

reliable and first source of the different actors that are part of the implementation of the BTH-JM project. For which key informants who are actors in the project were identified. Open interview guides were developed and applied to course delegates of students in the 5th and 6th grades of secondary school, delegates of the course of parents, teachers of the 5th and 6th grade of secondary school, BTH specialty teachers, director of the educational unit, District Director of Education of Tiquipaya, representative of the ICEL of the school, responsible for education of the Tiquipaya municipality, director of the BTH project. Also to representatives of the management committee.

Initially, it was planned to use the Observation, because it would allow observing some academic activities in situ, such as classroom observations, either face to face or virtual. Observation guides were developed for this. This technique would have allowed us to obtain information from the first source, and would have allowed us to issue reliable criteria regarding result 3 and in some way also result 2.

The use of the focus groups technique was also planned, because it would have allowed us to obtain complementary information from some project actors, but at the same time it would have allowed us to reflect on the achievements and difficulties faced by the project and then generate commitments in the team. Community management and P-BTH-JM partners.

However, due to the contingency situation and the restrictions that quarantine implies, especially in the educational field, class observation could not be applied, so inference is made based on the interviews and the focus groups could not be carried out either. , since the last rigid quarantine measures in the department made it difficult to carry out focus groups; therefore, from the interviews of the different actors of the Community Educational Management Committee, commitments can be generated for the time remaining in the implementation of the P-BTH.

Process of categorization, tabulation, analysis and interpretation of data. Once the information was obtained, we proceeded to tabulate quantitative data and categorize qualitative data, and then analyze and interpret this information.

The data obtained from the different techniques and instruments, in their analysis process, were triangulated with each other, which allowed the information to be interpreted based on the results achieved, considering the indicators as verification criteria. Therefore, the final report of the middle term evaluation accounts for the achievements made to date, the weaknesses found in the implementation process and the challenges that still entail to comply with what is stated in the P- BTH-JM.

This analysis and interpretation of the data was carried out considering Digni's philosophy and transversal axes. At the same time, it should be noted that some problems that directly or indirectly affect the implementation of the project have been identified, but that are not necessarily problems attributable to P-BTH-JM.

#### 5. Findings from the P-BTH-JM implementation process.

In beginning, it is important to assess the political and technical will of ICEL to prepare and implement the BTH-JM Project, given that the educational system, in addition to promulgating BTH regulations, has not generated the physical condition, training and administrative conditions to finalize its implementation. On the other hand, ICEL, meeting the demands of parents mainly, took on the challenge of contributing to the operationalization of techniques in its two specialties for the benefit of students and the community in general. This section presents a description of the state of affairs in which the implementation of the BTH is in the Jesús Maestro educational School. As it is a description of the implementation process, it will be combined between statistical data and qualitative information that in some way corroborates or explains the situation of the educational event in the BTH. For methodological reasons, the delimitation of the problematic situations attributable or not attributable to P-BTH-JM will not be carried out yet. Due to its Middle Term Evaluation character, the specific objective and the respective results and indicators planned in the project will be used.

It is important to circumscribe that the P-BTH-JM faced political, social, climatic and health contingencies, which undoubtedly had a strong impact on its implementation process. These include: the political crisis experienced in Bolivia between the months of October and November, making it difficult to complete the 2019 school administration; porridge, the result of landslides in the upper part of the Taquiña basin, which also suspended academic school activities for approximately 2 to 3 weeks; and when they were preparing to restart school activities, the health emergency and quarantine restrictions came, which undoubtedly influence the process of implementation of the P-BTH-JM unfavorably.

#### BTH offer with two Specialties

In the Jesús Maestro educational School, a Humanistic Technical Education is offered with the specialties of gastronomy, environmental management<sup>4</sup>, this is consolidated by being declared a full unit to be able to offer this BTH modality.

Statistical data from the educational School show that the students enrolled in the 2019 administration were 205 men and 209 women, making a total of 414 students, of whom 402 students are effective at the secondary level of the Jesús Maestro educational School. On the other hand, in the 2020 administration, the enrolled students are: 205 men and 190 women, making a total of 395 personnel so far. Of which 57 students would be obtaining their humanistic technical graduate certificate in management 2020.

The implementation of the two specialties in the Jesús Maestro educational School are pertinent because it responds to the demand of the population from previous years, they were chosen in consensus based on a participatory diagnosis, identifying the techniques of gastronomy and environmental management as needs of technical training at the secondary level.

The socio cultural characteristics of the population, who are Quechua and Aymara migrants, with roots in the lower middle class, who are dedicated to the trade and sale of food, in addition, the gastronomy technician, with the declaration of Cochabamba as gastronomic capital, constitutes an emerging specialty. On the other hand, for the specialty of environmental management, it responds to the different risk situations experienced by the inhabitants of the area, due to the intense rains that threaten to overflow the Taquiña river. These two specialties respond to the needs and expectations of the community and the student population. Of course there are also students, teachers, teachers, parents who would have preferred other specialties, related to technology.

<sup>&</sup>lt;sup>4</sup>The Project includes the specialty of risk management and adaptation to climate change with resilience; however, administrative situations from the Ministry of Education modified by Environmental Management.

## R1. Infrastructure and adequate equipment for the implementation of inclusive BTH in the Educational School "Jesús Maestro"

Regarding the construction of infrastructure and equipment, they comply with the regulations and it was delivered to the municipality within the deadlines established by the project. The infrastructure has environments for the development of theoretical classes and workshops for practical activities. The delivery of the property is recorded in the minutes, on November 29, 2019. The ICEL delivered the construction to the municipality, and not to the director, because the parties signing the loan are: the H. Municipal Mayor of Tiquipaya, on the one hand, and on the other, ICEL, being the responsibility of the municipality for delivery to the educational authorities of the District and the educational unit for its subsequent use.

Revised the contracting documentation of the construction company, realizes that the administrative procedures were transparent and framed in the corresponding regulation.

Therefore, 100% of the infrastructure of the technical workshops has been built according to national regulations. The Gastronomy technician has: cooking workshop, cold room, warehouse, specialty classroom and bathrooms for men, women and people with disabilities. For its part, the infrastructure of the Environmental Management technician has: two laboratories, a classroom for theoretical classes, a deposit and toilets for men, women and people with disabilities. The construction was delivered in the terms established by the Project. In general, there is satisfaction with the infrastructure of the workshops that was built under the responsibility of ICEL, which have not yet been used.

During the 2019 administration, the students of the 5th year of high school of the gastronomy technician, passed classes and did their practices in the kitchen of the dining room.

The technician of the Gastronomy specialty is well equipped, with an approximate value of 125,000 Bs. And satisfactorily meets the requirements established in the BTH Project, which is included in the delivery document of the municipal government. On the other hand, in the specialty of Environmental Management it is necessary to complement the equipment, which is being managed by the Project, with a commitment from the municipal government to equip in two phases; the first year the Gastronomy specialty was equipped and the second year, it is planned to equip the Environmental Management specialty.

By interviewed sources and due to its complexity, the specialty of Environmental Management is shown as a theoretical and abstract technique, it is necessary to make visible the concrete importance in the daily life of people and nature. Situation that causes fewer students interested in pursuing this specialty. For its part, the P- BHT-JM works to specify the scope and challenges of Environmental Management.

In both cases, the students still did not have the opportunity to know the facilities, the technical management and the proper use of the equipment, due to political, climatic and health problems.

A majority of the interviewees coincide in pointing out the importance of the commitment and leading role played by parents, to manage the construction of the infrastructure of specialties and equipment, but also the participation and management of the BTH project, played a decisive role, both due to the institutional presence and the existing interinstitutional agreement.

