REDE DE COOPERAÇÃO MÚTUA (RCM): UMA EXPERIÊNCIA EM UMA INSTITUIÇÃO DE EDUCAÇÃO TÉCNICA PROFISSIONAL (ETP)

MUTUAL COOPERATION NETWORKS (MCN) AS A PROPOSAL OF SCHOOL INTERVENTION: AN EXPERIENCE IN AN INSTITUTION OF PROFESSIONAL TECHNICAL EDUCATION (PTE)

REDES DE COOPERACIÓN MUTUA COMO PROPUESTA DE INTERVENCIÓN ESCOLAR: UNA EXPERIENCIA EN UNA INSTITUCIÓN DE EDUCACIÓN TÉCNICA (IET)

GOUVEIA, Marco Aurélio da Cruz
gouveiamarcoac@gmail.com
Faculdade Anhanguera de Guarulhos
https://orcid.org/0000-0002-4815-0417

FERREIRA, Sandra Lúcia
07sandraferreira@gmail.com
UNICID – Universidade Cidade de São Paulo
https://orcid.org/0000-0002-6891-1332

SCHLINZ, Rita
rssouza@ifsp.edu.br
Instituto Federal de Educação de Ciências e Tecnologia– Campus Suzano – SP
https://orcid.org/0000-0001-8064-8453

RESUMO Este artigo apresenta o estudo que investiga a função de uma instituição de educação técnica do estado de São Paulo. Trata-se de uma pesquisa qualitativa com delineamento longitudinal cujos dados foram coletados por meio de questionários aplicados em diferentes períodos gerando assim informações dos participantes dos cursos pesquisados e pautou-se nos critérios de análise de conteúdo proposto por Bardin. Os resultados apontam que a concepção de Rede de Cooperação Mútua (RCM) integra-se ao conceito de participação qualificada como ponto essencial para a implantação de um projeto de intervenção institucional, embasado em valores éticos, alteridade, empoderamento dos direitos humanos, bem como na investida de uma reorganização dos pensamentos e valores institucionais, tornando os envolvidos mais humanizados e críticos.
Palavras-chave: Educação técnica profissional. Egresso. Formação permanente. Rede de cooperação mútua.

ABSTRACT This article presents the study that investigated the role of a technical education institution in the state of São Paulo. This is a qualitative research with a longitudinal design whose data were collected through questionnaires applied in

different periods, thus generating information from the participants of the researched courses and based on the criteria of content analysis proposed by Bardin. The results indicate that the conception of the Mutual Cooperation Network (MCN) is integrated into the concept of qualified participation as an essential tenet for the implementation of an institutional intervention project, based on ethical values, alterity, empowerment of human rights, as well as on the adoption of actions that seek a reorganization of institutional reasoning and values, making those involved more humanized and critical.
Keywords: Professional technical education. Former student. Continued education. Mutual Cooperation Network.

RESUMEN Este artículo presenta el estudio que investigó el papel de una institución de educación técnica en el estado de São Paulo. Se trata de una investigación cualitativa con diseño longitudinal cuyos datos fueron recolectados a través de cuestionarios aplicados en diferentes períodos, generando así información de los participantes de los cursos investigados y con base en los criterios de análisis de contenido propuestos por Bardin. Los resultados indican que la concepción de la Red de Cooperación Mutua (RMC) se integra al concepto de participación cualificada como principio fundamental para la implementación de un proyecto de intervención institucional, basado en valores éticos, alteridad, empoderamiento de los derechos humanos, así como en la adopción de acciones que busquen una reorganización de los razonamientos y valores institucionales, tornando más humanizados y críticos a los involucrados.
Palabras clave: Educación técnica profesional. Estudiante graduado. Entrenamiento en curso. Red de cooperación mutua.

1 INTRODUCTION

Investing in proposals for institutional actions that favor monitoring and evaluation has been a challenge both for managers and for public policies that seek to improve the quality of educational institutes. The present study/research, developed within the scope of the study group "*Studies of Values: the images that public policies unveil in relation to human rights and humanization processes*", sought to present the contribution from the perspective of the Mutual Cooperation Network (MCN) to the development of Institutional Self-Assessment, thus seeking to provide support to the actions by the management. The MCN is based on the psychosocial approach that understands the inseparability between psychic and social, that is, subject and object, conceiving the relationships between these elements as circular and complex, and recognizing the existence of a dynamic and joint coexistence, weaving the meanings of reality. Therefore, the understanding of an MCN does not dichotomize the internal and the external, that is, it considers the importance of intrasubjective and

intersubjective processes, recognizing that in these relationships - in the case of this study/research - managers and students are complex and conflicting processes, implying differentiated values, beliefs, ideologies, information, and feelings (Alvarez; Celdrán; González, 2015).

