

(Mathematics) Teacher training initiatives in two cities in Mato Grosso¹

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ABSTRACT

This paper is a result of two post-graduate researches, both developed using the Oral History methodology, and it discuss the official initiatives of (Mathematics) teacher training, in periods belonging to the second half of the 20th century, in two cities of Mato Grosso: Cuiabá and Barra do Garças. It is possible to find similarities between these process, the analysis of the results allow to perceive the lack and the urgency prescribing the teachers training initiatives at both of these cities, in addition to a common institutional understanding about the concept of teacher training. The discussions also allow identify local particularities about the themes studied.

KEYWORDS: Oral History. Cuiabá. Barra do Garças.

Movimentos de formação de professores (de Matemática) em dois municípios mato-grossenses

RESUMO

Este artigo é resultado de duas pesquisas de pós-graduação, desenvolvidas por meio da metodologia da História Oral (HO), e trata dos movimentos oficiais de formação de professores (de Matemática), em recortes temporais compreendidos na segunda metade do século XX, ocorridos em dois municípios mato-grossenses: Cuiabá e Barra do Garças. Similaridades podem ser encontradas entre esses processos, os resultados analisados permitem perceber os signos da carência e da urgência

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ditando as políticas formativas implantadas em ambos os municípios, além de características comuns sobre a compreensão institucional de formação docente. As discussões possibilitam, ainda, identificar particularidades locais com relação aos movimentos estudados.

PALAVRAS-CHAVE: História Oral. Cuiabá. Barra do Garças.

Movimientos de formación de profesores (de Matemáticas) en dos ciudades de Mato Grosso

RESUMEN

Este artículo es un resultado de dos investigaciones de postgrado, desarrolladas bajo la metodología de Historia Oral, y habla de los movimientos oficiales de formación de profesores (de Matemáticas), en periodos comprendidos en la segunda mitad del siglo XX, en dos ciudades de Mato Grosso: Cuiabá y Barra do Garças. Es posible encontrar similitudes entre esos procesos, los resultados analizados permiten percibir la carencia y la urgencia como conductoras de las políticas formativas implantadas en ambas ciudades, además de características comunes sobre la comprensión institucional del concepto de formación docente. Las discusiones possibilitan, todavía, identificar peculiaridades locales, sobre los movimientos estudiados.

PALABRAS CLAVE: Historia Oral. Cuiabá. Barra do Garças.

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Introduction

The present article is the result of analyses made from two researches, one from master's degree, BOTH (2014), and another from a doctorate degree in progress⁴. Both study teacher training in Mato Grosso, one of them specifically in Cuiabá and another in the region of Barra do

⁴ The referred research is developed in a region deriving from the diamond mining, formed by municipalities of Mato Grosso and Goiás, and it is studying a history of (Mathematics) teacher training in the second half of the 20th century. The defense forecast is for the first semester of 2021.

Garças⁵. In this text, we will discuss the official teaching movements that took place in these two municipalities, their approaches and particularities.

To develop our research and, consequently, the proposed article, we relied on the Oral History methodology (OH), through which we were able to understand our subjects of study, from testimonies of people directly and/or indirectly involved, as well as from written, pictographic and audiovisual records that we have located.

By choosing OH, we understand that it is not only “to describe a series of procedures that lead to one and single objective”, but “to defend and carry out a series of procedures that, based on consistent arguments and justifications, are slowly being worked on and helping us to see further and find multiple ways out, even when there are a few and fragile entries”. (GARNICA, 2014, p. 39-40), that is, we are based on a methodology in constant process. However, although the OH is not only based on procedures, some of them are commonly followed: conducting interviews, their transcriptions and textualizations. The latter procedure consists of a thematic and/or chronological edition and reordering of the transcriptions, removing some language vices and keeping others, so that the collaborator can still recognize him/herself in the text. Thus, we seek to leave the text smoothly, in a joint work between researcher and depositor. Once the transcription and the text are concluded, they are returned to the researcher, who, after checking them, signs a letter of assignment authorizing their use.