## **R2.** Curricular plans for Vocational Humanistic Technical Education are developed and validated

The existence of two curricular designs for the two specialties of the BTH is evident: Gastronomy and Environmental Management<sup>5</sup>.

The curricular designs respond to the needs and demands of the student population, but also these curricular designs are framed in the Education Law, the Productive Socio-Community Educational Model.

The process of elaboration of these curricular designs, in both cases, accounts for the participation of specialists, professionals and people with experience in the different techniques, which is not always easy to achieve this objective and specify a product; for which to congratulate the team that worked on these curricular designs. The fact of opening to the participation of different actors directly related to the work performance activities of the two techniques, is also a way and a process of validation of these curricular designs and their corresponding bimonthly class plans.

The curricula of these techniques show a high level training. In this regard, the two teachers in their plans followed a content plan based on the mesh of the Ministry of Education. The teacher affirms: "we have our pedagogical techniques to carry out the practices outside the classroom. As for the evaluation, we carry it out in a more practical way due to the content and units that we have "(Prof. Entr. GA-LYCM, Jun. 15th 20). From the look of a student: "last year the teacher showed us his plan of progress for the two-month period. But he did have good planning and organization" (Entr. Estud. METC-Gastr., Jun.15th 20).

In relation to the teaching materials of the validated specialties, there are 3 worksheets: 2 sheets on Environmental Management and 1 on Gastronomy; It also has digital material on CD, which was produced by the BTH project.

The digital version of the CD features a content archive on food safety and hygiene. And the other file is about motivational material, aimed at attracting interested people to the Gastronomy specialty.

On the other hand, in the specialty of Environmental Management, a visit was made to the Faculty of Agricultural and Livestock Sciences, organized by the professor, where they were given triptychs on the subject of soils, in addition to accessing the soil laboratories. This experience generated significant learning for the students.

# R3. Teachers provide inclusive vocational Humanistic Technical education of quality and warmth

Regarding the first indicator, it refers to 80% of teachers trained in BTH teaching methodologies.

To get an approximation of the achievement of this indicator, we use the quantitative data from the perspective of students, the testimony of the teachers and the attendance lists for refresher courses.

<sup>&</sup>lt;sup>5</sup>It is plausible to highlight the effort that has meant for the person in charge of Education and the director of the P-BTH-JM, because in principle they had worked on the curricular design of risk management and adaptation to climate change, but, due to these situations of the administrative bureaucracy of the Ministry of Education, at the last minute they had to change and elaborate a curriculum design for Environmental Management.

	Frequency	Percentage
20%	14	17,1
40%	8	9,8
60%	15	18,3
80%	13	15,9
100%	26	31,7
N/S	3	3,7
N/R	3	3,7
Total	82	100,0

Table Nº 1. Teachers trained in teaching methodologies

Source: Own elaboration based on surveys applied to students

The appreciation of the students shows that approximately 66% of the students consider that between 60 and 100% of the teachers have training in teaching methodologies at BTH.

Triangulating the attendance forms and the interviews carried out, it is evident that approximately 90% of the teachers attend the refresher courses programmed by the BTH-JM Project management. It is important to note that attendance at these courses are voluntary.

The updating courses offered by the Project for the 2019 management were:

Howard Gardner's	Playfulness in	Environmental	Inclusive	Curricular
Theory of Multiple	the learning	Education and risk	education	adaptations
Intelligences	process	management		

Proposal for refresher courses for 2020 management are:

Institutional	Gender and	Entrepreneurship	Inclusive	Playfulness in	Research
identity	violence*	LEAN	education	the learning	Methods*
update		CANVAS	(Adapt. Curr.)*	process *	

To do this, as facilitators, in both cases, multidisciplinary professionals have been contacted, with training or expertise in the topics to be developed.

On the other hand, according to attendance sheets, when it comes to directly related courses such as coordination and curricular validation of specialties, teacher attendance fluctuates between 50 to 60%.

According to testimonies of the teachers themselves, some questions arise about the possibilities of replication in the classroom of the updating courses:

Now the teacher who has gone to training I do not know if he has applied it in the classroom and in his curriculum plans, I do not know if he has received the follow-up. Workshops are held, assuming that all teachers are trained. (Teacher JM, 06/17/20).

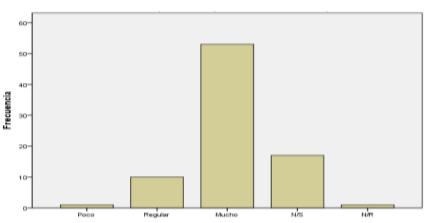
It is just as legitimate to question the attendance of your colleagues in refresher courses, as it is legitimate to be concerned about the change you seek to bring about in education and in your own classroom practice.

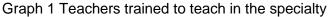
Another important point is related to the themes defined in these refresher courses, although some of them are highly relevant to the institution's philosophical principles,

framed in the Digni indicators of the P-BTH-JM, other themes could be better related to the challenges of comprehensive implementation of the BTH.

Regarding the training of the teachers of the specialties, note that they are not collegiate, because the Higher Schools of Teacher Training do not train for the specialties in the BTH. Therefore, the teacher of gastronomy is a Graduate of Gastronomy from UNIVALLE, while the master of Environmental Management is an Agricultural Engineer from UMSS, that is, they are free professionals and that is the reason for the level of capacity and professionalism with which they are training future technicians in both specialties. It should be noted that the two specialty teachers completed a Diplomat in the Productive Socio-Community Educational Model in management 2019, which enabled them to apply to teach these techniques, pending the granting of the Diploma by the Pedagogical University, dependent on the Ministry of Education.

According to graph  $N^{\circ}$  1, the teachers of the specialties have a great capacity to teach in the techniques in which they are working.





Source: Own elaboration based on surveys applied to students

These teachers attend upgrade courses, they are very willing to continue learning and building learning together with their students.

The teachers of the specialties show greater sensitivity and predisposition to articulate and integrate the knowledge with the different areas of the humanistic graduate, therefore they demand greater coordination with the teachers of the humanistic area.

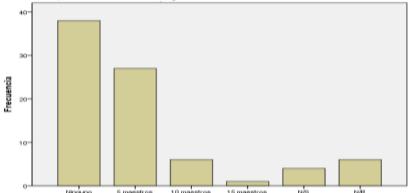
Parents value professionals specialized in the area, because it is closely related to shared training with their children: "we do not want average children if their teacher were a normal teacher with a training course of a few months, we want professionals in the area" (Ent. Ppff JM, 06/12th/20).

It is undoubtedly a sensitive topic for the teachers' union, but also a great concern for the quality of education and training of students who have chosen some specialties, because for many of them, for different reasons, it is their last level of training. Academic and therefore seek good training in the chosen technique.

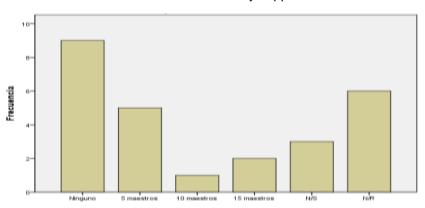
In relation to the 20 teachers who use lesson plans articulating the contents of the BTH, graph 2 shows a coincidence in the perception of students and parents, where a high percentage indicates that no teacher uses plans articulating content of the BTH. BTH. And

the second coinciding trend is that only 5 teachers would be articulating the contents of their plans with the BTH.