Studying the relationship between managers/students meant understanding the school and, in the specific case of this research, one that offers Professional Technical Education (PTE) concomitant with/subsequent to high school studies in a federal education institution, the pedagogical coordination and students, who are characterized by freshmen and graduates. Specifically, in relation to students already graduated, we started to identify them as "former students" based on the concept proposed by SETEC/MEC, which considers graduates as " *[...] actors with the potential to interface with society, sources of information [...], both from the point of view of the educational process, as well as the level of interaction that takes place.*" (Brazil, 2009, p. 02).

The study/research aimed to propose institutional actions for the monitoring and evaluation of students, enrolled in the period from 2013 to 2017, considering three focuses of analysis: 1) The relational process with teachers; 2) The contributions of the course planning (PPC); 3) New labor market demands.

In the case of educational plans, the first National Education Plan (PNE) began to be devised in 1996, however, it only came into force on January 9, 2001, with its period of effectiveness between 2001 and 2011 upon the approval of Law No. 10.172 of January 9, 2001. Its purpose was to propose investments for the improvement of the quality of education in the country and, to that end, guidelines, goals, and strategies were established that, at the time, governed the initiatives in education.

As for PTE, technical education is a reference for Goal 7, which specifically addresses issues involving Technological Education and Vocational Training. The complexity of the topic is evidenced in the body of the text, which indicates that "there is no accurate information, in Brazil, on the offer of professional training, precisely because it is very heterogeneous" (Goal 7, Diagnosis, 7.1). It also highlights strong criticisms related to the precariousness of the schools in which PTE is developed, indicating "generalized deficiencies and improvisations", including the issue of "propedeutic-professional duality" that affects the identity of the training work, which

was characterized by offering qualifications, of low cost and prestige, to students enrolled in state or municipal night schools. According to the text of Goal 7: "only 15% of schools have libraries, less than 5% of them offer an adequate environment for studying science and not even 2% have a computer lab – indicators of the low quality of education they offer to the most underserved sections of the population" (Goal 7, Diagnosis, 7.1).

The consequence of the precariousness in the PTE modality implies the construction of an image where students who finish high school are divided into two groups: those who are destined for the best positions in society, follow university training, and those who are destined for the worst positions in society, proceed with professional training. This topic is not new and can be referenced in previous studies: Ferretti (2000); Sodré (2004); Ciavatta (2005); Artexes (2007); Frigotto *et al.* (2007); among others.

As a proposal, the PNE (2001 - 2011) sought to counter these criticisms by proposing a new vocational education in 15 Goals, based on the development of skills and competences, favoring the integration of various entities, be they the government, private entities, and groups of workers.

The 2nd PNE-Law no. 13.005, June 25, 2014 (Brazil, 2014), has been addressed since 2010, and aimed to establish 20 Goals to be met in 10 years with the following objectives: 1) raise funds for Education to 10% of GDP; 2) increase the number of enrollments at all school levels, and 3) expand the minimum quality standard in all schools in the country, paying attention to the promotion of the principle of Democratic Management. It was structured considering 10 guidelines and 20 goals that should provide the direction for the Brazilian education.

For this study, we highlight Goal 10, which proposes the following: the need to offer, at least, 25% of enrollments in youth and adult education in an integrated manner with PTE in the final years of elementary school and high school, and Goal 11 clarifies the need to expand the offer of openings for the PTE, in order to triple enrollments in technical courses at secondary level, ensuring the quality of the offer and at least 50% expansion in the public sector.

Thus, the PTE according to the 2nd PNE (National Plan of Education) aims to guarantee a student's right, in the proposal of their insertion in the professional world,

and the understanding that human development must also be an axis for the integration, interaction, coexistence, and the sense of collective belonging.

2 MUTUAL COOPERATION NETWORK (MCN): CHALLENGES FOR THE PEDAGOGICAL COORDINATION OF A PTE

Accepting the challenge of improving the quality to the PTE at the high school level, this study focused on actions on the part of the managers. Quality understood here as carrying out a training and education process capable of integrating, at the same time, relevant aspects of the development of citizenship skills and training that may pave the way for the student to enter the labor market.

To do so, it sought support in a conception of school management, focusing on pedagogical coordination, which incorporates into its daily life the constituent ideas of a "Mutual Cooperation Network (MCN)" which, as the name suggests, is related to specific forms of relationships established in the day-to-day life in a school. The term chosen was mutual because the idea that is intended to be conveyed is that, from the exchange of one thing for another, in a reciprocal way, everyone gains.