In possession of the assignment letter, we began the formal analysis of data, a process that, although we believe has already begun in the choice of the research theme, perpetuating all its development, shows at this moment a space of its own. The narratives are the triggers of this movement. We will present here part of these analyses.

⁵ This doctoral research focuses on six municipalities in the region of Barra do Garças, in this article, however, we will only look at the municipality of Barra do Garças.

Teacher training in Cuiabá in the 1960s to 1980s

In this section we will discuss (Mathematics) teacher training movements in Cuiabá, which took place in the 1960s to 1980s, based on the results of the master's dissertation of one of the authors (BOTH, 2014). The teacher's training in Cuiabá had its official beginning in the mid-nineteenth century, through the Normal School, the main teacher until the 1960s, when the courses of the Campaign for Improvement and Dissemination of Secondary Education (Cades) began to occur in Cuiabá. In that decade, it also has begun a training at a higher level, through the Institute of Sciences and Letters of Cuiabá (ICLC), and, at the beginning of the following decade, the Federal University of Mato Grosso (UFMT), incorporating the two existing institutions of higher education: the Faculty of Law and the ICLC.

In Cuiabá, until the end of the 1960s, it was almost a tradition for girls to continue their studies after the Gymnasium, opting for the Normal Course, offered by the Pedro Celestino Normal School, which operated at the Palace of Instruction. The course was mainly attended by women which, when they finished it, had to teach in the initial years, but who, due to the lack of qualified teachers, ended up teaching at different levels.

The first movements for the installation of the Normal School in the capital date from 1838, when Mato Grosso sent a teacher (Joaquim de Almeida Louzada) to Niterói (Rio de Janeiro state) to train himself and, on his return, assume the regency of the School. However, as the state lacked qualified professionals in several areas, upon his return, Joaquim did not take over the teaching, as planned, but the Province Government Secretariat. However, even without trained teachers, the Normal School was created in 1840 and started in 1842, being extinguished in 1844, due to lack of teachers and resources to keep it running (AMORIM; FERREIRA, 2014).

Since then, this School has been closed and reopened several times, stabilizing from 1910 onwards, with the arrival of two teachers graduated in Normal Schools in São Paulo. Through them, the São Paulo school model was adapted to Cuiabá's reality (SIMIÃO, 2006), and in the course the focus was on methodological contents instead of specific ones.

As there was no higher education in the capital, sometimes the Secretary of Education appointed people to specialize in São Paulo at the University of São Paulo (USP), who upon their return, in retribution, offered courses to teachers and principals at the Educational Center for Teacher Education in Cuiabá.

In addition to the Normal School⁶, in 1960, Cades (a movement of national scope) began to operate in Cuiabá, and on several fronts it allowed the formation of teachers, directors and educational inspectors. Among the actions of the Cades, they were: journeys, seminars, lectures, meetings, contests, magazines, books and courses.

Cades was created in 1953, by Decree number 34.638, and from 1955, by Law number 2.430, the Sufficiency Exams (exams that lay teachers took to obtain authorization to teach) were conditioned to the courses⁷ of the Campaign, that is, the candidate had to attend the course and when it was finished it the candidate could take the Exam that qualified those approved to teaching, through an authorization to teach where there were no graduates in Faculties of Philosophy⁸ (BARALDI; GAERTNER, 2013).

In Cuiabá, its offer was made through a cooperation with the state government through the Secretariat of Education and Culture - Seduc/MT (A CADES..., 1960). In 1960, the course lasted 25 days, from January 4 to 29, and functioned in the amphitheater of the State College of Mato Grosso, now Escola Estadual Liceu Cuiabano "Maria de Arruda Müller"

⁶ Date on which we found the first record of courses offered in Cuiabá.