### Graph 2. Comparison of students and parents on the number of teachers who use plans articulating the contents of the BTH



Source: Own elaboration based on surveys applied to students



Source: Own elaboration based on surveys applied to parents

For their part, all the interviews with the teachers affirm that the annual plans are linked to the Productive Socio-Community Project (PSP) <sup>6</sup>, because the theme is: "Strengthening healthy eating habits to live well in harmony with the community. And mother earth". Specifically, it is articulated in some bimonthly contents and activities proposed in the PSP, and not necessarily with the contents of the BTH, or of the contents of specialties such as Gastronomy and Environmental Management.

On the other hand, for the District Directorate of Education "the Technical Graduate is complementary to the Humanistic Graduate and not the other way around ... There is coordination, but not necessarily that all teachers have to adapt to the Technical Graduate" (DDE, 06/15/20).

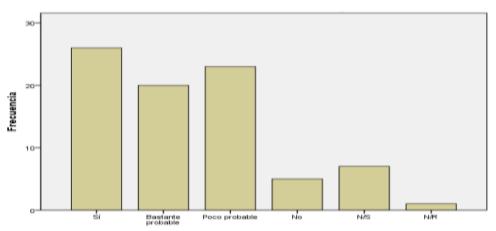
This aspect denotes a weakness of the project, because the lack of coordination and confusion to articulate the contents of the BTH is recognized. A gap is identified in the articulation of contents between the specialties and the humanistic one, which at the same time can express a lack of information and commitment of the teachers of the humanistic area with the techniques.

<sup>&</sup>lt;sup>6</sup>The PSP is an articulation mechanism between school and reality, not just a methodological tool. It implies a change in the approach and paradigm of education, while promoting the generation of pedagogical processes from the social, economic, linguistic, and cultural problems of different socio-educational contexts and not the content proposed from the central level. It seeks to solve these problems, strengthening the productive vocation of the community.

In the Jesús Maestro educational School, teachers are aware of the need to work on educational inclusion and gender equality, promoting pedagogical processes of non discrimination and inclusion, within the framework of Digni's philosophical principles that govern the Project.

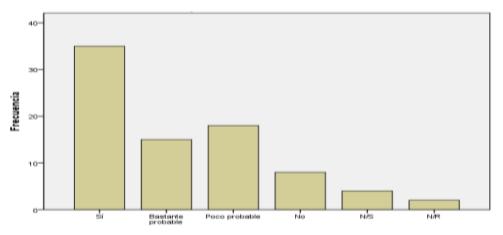
# R4. The Technical and Humanistic Graduate is relevant to the job opportunities of the students or their possibilities to continue their education at a higher level

According to graph 3, 56% of the students do consider feasible that the certificate of Middle Technician will help them get a job when they have finished their humanistic technical baccalaureate. 28% of students who are not sure of getting a job.



Graphic 3 certificate utility to obtain a job

For their part, 61% of the students state that they do and it is quite likely that the certification of Middle Technician in gastronomy or environmental management would allow them to continue their higher studies.



Graph 4. Usefulness of technical certificate to continue higher studies

Source: Own elaboration based on surveys applied to students

So, a majority believes that it will allow you to continue with an education at a higher level, especially if you choose a related Career. Conversely, If your professional choice is different from the Technical Specialties, it will only be one more knowledge and part of your curriculum.

Source: Own elaboration based on surveys applied to students

The usefulness of the Middle Technician certification is not in question, because between 56% and 61% of students affirm that the BTH certification would help them to get a job and would allow them to continue with higher studies. It is a matter of working a little more on the acquisition of confidence, motivation, oriented to generate more security in the students regarding the added value that the Technical Graduate has, in relation to a humanistic Graduate only.

In the interviews, the students state that they are not very clear about the scope of the specialty in Environmental Management, whereas Gastronomy is, because it can open their company or undertaking, because it is something very concrete and operational; on the other hand, Environmental Management is shown as something still abstract and theoretical.

According to the opinion of parents and teachers, they strongly affirm that Technical certification will be a tool in their lives, which will help them to continue studying and get a job: "It is a support for them, their family and to support higher studies" (Ppff, JM, 06/12/20).

From the opinion of various teachers, some students "are yet to be", because they aim to study a university degree not related to technical studies. Everything will depend on the interest of the students who do not anchor themselves in looking for traditional careers such as: law, dentistry, medicine, but rather looking for alternative careers, depending on the specialty they choose.

# R5. The school management and operations of the Technical and Humanistic Graduate are fully managed and financed by Bolivian stakeholders

All parents or guardians of secondary school meet the contribution of Bs. 20 of their dependents. The payment of the established amount is per student and not per parent. 90% comply with the established deadlines and 10% when starting the next administration. In the 2019 management, there were 402 students and in the 2020 management, there are 395 students enrolled.

Information collected shows that there are also certain consideration mechanisms for some families and / or students that justify their inability to meet these payments. This determination passes through the decision of the representative of the Board of Parents and the Chaplain of ICEL.

The resources from the contributions of parents are deposited in an ICEL account and an audit is carried out every year. These resources are administered by the Board of Directors of the Parents, who in assembly approve and decide the work to be done and the expenses to be distributed.

With these contributions, parents contribute to the implementation of the BTH-JM, covering the salaries of some professionals in the specialty, of some members of the administrative and service staff, which is spent around Bs. 170,000 annually. As you can see, these resources are also used to improve infrastructure and equipment with some supplies, not only for the BTH, but for the entire educational school.

The surpluses of the contributions, at the end of the term, are considered as a financial buffer for the beginning of the next term, because the fees begin to be paid from the first two months. "If you didn't have those resources, where would you pay the teachers and administrative staff?" (Pdte. Ppff, 06/10th/20).

Regarding the Items covered by the Tiquipaya District Directorate of Education, to date an Item with 96 hours has been achieved for the Jesús Maestro educational School, with the commitment of the District Directorate to grant at least one more Item for the specialty. However, the appointment of teachers for specialties establishes having a title of Collegiate teacher and in the absence of collegiate teachers trained for technical, it is difficult to recruit other professionals with relevant training. Although the requirements for the appointment of specialty teachers have been relaxed, admitting free professionals, but it is conditioned on annual contracts.

The achievement of items, although it is an administrative issue, has a direct impact on the pedagogical, being of great importance for the sustainability of the BTH in the educational School Jesús Maestro.

Regarding the budget that the Mayor's Office of Tiquipaya designates annually for the maintenance of infrastructure and equipment, the documentation and the testimonies of the educational actors, show that the construction of the infrastructure was in charge of ICEL and the equipment was the responsibility of the Tiquipaya Mayor's Office, which has been partially met, although with some delays and modifications. The Mayor's Office delivered quality and adequate equipment to the Gastronomy Specialty, it is still necessary to equip the Environmental Management specialty.

The indicator refers to the annual designation of the budget for maintenance of infrastructure and equipment. In this regard, by reviewing the POA of the Tiquipaya municipality, it is verified that there is a general budget designated for the Education sector, which is not specifically established. For equipping the Environmental Management specialty of the Jesús Maestro educational School, but the municipality does have a commitment.

On the fulfillment of the functions of the Management Committee in the implementation of the BTH, we have the following findings:

The Management Committee is an entity organized by the P-BTH, as a strategy to work on the sustainability of the project; therefore, it is new and is in the process of becoming institutionally consolidated. In the process of building the infrastructure, he showed great management capacity, at the same time, in an effort to consolidate the techniques, they acted in coordination and with some collegiate momentum until achieving their objective, but in the implementation of the project, it still has weaknesses, especially in the pedagogical part.

According to conversations with different actors, it turns out that most of the interviewees have little information about the existence and even worse about the functions that the Management Committee plays in the implementation of the project.