This form of coexistence combines the assumption of democratic coexistence and the sharing of information, aiming at the establishment of common goals. An MCN is recommended for the actions of the management because it is flexible and dynamic, aiming to obtain solutions to common problems, share knowledge and learning on the part of individuals and motivate trust and bonds established between relationships.

Castells (1999) points out the collaborative network as a promising way to organize work. To do so, it indicates 7 significant actions: 1) Building trust: it requires time, interactions, exposure of differences and preferences from participants, experience of conflicts, preferably with the support of professional facilitators; 2) Sharing of values: involves promoting both personal and professional development; 3) Giving and receiving: considering that networks are mechanisms that facilitate exchanges; 4) Creating products and events: events such as collective production that generates a sense of belonging; 5) Investing in leadership: as there are several intersections between several networks containing differentiated competences and knowledge, it is necessary to encourage leaders to systematize the productive processes of the networks; 6) Systematizing knowledge: in order to make knowledge

perennial and maintain the initial alignment; 7) Learning by doing: networks have a dynamic nature resulting from the exchange of knowledge between the subjects and their contributions.

Lévy (2003) argues that a significant element for the maintenance of a network is communication. This is because human communication is considered as a continuous process that changes scientific, economic and professional contexts, creating the need for new conceptions of thought and negotiation of society to conceive Collective Intelligences, because when the reinvention of new models of communication occurs, a new model of democracy is also reinvented, more active and distributed, because [...] The better human groups manage to constitute themselves into intelligent collectives, into cognitive, open subjects, capable of initiative, imagination and quick reaction, the better they ensure their success in the environment [...] which is ours (Lévy, 2003, p.19).

The concept of permanent education is also incorporated into the set of assumptions of an MCN. This concept is based on the four pillars of the Delores Report (UNESCO) and on the seven complex lessons idealized by Morin (2002). Its dynamics is the innovative movement of knowledge construction, recognized as cyclical and inexhaustible, which feeds back the entire system and which emerges as a response to the need for constant adaptation to changes in society with repercussions in the fields of knowledge and in the modes of production of goods and services.

RESEARCH PATHS: METHODOLOGY AND CONTEXT

To achieve the proposed objectives, this study adopted the qualitative research methodology, which is used to describe how something develops or changes, with its causes, processes, and consequences (Gil, 2007; Yin 2005). The investigation took place through an exploratory study in an educational institution of PTE. The design is longitudinal, as it aims to analyze the variations in the characteristics of the same sample elements over a long period, which in this case, comprises the period from 2013 to 2017.

The data collection tools were questionnaires applied to the same group of freshmen students who later became graduates of the course they attended. The situation of the graduates after completing the course and working in the field of their

education was verified, in addition to the application of the questionnaire to the subjects of the mentioned courses to verify the assumptions of this study. The investigation took place through content analysis, which, according to Bardin (2011), comprises the categorization and classification of data, with triangulation of the different databases, until the theoretical saturation for the answer to the research question and completion of the final report.

The operationalization of the variables contained in the proposed research model presupposes Professional Career, Experience Sharing, Continuing Education, Dialogue between theories and practices, Knowledge (Management, Research and Public Policy, and Scientific Academic) and focus of interest (Job market and learning), are themes that verified the educational status of the institution in the courses listed in general. Such propositions are based on a review of the available literature and include previous studies related to the operationalization of the MCN.