⁷ The courses aimed at "making up for the deficiencies of the teachers, until then laypeople, regarding the pedagogical aspects and the specific contents of the subjects they would teach or that they already taught in secondary schools" (BARALDI; GAERTNER, 2013, p. 21), since until then their formation was based on daily practice. Since the number of those going out to do a degree was small and higher education was still poorly publicized, these courses were among the main teacher trainers in Cuiabá.

⁸ The authorization received allowed teachers to teach at the Gym, Scientific, Classic and Normal, and was mandatory for all who did not have a degree.

(CAMPANHA..., 1960), serving 9 areas and more than 100 students, 95% of whom were from other cities. Among the areas attended it was Mathematics, which was under the responsibility of Sister Glória Imamura, regarding to part of specific contents, and Bernardo Lopes de Souza, regarding to Special Didactics (CURSOS..., 1960; NÍVEL..., 1960). As the law regulated, the Sufficiency Exams were applied after the course, which occurred on February 2 and 3, 1960. On the first day the General and Special Didactics examinations were applied, and on the second, the written and oral examinations (EXAMES..., 1960).

In 1970, in the state capital, the courses became known as the Teacher Orientation Course for the Sufficiency Exams (Copes)⁹, being offered in two modalities: for performance in the Gymnasium and in High School. That year, at the Nilo Póvoas Educational Center, the mathematical content was taught by João Bosco London, while Methodology and Didactics of Mathematics Teaching was taught by a teacher from Goiás, named Gilberto¹⁰. In the Methodology and Didactics course, as a form of evaluation, the students gave classes to their colleagues about certain subjects. This was the last class about which we obtained information.

At that time, there were already some higher education courses in Cuiabá. In 1966, the Faculty of Philosophy, Sciences and Letters¹¹ was created, which in July of the same year, by Law 2.629, it became the Institute of Sciences and Letters of Cuiabá (ICLC). The Institute, besides incorporating this Faculty, also added that of Economic Sciences, instituted in the previous year.

The Institute was linked to the State Secretariat for Education, Sports and Leisure, in Mato Grosso state (Seduc/MT), its first 4 courses were Full Term Degrees (from now on, only: Degrees) in: Natural History, Geography,

⁹ According to Achilles Leite do Nascimento, collaborator of the basic dissertation for this article, different from the Cades that lasted about a month, this one lasted three months (January, February and March) - January 3rd to April 10th - 100 days, from morning to afternoon, and in some days at night, lasting 360 hours, as if it was a specialization of all the knowledge of the Gym and/or High School.

¹⁰ It was not possible to research the teacher's full name.

¹¹ This institution had already been created in 1962, but it only started working, still incipiently, in 1966.

Mathematics and Letters. This was the first teaching movement at a higher education in Cuiabá. The courses were chosen considering the availability of teachers to work for them, whom organized their curriculum, with the help of teachers from the institutions where they graduated (RIBEIRO, 2011).

ICLC emerged as a possibility to complement studies in the state itself, with it the existing¹² courses were expanded and it brought the opportunity to meet the needs of the state, related to labor, for its formal organization. The courses were offered at night, which allowed the teachers, during the day, to complement their income in other institutions and the students could work.

According to Professor Suíse M. L. Bordest, an interviewee of Both (2014), the Institute initially did not have its own head office, but operated in the basement of the State College of Mato Grosso, with rooms separated by screens. It was then transferred to the Palace of Instruction, at the Pedro Celestino Normal School, followed by the Federal Technical School of Mato Grosso (Escola Técnica Federal de Mato Grosso), and finally the José Barnabé de Mesquita School, which had been built with the purpose of also serving the Institute. From there, ICLC went to the first block built at the UFMT Campus, in August 1970¹³.