Documentary sources show that the Management Committee held meetings of at least one every month, addressing different topics, from reports of activities, finding solutions to problems raised in management, and even making activity plans for the implementation of the BTH, covering administrative areas of construction and equipment, methodological training courses for teachers and workshops for parents.

So why not all the actors in the educational community know the Management Committee? What happens is that there is a lack of communication of the actions of this entity to the bases, by the representatives of different actors involved in the implementation of the P-BTH-JM. In other words, they are not informing their sectors about the reports and activities they are carrying out and the work plans to be faced. Especially students and teachers claim to have no information about the functions performed by the members of the Management Committee.

At the same time, a large part of the actors consulted coincide in pointing out that the key part of the Management Committee are parents, represented by their president and the board of the school board. This scenario may change due to compliance with the management of the directory, which implies the renewal or appointment of another directory, which could cause some discontinuity in the management of parents and their leading role that they play in the Management Committee. Such is the case of the president of Fathers and mothers who has already fulfilled her management and who also no longer has children in the educational unit, which implies making a transfer of his experience to the new representative to be elected. This situation was foreseen in the Management Committee, because they agreed to hold a workshop with representatives of parents to outline sustainability strategies and generate transition processes to the new directive.

From the parents' perception, it is affirmed that before it was better coordinated and was weakened, due to the distancing of the church and a certain passivity of the school management. Parents, teachers and students expect more commitment and initiatives from the ICEL and more proactivity from the director of the educational unit.

This situation poses the challenge of institutionally consolidating the Management Committee, for which it would be necessary to work on the elaboration of statutes and operating regulations of the Committee. You could also make a regulation of use of goods and work concerning BTH.

During the P-BTH-JM implementation period, two sustainability strategies proposed in the project have been applied. The first one refers to the constitution and strengthening of the Management Committee as an instance that promotes and energizes the Project management.

Another strategy in the implementation process of the project is the development of teaching methodology workshops at BTH, in which it includes topics related to values, gender and the environment. These workshops have been developing during the 2019 administration, workshops have also been carried out in the current 2020 administration.

It is noted that the Project, despite some difficulties, has been applying the two strategies defined in result 5, which is a ponderable decision, because it is aiming, on the one hand, at institutional and administrative strengthening and, on the other hand, to the pedagogical field of teacher training. Both strategies are very important to strengthen the full implementation of the BTH-JM Project and its sustainability.

In general, the implementation of the P-BTH-JM, being an initiative of parents from previous years, has generated a feeling of ownership. And there is also a level of empowerment, mainly from parents, students and, to a lesser extent, from teachers in the educational unit and, of course, from ICEL. Although greater commitment and unity is expected from all the actors that make up the Management Committee and the educational community in order to consolidate the sustainability of the Project.

#### 6. Analysis/discussions

This section seeks to identify the strengths and problematic knots to analyze and reflect purposefully in relation to the findings presented above, they are aimed at generating discussions that envision possible solutions to continue deepening the implementation of the project. In this sense, considering that it is a Mid-Term Evaluation, the aspects indicated in this section will contribute to achieving the planned results, in the missing implementation time.

In the implementation of the Project, we can not fail to value the committed work carried out on gender equality and educational inclusion, which constitute a strength of the BTH. These two axes, without a doubt, crosscut the entire institutional and pedagogical process of the Project. An example of this, for example, are the refresher courses in teaching methodologies, which address the issues of gender equity and educational inclusion. Both thematic axes are rooted and internalized in the educational practice of teachers and are a constituent part of the BTH Project. It is considered that there is a strengthening of the role of women in the different classes. Likewise, the Technical Specialties do not limit the participation of students due to gender issues. Everyone has the same opportunity and ability.

A general aspect that invites reflection is the reference to the Productive Socio-Community Model approach, specifically to intra and interculturality in both specialties.

Given that the context where the project is implemented presents a cultural, linguistic, economic, productive, culinary diversity and relationship with nature, which entail also diverse life practices. Today, as a challenge of the post-pandemic, food production linked to food sovereignty and food security becomes an important guideline. Therefore, we consider that the project could discuss the incorporation of this productive socio-community approach.

In this same line of food sovereignty in the post-pandemic, it is necessary and opportune to reflect on the incorporation of Agroforestry as another approach to relationship with nature, which entails other practices of doing agriculture and therefore other views to contribute to Environmental Management.

The intercultural approach in the specialty of Environmental Management could incorporate elements of relationship of coexistence with nature, which implies establishing relationships of interdependence and incompleteness between human beings and beings of nature, valuing their production systems. It means building a broad, complex, comprehensive approach to Environmental Management, which is expressed in daily life practices.

In relation to the Gastronomy specialty, the intercultural approach allows evaluating food systems that are closely linked to health and life systems, which implies taking into account the different forms and knowledge of food preparation depending on the weather conditions.

In no case is it intended to devalue, nor to deny the need to work the so called universal knowledge, on the contrary, the challenge is to generate a dialogue of intercultural knowledge and knowledge, respecting the life practices of the educational community.

From now on, for didactic reasons, the presentation of this section is organized according to the results and indicators of the BTH-JM project.

## 1. Infrastructure and adequate equipment for the implementation of the Humanistic Technical Graduate in the Jesús Maestro educational school

As seen in the findings chapter, this result has been partially met, pending the Environmental Management equipment and the technical management of the equipment and its proper use, which were paralyzed by the problems of the current pandemic worldwide.

One aspect to consider in infrastructure is the one related to water use, which is not considered in the project design. Since, from a comprehensive approach to Environmental Management, water is a vital element that requires a rationalized and responsible use and as such could be contemplated in the project, to avoid falling into contradiction with environmental principles. The cultural change in the ways of relating to water merits working in the new generations.

Another aspect to consider in the implementation of the project refers to the inputs for the practices of both specialties, especially manifested in gastronomy practices. For now, it has been established that students contribute their own inputs, without taking into account the situation and the economic possibilities of the families, when from the project the management of inputs for the Gastronomy and Environmental Management practices should be considered.

The experience of the visit to the Agronomy Career could be replicated to other institutions, since they were able to manipulate some materials and get to know their soil laboratories, which allowed them to generate significant learning for the students.

## 2. Curricular plans for vocational humanistic technical education are developed and validated

The curricular plans, in their purposes and objectives, are framed in the educational model of the Ministry of Education. However, in the contents and the methodology of both study plans, they demonstrate a lack of incorporation from an intercultural perspective, so it would be much more in line with the principles and purposes of the Plurinational Educational System.

An element of analysis is that in the content planning of both specialties it is necessary to recover the knowledge of the communities, this activity would enrich the pedagogical learning processes of the students and in some way strengthen the cultural practices of the families.

From a perspective of pedagogical decoloniality, the socialization of these plans to the educational community is important, because it implies evaluating the opinion of the beneficiaries, making them suggest content that meets their most pressing needs in their context, in addition to generating pedagogical processes of horizontality between teachers, students and parents.

It is a challenge for the teachers of the specialty to prepare and validate teaching materials, together with the students as it is being done, and for the Project to disseminate it, after editing and printing them. Which directly contributes to the appropriation of the Project.

Until now the school has become a benchmark at the local and national level in BTH, which challenges to maintain and strengthen this institutional image.

#### 3. Teachers provide quality vocational humanistic technical education and warmth

Refresher courses in BTH learning methodologies developed by the Project are conducted by professionals who have experience in the topics they share. However, the way of approaching these courses has a theoretical and expository focus, from a cognitive position of the facilitator, which conditions the low participation of teachers. Considering the teacher culture, these courses could be approached from the experience of the teachers, promoting a kind of practical workshops. That is to say: if the interest is to incorporate the gender theme in the classroom work, the course may consist of planning a learning situation taking that theme into account; or when talking about the LEAN CANVAS business model, one could start from the components of the model that invites to plan an entrepreneurial activity in a more practical way.