Figure 1 - Mutual Cooperation Network Model
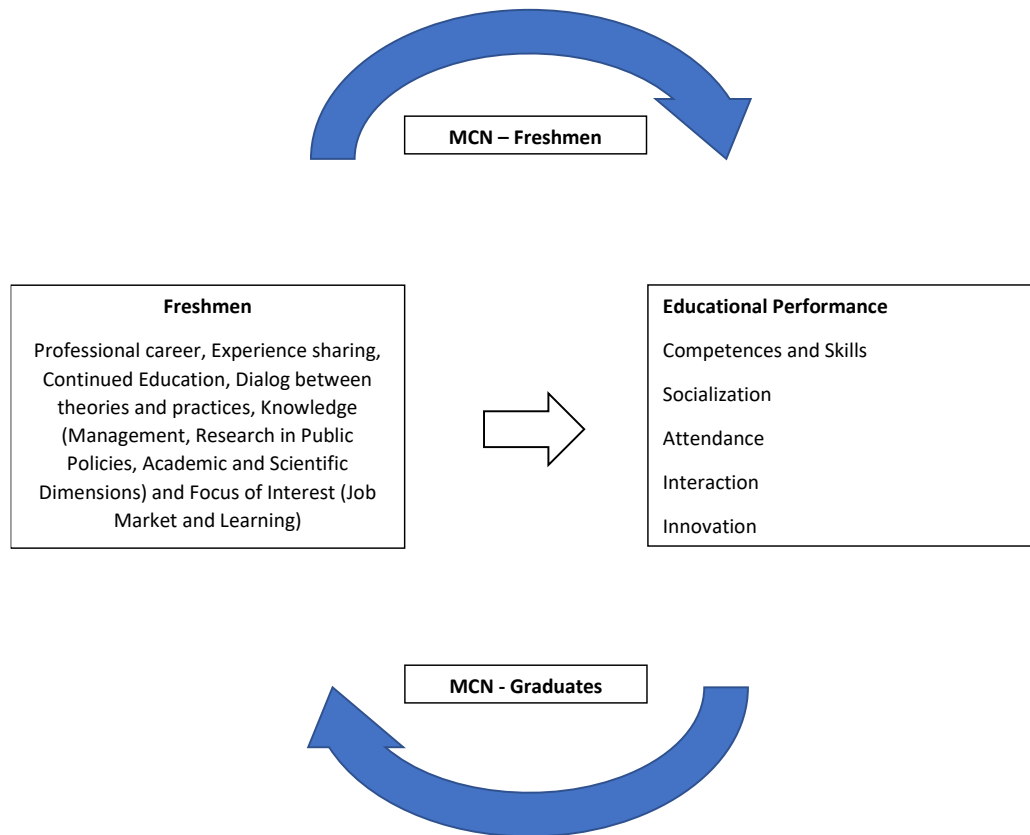
Source: Prepared by the authors

3.1 Student Monitoring Project: MCN at PTE

As stated earlier, the study proposed to carry out a type of intervention in the school routine, based on the constituents of an MCN, aggregating students from the PTE. This implied understanding the importance of listening to students. Therefore, the methodology proposed to create an opportunity for the students' words to be expressed and fulfill their role. This is because, as another assumption of the MCN, everyone has opinions and values.

Regarding the approach used in the research, the assumptions of qualitative methodology were adopted. According to Weller and Pfaff (2010, p. 34), qualitative research collaborates with the evolution of the educational processes developed in the area of Education, leading to a "better understanding of educational and learning processes, of the relationships of institutional and cultural, socialization and sociability processes of everyday school life in its multiple implications." After the bibliographic

research and document review, the field investigation was carried out through the application of questionnaires to incoming and outgoing students, followed by the method of thematic and interpretive analysis. The purpose was to collect the information required from the selected group for the development of the MCN.

As the work consists of a longitudinal descriptive/exploratory research, it is worth recalling that the descriptive study enables the development of analyses and a better understanding of the behavior of several factors or elements. In a descriptive research, the researcher must efficiently choose the most appropriate tool to carry out data collection (Oliveira, 2002).

For the research, 3 (three) questionnaires were applied to incoming and outgoing students, organized as follows: the first questionnaire was composed only of closed-ended questions and the following 2 (two) questionnaires comprised closed-ended and open-ended questions. The set of results from these questionnaires was systematized in spreadsheets.

PHASE 1: A process of collective construction - getting closer to incoming students (2013)

The subjects chosen for the 1st phase were students entering the following courses: Technician in Industrial Automation and Technician in Commerce (2013). It is noteworthy that these 2 (two) courses were chosen because the students have different characteristics.

For this phase of the research, a questionnaire was developed with the intention of concentrating attention and efforts to prepare the initial prognosis, obtaining data from the collection tools with the most relevant information regarding the purpose of the investigation. It must be mentioned that the questionnaire composed of forty (40) diversified questions was printed on bond paper, distributed in loco to the 80 chosen subjects in the second week of classes, in August 2013, since it was necessary to get to know these subjects as soon as they entered the educational institute, and the process took about two weeks altogether and it was verified that only 45 students returned the questionnaire completed.

Therefore, the categories were arranged considering the development of the competences proposed by Barbier (2013) and the following categories were defined for the initial expectations of the competences: Student profile, Learning (Curriculum),

Professional Development (Career), Understanding of the reality based on the reflection on issues (Socialization and Dialog with the Faculty); Improvement/Review of the associated practice and theory (investigative spirit); Update of practices, Socialization (interactions).

The investigation favored the creation of a set of data that reflects a historical perspective of the students who seek PTE and the reasons for them to look for such an educational model. The tool created in this 1st phase proved to be inefficient in relation to the requirements of the research, the actions that would determine the students' success to complete the course and their retention in the institute. Therefore, the initial information provided the basis for the 2nd phase of the research since it was necessary to understand which were the expectations of the students entering the PTE and if these were aligned with the the proposals of the courses. This communication is dichotomous, for it provides the student with a "voice" and further proposes moments for reflection by the internal "listener" faculty community in relation to its daily practice.

It was found that the incoming students mostly have a profile of average/low social vulnerability. One of the social and economic aspects that influence a student to drop the course is related to the work dimension, in that the student enters the PTE with the intention of improving their standard of living and, when they manage to get a job, they leave the institution.

Economic reasons sometimes make it hard for the student to continue the course since many of them are the primary financial support of their households. As to the educational aspect, most of these students who drop their studies along their academic lives and are kept away from school, upon their return, face difficulties in keeping up with their education (Delors, 2003). Another important factor detected was the cultural lag and weakness in the literacy processes resulting from the lack of quality education.

Among the disciplines that mostly influenced students to abandon their courses were those related to the lack of background knowledge to cope with mathematics and physics: necessary and crucial knowledge to take up a technical course. It was observed that many students did not have the minimum requirements of this curricular component and were discouraged to proceed with the PTE. Portuguese also proved to be a major challenge to these students based on the difficulty to comprehend and

analyze texts and, therefore, required attention in this regard as they entered the institution. An alternative to solve this issue would be to conduct an assessment to understand the difficulties faced by those students and adopt remedial actions to make up for the missing content.

It was further observed that, in relation to the faculty, although the students felt generally welcome, when they were asked about the teachers' attention when they had questions, the respondents attending the technical course of commerce (mostly women) considered the teachers to be little responsive. Thus, it was found that those involved in the teaching & learning process were somewhat detached, which might lead up to a break in their relationship of trust.

PHASE 2: Listening to graduate students (in 2016)

When beginning the 2nd phase of the research in 2016, an attempt was made to assess the academic status of the 45 respondents of the first questionnaire: did they drop the course, did they graduate in the term scheduled in the Pedagogical Project of the Course (PPC) and, lastly, were they still attending the course at the institution?

All this considered, an online questionnaire was applied comprising 18 open-ended questions, a tool created for the 2nd phase of the study that proved to be more efficient in relation to the investigation requirements. According to the specifications, the questions addressed the evaluation of the course considering its operating dynamics, labor market, PPC, laboratory practices, and expectations. To that end, 10 indicators were studied: did the training contribute to the professional progress; did the course help in the placement in the labor market, did the curricular aspects contribute to a good training program; did the curricular aspects contribute to a good overall training; did the laboratory practice develop the necessary skills to reflect on the issues; was the equipment used in the school institute aligned with the labor market; did the skills developed favor the socialization in the work environment; are the practice updates innovative; does the institute play an important role in the placement in the job market; were the course expectations met?

In relation to the Occupation chosen by the student, it was observed that only two former students worked in the field of their courses and only one graduate continued his/her studies, and two former students were not working in the area of their courses.

As to the reason for not be working in the field of their educational background, 01 (one) student informed that he/she was only studying, 02 (two) students were not able to inform why they were not working in the field of their educational background, 02 (two) former students informed they were working in the field of the educational training they received by the institution, and only 01 (one) former student informed that the educational training offered by the institution did not meet the market needs.

When asked about the role the school played as a center of enrichment of the curriculum, 05 (five) former students informed that they consider the learning place enriching and 01 (one) former student said that the school did not meet his/her expectation because the practice was insufficient, and added that some teachers were good, but some were not.

In terms of educational background in general, 06 (six) respondents informed that the institution met their expectations related to technical training, 02 (two) said that the courses did not meet their expectations, and 04 (four) declared they were happy with the results. In relation to the theoretical knowledge acquired, 06 (six) former students said it was good, but 01 (one) graduate said that some teachers should change their methodology. In relation to the question asking if the skills developed at the institution are being put into practice, 05 (five) respondents gave an affirmative answer, and 01 (one) said he/she is not working in the area, so no answer could be given.

In relation to the role of the institution in the process of job market placement, 04 (four) said that the school had an important role and 02 (two) said it did not.

In relation to the students, it is necessary to ensure that they feel they are an integral part in the environment so that they can take up their leading role and become a promoter and receiver of ideas in the community and in the job market.

PHASE 3: Social Empowerment Process - Former Students Participants (in 2017)

For Phase 3, a questionnaire was proposed with questions such as: course evaluation, course dynamics and operation, teacher/student interaction, student's self-assessment along the course, implementation of activities proposed both by teachers and students.