Although it is a strength to carry out teacher refresher courses and workshops, it should not be taken for granted that they apply it in classroom practice and that the reflection of the topics is incorporated into the curricular class plans. Therefore, it is important to incorporate follow-up processes and accompaniment into the activities of the teachers. These processes will contribute to establishing better coordination relationships for the benefit of educational quality for students.

The fact that not all teachers participate in refresher courses, because they are attributed to various factors such as thinking that it is only for BTH technicians or because they are not informed promptly or there is no consensus on the schedule, or the lack Coordination from the school administration are arguments that justify their disinterest in participating in these courses by the teachers. But it can also be read as a culture of resistance to change by the teachers. Because ultimately, the main objective of these refresher courses is to generate changes or transformation, both conceptual and methodological, of their classroom practices, aimed at improving the implementation of the BHT.

This situation suggests that, from the academic direction of the educational unit, it could be planned, together with the teachers, the completion of courses, a follow up and accompaniment to their planning and to the classes developed in the classroom. This requires deploying a work of motivation, awareness and appreciation of the importance of the teaching role and its updating to improve educational quality in the BTH. A project like BTH requires a committed effort, generating synergies between the humanistic and the technical. This requires generating spaces for reflection, creating spaces for meeting and coordination, in addition, awakening and developing greater sensitivity towards techniques without neglecting the humanistic, since not all students want to be technicians in some of the two specialties, but rather choose some career that has no relation to the specialties offered by the Jesús Maestro educational school.

Due to the lack of graduated teachers with training in Gastronomy and Environmental Management, there is a need to hire professionals trained in technical, beyond the ranks. Of course, the non release of education must be taken care of, but in order to ensure the quality of training of the average technicians, as a greater good, it is necessary to have qualified professionals for a relevant performance and a quality of training for the students average technicians. Point out to the Ministry of Education that vocational training in a specialty is not the same as taking "complementary training and education programs developed by the Ministry of Education for Subsystems of Regular Education, and Alternative and Special Education." (ME, 2014: 17), as established in the BTH regulations. In fact, it is known that a few month training course is not the same as vocational training in a technical area.

The challenge of the BTH is to carry out a coordinated, integrated and articulated work among all the actors of the educational community, and the work cannot be centralized only in the two specialty teachers, but requires greater participation and articulation especially of the teachers in the area. Humanistic with those of the technical area. Everyone must participate.

We are in a moment where the symmetrical relationship between teacher and student is more important, it is about developing and strengthening the potentialities, awakening in them curiosity, interest and vocation so that meaningful learning occurs in students.

The plans of the teachers of different subjects in the humanistic area have shown that they only focus on their specific subjects with activities planned in the PSP. But little or nothing is related to the Technical education of the two Specialties. This situation makes it difficult to establish empathy processes between the masters of technical careers with those of the humanistic area.

The joint is recognized to be still a nebula. Full articulation has not yet been achieved, neither at the planning level nor in the classroom practices. Therefore, generating articulation processes of technical and humanistic content is still under construction, constituting a challenge to achieve in the implementation time remaining for the Project. Likewise, it is important to coordinate among all the members of the educational community and the Management Committee with expert professionals so that they can guide on the subject of articulation and harmonization of content.

4. The Technical and Humanistic Graduate is relevant to the job opportunities of the students or their possibilities to continue their education at a higher level

There is a majority consensus on the usefulness of certification as a middle technician, both for job placement in better training conditions, and for continuing higher education; for this reason, they take advantage of the opportunity to train as Humanistic Technical Graduate. Therefore, the usefulness of certification is not a matter of discussion, on the contrary, it is about working on the conviction, the generation of confidence in technical training in students, a fact that would allow for greater commitment to their training and provide them a certain personal security that would allow him to project himself into an undertaking in order to improve his living conditions and studies.

The greatest challenge is in the specialties of Environmental Management, because it needs to be operationalized in the activities of daily life, which will contribute to clarifying its educational expectations of students and their families.

The advantage of having university trained teachers and the work experience they possess, in both specialties, make it possible to contribute to the continuation of higher studies, validating their studies as a middle technician towards a higher technician, this thanks to the concerns expressed by the two teachers. Of the specialty, who would be willing to manage with different vocational training institutions.

Let us not forget that environmental problems, care for nature and healthy eating will become important and emerging areas in food production and food security in postpandemic times; therefore, it is a priority to strengthen and consolidate the specialties in the BTH.

There is no doubt the great damage that the presence of the pandemic is causing on the world stage and in our local context, whose direct incidence is the paralysis of school activities, which also lead to the interruption in the implementation of the BTH-JM Project. School activities have been suspended for approximately four months and it is expected

that they will not return to face-to-face school activities in the current school administration.

In this scenario, the question posed by a student calls for reflection: "Are you going to give us the technical certificate just for passing specialty classes for a year?" (Est. 6<sup>o</sup> B 06/15th/20). The question posed by the student reveals their concern, expectations for training and greater interest in learning the knowledge of the specialty she seeks to receive, rather than for the certificate. So it is important to analyze the possibilities of restarting technical activities through virtual means, to satisfy the expectations of training in technical areas; this will mean prioritization and planning of contents and methodology to be applied.

# 5. The school management and operations of the Technical and Humanistic Graduate are fully managed and financed by Bolivian stakeholders

The fulfillment of the contributions of the parents and the administration of the resources contribute satisfactorily to the sustainability of the Project. With these resources, the representatives of the parents carry out important steps such as: obtaining donations from other instances and covering the salaries of a part of the administrative staff, which consists of: cashier, secretary, psychologist, classroom assistant, regent; In addition, they support the improvement of the infrastructure, the equipment of some materials, and also the payment of the Environmental Management teacher.

Considering that a good part of the administrative staff is paid with the contributions of the parents; the question is: what would happen if the parents stop paying the monthly fees? With what resources would the salary of the personnel paid by the parents be covered? Who would assume this responsibility?

From the Middle Term Evaluation, the need to reflect on these issues arises to envisage solutions for the consolidation of the BTH. Such reflection should be made possible in local contexts, such as the Management Committee, and national, such as the corresponding instances of the Ministry of Education.

To date, an item has been obtained for the Gastronomy specialty, with which the teacher, in 2019, received his salary from the General Treasury of the Nation, pending the item for the professor of Environmental Management, who currently receives his salary of the contribution of the parents.

Likewise, the attainment of other items intended to cover the technical hours of lower courses, from the first to the fourth year of secondary school, is pending.

However, the appointment of the Gastronomy teacher is conditioned by an annual contract, as he is not a Graduate teacher. Therefore, these Specialty teachers are not part of the teaching staff and do not enjoy benefits.

In addition, this type of annual contracts does not give security to the teachers of the specialties to continue working in the following steps, which causes permanent changes for these professionals, also constituting a detriment to the students because there is no continuity in the process of teaching and learning.

The calls, for the compulsory of these positions, is made from the national level, whose procedures take time, meanwhile the classes are already in full development and the students are harmed in the progress of classes and the achievement of their learning. This merits a reflection and review of national regulations and at the same time someone

from the Management Committee would have to take responsibility, following up to speed up the timely appointment process over time.

The analysis regarding the fulfillment of its functions in the implementation of the Humanistic Technical Graduate of the Management Committee organized by the Project revolves around the institutional presence that has marked the educational school. Such presence implies promoting participatory and agreed levels of coordination.