To that end, indicators related to the course plan were developed to provide room for the institution and the former students to have debates and reflections, encouraging the former students to participate in a new restructuring/re-planning approach, as follows: did the Course Plan provide clarification to the student as to proposal of the Technical Course of Industrial Automation/Commerce, with details of the research lines, the research projects of the faculty, the disciplines, the programmed activities, the objectives of the course among others; did the Course Plan organize and communicates scientific events and activities; did the Course Plan foster dialogs and debates with experts and professionals in the field; did the Course Plan program activities aligned with the educational proposal of the course; did the Course Plan communicate the activities developed during the semester on the website or in other means; did the Course Plan conduct the decision-making process with the participation of the students; did the Course Plan include the attention given to the students by the teachers in a customized way; was systematic guidance provided to the freshmen in relation to the course dynamics; did the Course Plan presupposes students' self-assessment thus making the student a player in the teaching-learning process; did the disciplines in the Course Plan have innovative content?

In relation to the Course Plan, the question was if it clarified what the proposal of the course was with explanation of the research lines, the faculty's research projects, disciplines, programmed activities, objectives of the course, among others. It was verified that out of the 06 (six) former students responding the survey, all said that all information about the projects, research lines, programmed activities and course objectives were communicated since the beginning.

As to the question on the Course Plan specifically about whether it organized and communicated events and activities, 05 (five) former students gave affirmative answers, however 01 (one) graduate informed that although events were communicated, they were not very accessible to a working student with limited means, and 01 (one) former student said that although information was given, the Institution had many problems in its internal and external communication, and only 01 (one) students said that there was lack of information. It can be observed that there is evidence of failure in the communication dimension at the Institution.

As to the question on the Course Plan about whether it promotes dialogs and debates with specialists and professionals in the area, 05 (five) former students gave affirmative answers, but 01 (one) informed that these are rare and not accessible to a working student, 01 (one) said she/he did not have time for the events, 01 (one) clarified that there is a specific week for these talks, 01 (one) said that the talks occur, but they are too few, and 01 (one) said that there were none, and if they happen, the dialogs or debates fail to meet the needs for the students enrolled in the evening classes. The answers to this question lead to the conclusion that dialogs and debates need to be more customized to the subjects of the courses evaluated.

In the question about whether the Course Plan showed evidence that the programmed activities are aligned with the educational proposal of the course, the following answers were given: 06 (six) respondents gave affirmative answers, however 01 (one) former student said that the course proposal was not very clear (adding that some teachers had poor communication skills).

When asked about whether the Course Plan presented the activities developed in the semester on the Institution website or in any other means, the following answers were provided: 05 (five) former students said that information was provided on the website and in other channels of communication, but out of these respondents, 04 (four) informed that the institution had some failures in the communication, and 01 (one) former student said that the website had many issues. It is clear once again that there are communication problems between the institution and the students.

Regarding the question whether the course plan contained information about carrying out self-assessments with the participation of students, the following information was collected: 05 (five) former students reported that self-assessment was not used, among them 01 (one) respondent informed that using self-assessment was not aligned with the profile of teachers in this area, and only 01 (one) graduate reported that some teachers used self-assessment. In view of the answers, it is verified that it is necessary to emphasize the importance of using self-assessment as another tool that allows the direction of behaviors, reflections, and feelings, that is, if it lends itself to self-regulation for the student, it can also be recognized as a process of metacognition, considering that the student analyzes the path taken and reflects on it.

On the question whether the Course Plan contemplated the decision-making process with the participation of students, the results indicated the following: 05 (five) graduates reported that the PPC did not contemplate the decision-making process with the participation of students, and among them 01 (one) informed that the school was very good, but it was not so democratic, 01 (one) pointed out that the teachers already brought everything ready for the student to do, 01 (one) graduate informed that they had a classroom representative, but he did not have any representativeness, and only 01 (one) former student gave an affirmative answer saying that there was the participation of students, but in practice they did not participate in important decisions. It was found that there is the need to promote actions related to the qualified participation of students, making students feel that they belong to the educational environment, making the school space more welcoming and democratic.

When asked whether the Course Plan established that professors would provide personalized service to students, the 06 (six) respondents informed that it did.

Regarding the question of whether there is a systematic on-boarding process for newcomers regarding the dynamics of the course, 05 (five) former students gave an affirmative answer, but according to the answers this dynamics occurs more at the beginning of the courses, and 01 (one) former student stressed that there is no systematic approach, they only mention this at the beginning of the course.

On the question of whether the disciplines included in the Course Plan had innovative content, the following answers were obtained: 02 (two) graduates gave an affirmative, generic answer saying that the disciplines were very good and some had innovative contents, 01 (one) former student said that he believed the content was innovative, but to start with, the very name of the course did not help much, 01 (one) graduate answered that some disciplines had innovative content and others had to be revised, and 02 (two) former students said the following "Technology changes all the time, the school has to go after it, the laboratories leave something to be desired/Technology has changed a lot and the school is always at a disadvantage compared to the market". In this question it is understood that the school needs to update itself to meet with the expectations demanded by the job market.

Finally, respondents were asked to leave a comment on any aspect that they considered necessary to change in or add to the course. The answers to this question

were given as follows: 01 (one) graduate replied that the professors are very good, but they lacked a more intense contact with the job market, 01 (one) former student stressed that the name of the course did not favor them explaining that companies did not know what a 'technician in commerce' was, 02 (two) respondents reported they following: "…they have very good teachers, but there are teachers who do not have the profile to teach, have no respect for the student/ some teachers have to have more training since, despite their deep knowledge, they do not know how to teach properly…", 01 (one) graduate requested more lectures with professionals in the area and finally, 01 (one) former student said that they should have more classes to help them enter the job market, since they did not have an internship program.

Intervention proposal: monitoring of freshmen and graduates

At the end of the research, an intervention proposal was developed for the school entity, focused at first on the PTE modular courses, in the educational institution – São Paulo. After mapping some of the specific factors that hindered the process of success and retention of students in the school, it was verified the possibility of developing an Intervention Project through the construction of a Mutual Cooperation Network (MCN), guided by the following central question: How to include students in a qualified way in the PTE courses?

To implement the MCN, a meeting is requested proposing the reflection of some conducts and the proposal of an interventional action with the involvement of the management, teachers and administrative technicians. Therefore, it was through this investigation that the pedagogical actions were researched, identifying problems and their variables. It is considered that the school manager will explore the potential of the institutional research, expanding the scope of qualitative participatory management, and using the collective intelligence of the community, based on concrete management events and, in addition, will enable the understanding and problematization of situations/ conflicts.

The intervention project was previously outlined, according to the items mentioned below:

a) The contractual act of the MCN in the school: to present the content and nature of the PPCs to incoming students, subsequently inviting them to participate in

the process of continuous reassessment of educational projects and to establish a network of mutual cooperation. Once the mutual cooperation network is developed, it is verified how the cooperating entities relate according to expected performance results, highlighting the question associated with the performance of the network. Their voice can be heard so that a democratic space can be offered, whether through playful activities, conversation circles, workshops or through cognitive tests pre-prepared by the faculty (assessments of necessary prerequisites in the subjects of Portuguese and Mathematics), and lastly, by applying the initial questionnaire for MCN data collection.

b) Constant approximation of the MCN group: interacting with the cooperative members through lectures with the presentation of the courses proposed by the PPCs and discussed with the group, proposing re-readings of the courses and updates, guidance for studies and motivational guidance with debates encouraging the proposal of a more democratic management. Strategies are to be created to approach modular PTE, observing the student's needs for a more comprehensive training, for knowledge, citizenship and the job market. Levelling is proposed in the lessons learned by the group, and the idea of continuous training and ongoing training must be implemented.

c) Continuation of the MCN with former students: the institution, through the MCN, should propose dialog circles with students, roundtables with professionals in the areas, related activities with incoming and outgoing students, training courses with innovative content required by the job market - Online questionnaire for graduates - data collection.

The general objective of the intervention project is:

Develop a Mutual Cooperation Network (MCN) with students, which implies understanding, with a view to monitoring decision-making, to guide the improvement of educational work, highlighting the relationship between school indicators with the proposal of a permanent educational training of these students, proposing a dynamic and dialog-based work.

As for the specific objectives:

a) develop new ways of training professionals in the education field, with the development of new strategies to improve teaching practices and reorganization of management practices;

b) understand that for the student to learn it is necessary to use and combine several teaching methodological resources to reach the receptive channels of apprehension of the students;

c) promote dialogues and debates with theorists and professionals in the field;

d) emphasize the importance of student self-assessment;

e) provide subsidies to help teachers overcome the problems identified in their daily practice with students.

f) permanently provide subsidies to teachers for training in innovative content required by the job market.

Implementation feasibility: it appears that the intervention proposal is viable, as it can be implemented with the contributions of management, teachers, administrative technicians from the pedagogical sector and students of the courses offered by the institution.

Methodology: As the central axis of the research is the development of a Mutual Cooperation Network (MCN), the actions that guest faculty members must adopt together with administrative technicians and students were determined, as these actions that took place at different stages in the development of the MCN allow for a discussion significant for the construction of the work, the analysis of the development of the work will be prepared by the students of the involved courses, step-by-step. For the formation of the work group, all the teachers who teach in these courses will be invited, as well as the administrative technicians of the pedagogical sector who work at the school, they will be invited through individual and group conversation, during the teachers' activity hours. For the development of this intervention proposal, there will be a continuous dialogue with the cooperating participants. This dialogue will take place in two ways: in person, that is, individually or in small groups, and via videoconferencing.