An identified strength of the members of the Management Committee is the transparent and effective participation of its members.

Until now, the actions developed by the Management Committee are very important, but at the same time not very visible, since many actors in the educational community do not know their functions in the BTH project and did not receive timely information on the activities carried out or planned.

A greater commitment is expected from all its members to promote the management of the Project, motivating the will to work, responsibility and respect for others, to radiate this proactive spirit to all the actors of the educational community and of the P-BTH-JM, as part of the consolidation process of the Management Committee.

The formation of the Management Committee is a new entity and in the process of consolidation, which has influenced so that they have not yet been known, especially by teachers in the humanistic area and students. In addition, it has been seen that each level of the Management Committee has a way of seeing, perceiving and reading reality, which is commendable, but it would be better to define the work to achieve common objectives for the good of the P-BTH-JM.

Therefore, a pending task of the Management Committee would be to socialize its work proposal, its functions and powers by classes and members, so that the educational community is aware of and contributes to the activities planned by this Committee.

One potential of the Management Committee is the coordinated work and the negotiations achieved to undertake the construction of the infrastructure, which should also continue to be strengthened for the Project implementation process.

Of course, the Management Committee in addition to talking about these issues of infrastructure and equipment, has also led to the holding of training courses for teachers in the BTH project, in teaching methodologies, with different themes, which is a great achievement, recognized and valued by many teachers.

The importance of deepening the work of the Management Committee, of strengthening the institutional framework, is established, implementing statutes and regulations to monitor and better follow-up on the BTH project.

Faced with the lack of coordination between the different levels such as: parents, teachers and church, a question arises: What can we do to make this lack of coordination change? It will be a pending task to be answered by the Management Committee.

The humanistic technical graduate has a great advantage over the graduate only in Humanities. Let's not forget that not all high school graduates enter the University and they don't have to either. They have one more tool, but it is in the way: the type and quality of training they receive.

When we talk about the empowerment and appropriation of the Humanistic Technical Graduate Project in the educational school "Jesús Maestro", the reflections are as follows:

The BTH Project is the best achievement, it is an important part of the life of most of the students they consider as part of themselves, because they are going to be "professionals" in a technical area, despite the limitations that have been analyzed.

However, this empowerment is still lacking, starting with some members of the Management Committee, since there is a certain indifference from some teachers and some parents. They know that the school is BTH, but they do not know what responsibility they may have and how to help.

When someone takes ownership, they want it and take care of it. Therefore, there is still no common idea of the scope of the BTH and therefore some things are distorted.

This leads us to affirm that greater coordination and consensus between educational actors and the Management Committee can strengthen the project in the medium and long term, in the empowerment of the entire educational community.

#### 7. Conclusions and recommendations

This section reports the conclusions and recommendations that were reached from the findings and the analysis of the information obtained. They correspond to the results formulated in the P-BTH-JM.

In general terms, and despite the contingencies that negatively influence Project management, it is being implemented and responding to the proposed objectives, avoiding difficulties outside the Project, achieving the planned results, although not yet as expected.

The formation of the Management Committee is also relevant, which will require consolidating and institutionalizing it for the sustainability of the Project.

The conclusions by results are presented below:

• Infrastructure and adequate equipment for the implementation of the Humanistic Technical Graduate in the Jesús Maestro educational school

The technical workshops have been built according to national regulations and in the times established by the project, but better coordination was needed for the delivery and reception of the same and to give them timely functionality.

A weakness has been seen reflected in the lack of coordination between the different levels to achieve the proposed objectives and results. Teamwork is important to face the challenges that still lie ahead.

There is no equipment for Environmental Management. Equipment requirements have been made to the Tiquipaya municipality, as part of the Mayor's commitment, and its materialization is awaited during this administration.

Curricular plans for vocational humanistic technical education are developed and validated

There are curricular designs with their study plans with their respective annual and bimonthly plans to respond to each specialty, they are framed in the principles and the MESCP of the Education Law, but it is necessary to incorporate an intercultural perspective in the contents and methodology of said designs. The school, in terms of equipment, constitutes a model and a benchmark at the departmental level.

To this end, visits to specialized training institutions and shared work experience contributed to consolidate the P-BTH-JM and at the same time contribute to generating significant learning.

• Teachers provide quality vocational humanistic technical education and warmth

The methodological updating courses were relatively successful, although it can be improved by planning a better articulation with the BTH. On the other hand, the courses for planning and validating the curricular plans and the lesson plans for the technical studies, have the participation of slightly more than half of the teachers. It is suggested to look for ways to articulate the methodological updating courses with the BTH techniques.

There are no specialized teachers in technical areas at the national level. Therefore, the revision of the regulations that closes the incursion of other professionals in the teaching career for technical areas is required.

The professional capacity of the two specialty teachers in their technical areas is recognized and valued, despite not being normal teachers, they show greater predisposition to plan based on the Productive Socio-Community Educational Model approach.

Each teacher goes for his own, lack coordination with teachers in the technical area and greater involvement of teachers in the humanistic area. Articulation is still an ambiguous possibility. Full articulation has not been achieved, neither in planning nor in classroom practices.

Therefore, the techniques are still little valued for the Humanistic Graduate, when it is expected to be carried out in a more integrated work. It requires generating spaces for reflection, meeting and coordination, awakening greater sensitivity towards techniques without meaning to neglect the humanistic.

• The Technical and Humanistic Graduate is relevant to the job opportunities of the students or their possibilities to continue their education at a higher level

It is concluded that, in general, the BTH is relevant for job opportunities or to continue studies at a higher level. Its importance is not discussed in the context of the Project.

The BTH-JM Project, for many graduates, can become a useful profession for their subsistence; a tool to pay for their higher studies and learned knowledge for those who choose to study a career similar to Technical Specialties. Thus, technical training plays a very important role in the lives of young people and their families.

The BTH project is relevant and largely satisfies the needs of the population and the municipality.

It is important a greater commitment of the estates, monitoring and socialization of the project permanently.

• The school management and operations of the Technical and Humanistic Graduate are fully financed by Bolivian stakeholders

Parents, in general, comply with the financial contribution. They contribute to the functioning of the school.

An item with 96 hours for the Gastronomy specialty was obtained from the Ministry of Education; however, the administrative appointment procedures are governed by an annual contract and also receive only a basic salary for not being a Collegiate teacher;

There are still another 96 hours. For the specialty of Environmental Management; In addition, items are missing for the hours of the general training cycle, from 1st to 4th high school. This point is very important for the sustainability of the BTH.

The educational community recognizes the capacity of specialty teachers, but the Ministry of Education hinders their appointment due to the fact that they are not collegiate teachers. It is urgent to review the laws and legal regulations in force, with a view to a greater good, such as educational quality for BTH students.

The equipment for Environmental Management and search for answers to provide supplies for the practices of the two techniques is pending.

Little is known about the functions of the Management Committee. Each level of the Management Committee has a way of seeing, perceiving and reading reality. The BTH Project has not worked on a common goal, which sometimes brings communication interference and certain disagreements.

Therefore, the importance of strengthening and deepening the work of the Management Committee is confirmed, institutionalizing with a regulation of functions that allow monitoring and better monitoring of the implementation of the BTH project. Better if a regulation of functions and administration of goods and services of the BTH is projected.

The Humanistic Technical Bachelor, if well led and directed, has a great advantage over the bachelor only in Humanities.

The BTH Project is the best achievement of the educational community and is an important part of the lives of most of the students, they consider it as part of themselves, and they value it because they will be trained in a technical area. Therefore, it is important to seek greater coordination and consensus among educational actors, and the Management Committee can strengthen the project in the long term, with the empowerment of the entire educational community.

It is also important to generate greater commitment, unity and stronger support from members of the Management Committee and external partners, such as the Mayor's Office, the District Directorate for Education and ICEL.

#### Recommendations

- Incorporate the intercultural approach in a general project for a new culture of relationship with nature and respond to cultural, economic and educational diversity.

- Generating spaces of greater rapprochement between teachers in the humanistic area with teachers in the technical area, despite shifts of different work schedules, would help develop sensitivity and have greater empathy towards technical careers that until now are isolated.

- Expand and develop workshops on values, gender, environment and others specific to educators and related to BTH.

- Analyze the possibility of giving functionality to the techniques, prior prioritization and content planning, by virtual means.

- Institutionalize the Management Committee, granting them statutes and operating regulations. In addition, draw up a regulation of the BTH to regulate the use of the environments, the equipment and the handling of the utensils of the specialties.

- Develop leadership training courses for parents and students, to continue with the implementation efforts of the BTH.

- Hold a conference on the benefits of Agroforestry, with the participation of the members of the Management Committee, Parents' Board, Teachers. The conference will be facilitated by a professional knowledgeable in the area, as a contribution from the P-BTH-JM Mid-Term Evaluation consultancy.

Finally, having regard to the efforts of the actors of the educational community and of those responsible for the Project, who are doing their best, despite the limitations and restrictions imposed by the pandemic, and which are beyond the control of the Project. The implementation of the Project has been hindered in the achievement of the results, especially those related to the technical training of technicians and institutional management. Therefore, it is necessary and opportune to extend the duration of the Humanistic Technical Graduate Project-Jesus Master.

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### Annex 1

### LOCATION MAP OF THE LUTERANA EDUCATIONAL SCHOOL "JESÚS MAESTRO"





Source: Google earth

#### **ANNEX 2**

#### STUDENT SURVEY-MID-TERM EVALUATION

#### PROJECT: IMPLEMENTATION OF THE HUMANISTIC TECHNICAL GRADUATED DEVELOPMENT PROJECT "JESÚS MAESTRO" EDUCATIONAL SCHOOL OF TIQUIPAYA BTH

Nombre:			
Sexo:	Mujer	Varón	
Curso:			
Área técnica de especialidad:			
Municipio/ Distrito			
Lugar y fecha			

LEE DETENIDAMENTE LAS SIGUIENTES PREGUNTAS Y MARCA CON UNA "X" LA OPCIÓN MÁS ADECUADA:

I. INFRAESTRUCTURA Y EQUIPAMIENTO ADECUADO PARA LA IMPLEMENTACIÓN DE UN BACHILLERATO TÉCNICO HUMANÍSTICO INCLUSIVO EN LA UNIDAD EDUCATIVA JESÚS MAESTRO

1. ¿La infraestructura y los talleres técnicos construidos son adecuados para tu especialidad?



POR QUÉ?.....

.....

2. ¿Se los construyó en el primer año del proyecto (2019)?

SI	NO	POR QUÉ

3. ¿Los talleres técnicos de tu Especialidad han sido equipados adecuadamente de acuerdo a lo que se requiere?

SI	NO	EN PROCESO	POR QUÉ

4. ¿Conoces el manejo técnico de los equipos y los utilizas de manera adecuada?

SI	NO	REGULAR	POR QUÉ

#### II. PLANES CURRICULARES PARA LA EDUCACIÓN TÉCNICA HUMANÍSTICA VOCACIONAL SON DESARROLLADOS Y VALIDADOS

5. ¿Cuántos planes de clases validados, con contenidos temáticos, técnicas pedagógicas didácticas e instrumentos de evaluación, les han presentado los maestros del BTH-JM?

1	2	3	4	NINGUNO	NS/NR

#### 6. ¿Cuántos materiales de enseñanza validados hay en tu especialidad?

1	2	3	4	MÁS DE 4	NINGUNO	NS/NR

#### III. MAESTROS BRINDAN EDUCACIÓN TÉCNICA HUMANÍSTICA VOCACIONAL INCLUSIVA DE CALIDAD Y CALIDEZ

### 7. ¿Tus profesores de las diferentes áreas están formados en metodologías de enseñanza de bachillerato técnico y humanístico?

20%	40%	60%	80%	100%
MAESTRO	MAESTROS	MAESTROS	MAESTROS	MAESTROS

#### 8. ¿El maestro propicia relaciones de:

CONFIANZ	MOTIVACIÓ	HORIZONTALIDA	EMPATI	AUTORITARISM	NS/N
A	N	D	A	O	R

## 9. ¿Los maestros de tu Especialidad están capacitados para enseñar y generar aprendizajes en esta área técnica?

POCO	REGULAR	MUCHO	NS/NR

10. ¿Cuántos de tus profesores de las materias humanísticas utilizan planes de clase, articulando los contenidos del Bachillerato Técnico Humanístico?

NINGUNO	5 MAESTROS	10 MAESTROS	15 MAESTROS	20 MAESTROS

IV. EL BACHILLERATO TÉCNICO Y HUMANÍSTICO ES RELEVANTE PARA LAS OPORTUNIDADES DE TRABAJO DE LOS ESTUDIANTES O SUS POSIBILIDADES PARA CONTINUAR SU EDUCACIÓN EN UN NIVEL SUPERIOR

#### 11. ¿Consideras que tu certificado de técnico te permitirá conseguir un trabajo?

SI	BASTANTE PROBABLE	POCO PROBABLE	NO	NS/NR

12. ¿Crees que tu certificado de técnico te permitirá continuar con tu educación en un nivel superior?

SI	BASTANTE PROBABLE	POCO PROBABLE	NO	NS/NR

13. ¿Consideras que el proyecto es pertinente a las necesidades de la población y del municipio?

DEFINITIVAMENTE	BASTANTE	POCO	NADA	NS/NR

14. ¿Consideras que el proyecto satisface las necesidades de la población y del municipio?

MUCHO	SUFICIENTE	POCO	NADA	NS/NR

15. ¿Desde tu punto de vista, crees que el proyecto ha alcanzado los resultados esperados hasta ahora?

MUCHO	SUFICIENTE	POCO	NADA	NS/NR

#### V. LA GESTIÓN ESCOLAR Y LAS OPERACIONES DEL BACHILLERATO TÉCNICO Y HUMANÍSTICO ESTÁN TOTALMENTE ADMINISTRADAS Y FINANCIADAS POR LAS PARTES INTERESADAS BOLIVIANAS

16. ¿Tus padres o tutor pagan puntualmente las cuotas mensuales comprometidas al colegio?

SI	A VECES	NO

#### 17. Los padres de familia contribuyen a la implementación del BTH\_JM:

MEJORANDO LA INFRAESTRUCTURA	AYUDANDO CON EQUIPAMIENTO	APOYANDO CON EL PAGO A MAESTROS	OTROS

18. ¿Los profesores de tu Especialidad reciben su sueldo del:

TESORO GENERAL DE LA NACIÓN	 _	OTRAS INSTANCIAS	NS/NR

19. ¿El Comité de Gestión cumple con sus funciones en la implementación del Bachillerato Técnico Humanístico en la Unidad Educativa Jesús Maestro?