So, with the MCN it is essential to develop a work that involves teacher/student team projects, work innovative methodologies, provide new practices that encourage students' creativity, work collaborative, cooperative actions, respect the individuality of the other, considering the positions of those involved and the autonomy of everyone.

This proposal is based on the dialog-based conception of language and arises from the continuous teaching/learning process. The problems identified throughout the MCN development process will guide those involved in the preparation of a more reliable diagnosis, they will be able to verify what the student already knows and what he/she still needs to learn. This diagnosis is set up as an assessment not only of student learning, but also of teaching strategies and content.

The implementation of this project will take place in the perspective mentioned above, although it is subject to several changes according to the guidelines, readings, needs and contributions of teachers, administrative technicians and students participating in the Mutual Cooperation Network project. To this end, the development of the work will be continuously evaluated by all those involved and the results will be systematized and presented through reports.

FINAL CONSIDERATIONS

The conception of the Mutual Cooperation Network (MCN) consists of the qualified participation as an essential tenet for the implementation of an institutional intervention project, based on ethical values, alterity, empowerment of human rights, as well as on the adoption of actions that seek a reorganization of institutional reasoning and values, making those involved more humanized and critical.

The research effort was relevant insofar as its results showed the gap between the idea of structuring the Pedagogical Course Projects (PPCs) offered in the Professional Technical Education (PTE) modality, the distancing from the use of technique from the one that employs the technique, of the understanding of the human being as a whole, and of the lack of sense of understanding of the interactive social beings; indispensable proponents in the action that promotes the use of more humanized strategies for the adjustment of PPCs according to the needs of students and of the labor market. Such a structure is in accordance with the role defined for educational institutions in the National Curriculum Guidelines (DCN), which propose that there should be more freedom for these institutions to define the focus and contents that they wish to offer in more depth and promote a trans-disciplinary approach for the courses.

It is observed that in the current context, the establishment of partnerships between managers and students has become an excellent option as a relational tool, which guarantees better results for the achievement of joint goals. MCN is characterized as a possibility of organizational action/understanding aiming at an environment where small initiatives enhance results and share resources and capabilities that would certainly have difficulties if taken individually (Porter, 1989).

The data presented showed the gap and ineffectiveness between the educational model, described in the legislation worded by public policies and the reality experienced at the time of application of the research tools. In this sense, the legislation provides for an education that should favor the access to the labor market, and the results indicate a weakness to achieve such purposes.

Some indicators analyzed in relation to the development of the courses presented points that arouse the attention of the management:

a) Absence of general information for teachers about the courses and the dynamics of their operation;

b) Listening to students legitimizes the actions that the school management must adopt, that is, it seeks to define the direction in a strategic way, proposing the implementation of a humanized Mutual Cooperation Network (MCN), which will define the continuous evaluation approach and the necessary adjustments of the educational actions;

c) The subsidies obtained guide the decision-making for the planning, development, and feedback of the institutional educational system with a proposal for permanent training necessary for the school routine.

As for the challenges, it should be considered that PTE institutions need to renew themselves, paying attention to undemocratic conducts. Educators must focus on meaningful learning and holistic skills, relying on the active participation of students, motivating them to seek individual paths to solve problems. In addition, the school environment should prioritize the development of social skills and collaboration; Curricular renewal must be initiated by listening to various audiences: educators, parents, students, and system managers. The research proposes a deeper reflection on the theme, but it does not exhaust the discussions. It re-evaluates the behavior of

participants in this social gear, seeking to empower students, teachers, and managers through their participation in the decision-making process.

MARCO AURÉLIO DA CRUZ GOUVEIA

Faculty member at Anhanguera College of Guarulhos. Holds a degree in Electrical Engineering (UMC), Mathematics (CEUCLAR), and Theology (USF), a master's degree in Quality (UNICAMP), and a doctorate in Education (UNICID).

SANDRA LÚCIA FERREIRA

Faculty member and researcher for the Doctoral Program in Education, the Academic Master's Program in Education and the Professional Master's Program in Educational Management Training, both at Universidade Cidade de São Paulo, where also serves as Vice-Coordinator for the latter. Holds a degree in Pedagogy, a master's degree in Education, and a doctorate in Education (Educational Psychology) from PUC-SP.

RITA SCHLINZ

Educational Affairs Specialist at the Federal Institute of Education, Science, and Technology (IFSP), Suzano Campus – SP. Holds a degree in Pedagogy from Faculdade de Pinhais and a master's degree in Education from UNICID.

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