CUMPLE 100%	REGULARMENTE	NO CUMPLE	NS/NR

20. Escribe tres dificultades económicas que percibes para que el Bachillerato Técnico Humanístico funcione bien

DIFICULTAD 1	DIFICULTAD 2	DIFICULTAD 3	NS/NR
20. Escribe algunas es	trategias de sostenibilidad	del Bachillerato Técnic	0

Humanístico que aplica el Comité de Gestión para su buen funcionamiento

ESTRATEGIA 1	ESTRATEGIA 2	ESTRATEGIA 3	NS/NR

	~ .	-	-	 	 		
1							
1							
1							

# 21. ¿Sientes que el proyecto Bachillerato Técnico Humanístico en la unidad educativa "Jesús Maestro" forma parte importante para tu vida?

21%-	41%-60%	61%-	81%-
40%		80%	100%

¡Gracias por tu colaboración!!!

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#### ANNEX 3

#### IMPLEMENTATION OF THE HUMANISTIC TECHNICAL BACHELOR'S DEVELOPMENT PROJECT BTH -TIQUIPAYA

#### GUIDE TO INTERVIEW WITH TEACHERS OF THE EDUCATIONAL UNIT "J. M"

Nombre:	
Sexo:	
Área o Especialidad de	
formación.	
Años de servicio / Categoría	
Trabaja en área Humanística	Trabaja en área de Especialidad Técnica:
Lugar y fecha de entrevista:	
Entrevistador:	

1. ¿Profe cree que en Tiquipaya es necesario un proyecto de Bachillerato Técnico Humanístico? ¿Por qué?

2. ¿Cuándo fueron construidos la infraestructura de los talleres técnicos? Y ¿cumplen la normativa nacional? ¿Por qué?

3. ¿Los talleres técnicos de cada Especialidad han sido equipados adecuadamente de acuerdo a la normativa del Ministerio de Educación? O ¿qué dificultades han tenido?

4. ¿Por qué eligieron por estas especialidades? ¿O hubieran preferido otra tecnicatura? ¿Como cuál?

5. ¿Los estudiantes están aprendiendo el manejo técnico y la utilización adecuada de los equipos? ¿Por qué?

6. ¿Los maestros han elaborado sus planes de clase con contenidos temáticos, técnicas pedagógicas didácticas e instrumentos de evaluación adecuados al Bachillerato Técnico Humanístico?

7. ¿Qué materiales han validado, articulados con las especialidades del área técnica?

8. ¿Los maestros tienen formación en metodologías de enseñanza de bachillerato técnico y humanístico? ¿Dónde y con quiénes se formaron?

9. ¿Los maestros de la especialidad (gastronomía y gestión ambiental) están capacitados para enseñar la tecnicatura? ¿De qué manera se capacitaron?

10. ¿Cuántos maestros y de qué materias utilizan planes de clase articuladas con los contenidos de la especialidad?

11. ¿Ud. cree que el certificado de técnico ayudará a los estudiantes a conseguir trabajo y le permitirá continuar con estudios en un nivel superior? ¿Por qué?

13. ¿Cuáles son las causas para que los estudiantes abandonen sus estudios en el BTH?

14. ¿Hay estudiantes con alguna discapacidad? ¿cómo se trabaja con ellos en el aula?

15. ¿Cuántos ítems del BTH son cubiertos por el Ministerio de Educación? O ¿por qué otras instancias (alcaldía, proyecto o padres de familia)

16. ¿Qué dificultades de financiamiento enfrenta la implementación del BTH-JM?

17. ¿Qué estrategias de sostenibilidad del BTH se están aplicando en la unidad educativa?

18. ¿Considera al Proyecto Bachillerato Técnico Humanístico como un Proyecto propio de la unidad educativa J M? Si/ No. ¿Por qué?

16. ¿Usted siente que es importante y que forma parte de la identidad del colegio, el proyecto de Bachillerato Técnico Humanístico? ¿Por qué?

17. ¿Qué haría si el BTH, por alguna razón, se cierra?

18 ¿La H.A.M. de Tiquipaya cumple con la designación anual de un presupuesto para el mantenimiento de la infraestructura y equipamiento del BTH?

19. ¿El Comité de Gestión organizado por el Proyecto, cumple con sus funciones en la implementación del BTH en esta unidad educativa? ¿Por qué?

20. ¿Qué sugerencias daría para mejorar la gestión del Proyecto Bachillerato Técnico Humanístico en la unidad educativa?

ANEXO 4 PARTICIPANTES ENTREVISTADOS BTH-JM						
Nro	NOMBRE	CARGO U OCUPACIÓN	FECHA			
1	María Concepción Ríos Toledo	Directora U. E. Jesús Maestro	12 de Junio del 2020			
2	Genaro	Presidente Junta Escolar Padres de Familia	12 de Junio del 2020			
3	Juan Carlos Zurita	Delegado 6to Sec.	12 de Junio del 2020			
4	Alberto Quiroz	Delegado 3ro SecMiembro Junta Escolar	12 de Junio del 2020			
5	Mayra Torrico	Delegada 6to Sec. B	12 de Junio del 2020			
6	Lizeth Chambi	Delegado 1ro SecMiembro Junta Escolar	12 de Junio del 2020			
7	Pastor René Mendoza Viorel	Capellán	15 de Junio del 2020			
8	Leiddy Yubithza Cáceres Mamani	Profesora Especialidad Gestión Ambiental	15 de Junio del 2020			
9	Patricia Maricela Fuentes Gómez	Profesora Ciencias Naturales y Biología	17 de Junio del 2020			
10	Gilka Magda Campos Monrroy	Estudiante 5to A-Especialidad Gastronomía	15 de Junio del 2020			
11	Marco Ántonio Fuentes Colque	Estudiante 5to B-Especialidad Gastronomía	15 de Junio del 2020			
12	María Elena Terceros Ucieda	Estudiante 5to B Especialidad Gastronomía	15 de Junio del 2020			
13	Melany Evelin Torrico Conde	Estudiante 6to B-Especialidad Gastronomía	15 de Junio del 2020			
14	Francisco Ariñez	Estudiante 6to B-Especialidad Gestión Ambiental	16 de Junio del 2020			
15	Marcelo Condori Castro	Estudiante 6to B-Especialidad Gestión Ambiental	16 de Junio del 2020			
16	Suri Duran	Estudiante 6to A-Especialidad Gestión Ambiental	16 de Junio del 2020			
17	Dennis Balderrama	Profesor Cs. Sociales. Asesor 5° Blanco	11 de Junio del 2020			
18	Giovana Silvia Luizaga	Comunicación y Lenguaje. Asesora 6º Azul	12 de Junio del 2020			
19	Ruth Arancibia	Directora P-BTH-JM	12 de Junio del 2020			
20	Sandra Arévalo Saravia	Profesora Sociales, Rep. Maestros al C.G.	13 de Junio del 2020			
21	María del Carmen García	Biología. Asesora de 6º Blanco	10 de Junio del 2020			
22	Ángel Reyna	Ex Director Del P-BTH-JM	12 de Junio del 2020			
23	Velía	Madre de familia y Tesorera de la JE ppff.	12 de Junio del 2020			
24	Maldonado Ariel	Profesor de Gastronomía	13 de Junio del 2020			
25	Henrry Pérez	Responsable de Educación del municipio de Tiquipaya	15 de Junio del 2020			
26	Carlos Zanabria	Director Distrital Educación Tiquipaya	17 de Junio del 2020			

### ANNEX 5 PHOTOGRAPHIC REGISTRY



### BTH-JM Project Infrastructure





Environments and equipment of the Gastronomy specialty



### Theoretical classrooms of the Specialties: Gastronomy and Environmental Management



**Environments of the Environmental Management Specialty** 



PSP activities and practical acetronomy workshop



Focus group with parents and interview with the District Director of Education