For entrance to the courses, the exams were held with two stages: written test and, to those who passed, oral test (RIBEIRO, 2011). Regarding the ICLC Mathematics course, 25 places were opened, occupied by 23 students. However, throughout the course many students dropped out and only three graduated: Nilda B. Ramos, Luiz G. Coelho and Mauro Custódio¹⁴. The undergraduate curriculum was composed of 15 subjects¹⁵, 11 specific and only 4 focused on teaching in some way, totaling 2700 hours, in 4 years of course (RIBEIRO, 2011). Mathematics students had their graduation ceremony in December 1969¹⁶, still at ICLC, but they received

¹² Until then, there was only the law course in operation in Cuiabá.

¹³ During the same period, the Law School was installed in the University, which until then was located in the center of the capital.

¹⁴ ICLC had only one Math class, it even opened entrance exam in the other years when it was in operation, but there was no demand (SILVA, 1967).

¹⁵ For further information about subjects and course load search Both (2014).

¹⁶ However, this course was only recognized with the first class of UFMT, in 1974.

their diploma as academics from UFMT, institution to which the Institute was incorporated, in 1970.

As the years went by, ICLC stabilized and, by the end of 1971, it already offered 11 courses: Pedagogy, Accounting Sciences, Physics, Economics, Mathematics, Engineering, Geography, Natural History, Social Service, Letters and Chemistry, transferred to UFMT still that year (DORILEO, 1977).

On December 10th, 1970, the first university in the capital, UFMT, was created by Law 5.647. When it was created, it incorporated the two higher education institutions already in existence, along with its courses: the ICLC and the Law School¹⁷. The University began its work in its own building, located in a region still sparsely populated in the city, with a single block, located near the entrance of the avenue Fernando Côrrea da Costa.

During the initial phase, three different situations were in force at UFMT regarding to the academic system: “annual series (Law School), semiannual series (I.C.L.C.) and the enrollment by discipline and credit system, which were implemented with the students admitted from 1972 onwards”. (DORILEO, 1984, p. 29). Most of the professors were those who already worked in the institutions that composed the University, since all of them were in regency on October 21, 1971, when the UFMT Statute came into force, so they were considered founding full professors.

To teach at UFMT, during this period, when there were few trained teachers interested in working in Mato Grosso, the minimum condition for hiring was only graduation. In compliance with this requirement, the teacher was hired as an assistant teacher, without the need for a contest, full-time and with exclusive dedication.

All the courses offered by the institutions that composed the UFMT were transposed to it, that is: Law, Economy, Engineering, Pedagogy, Letters, Geography, Natural History, Mathematics, Social Service, Physics, Chemistry and Accounting Sciences (DORILEO, 1977).

¹⁷ Despite being created in December 1970, the Federal University began, in fact, its work in 1972, thus in the year 1971, until December 31, although already in physical space destined to the Federal University, the Institute and the Faculty of Law were still working.

As for Mathematics degree, its first department head was a professor graduated in Physics, Claudio Mellado, since there were no professors graduated in Mathematics, or mathematicians, working in the course. This Department was installed at UFMT in 1972, with 28 teachers from the Center for Exact Sciences and Technology (WIELEWSKI; PALARO; WIELEWSKI, 2008).

In 1973, the Center of Exact Sciences and Technology of the University offered a specialization in Mathematics (whose teachers were from other places in the country), with a workload of 486 hours. This specialization, besides the qualification of the teachers, aimed at the recognition of the Mathematics course, because, since most of the active teachers were not formed in the area¹⁸, the course should, by requirement, have at least one specialization.

The recognition of the Degree in Mathematics occurred in 1974, when the teaching staff was already composed of specialists. It is worth mentioning that two of the three ICLC graduates took this specialization: Nilda B. Ramos and Luiz G. Coelho. However, they had not yet received their diplomas, even though they were already working as teachers at the University. In order to attenuate the lack of teachers, besides those graduated by ICLC, the graduates of the first classes of UFMT were also hired to work there. We highlight the Degree in Mathematics, although this has occurred in several courses. Thus, the University operated in a feedback system, training teachers to meet their own needs.

In its beginning, the UFMT courses, in general, and the Mathematics course, in specific, worked in two Cycles, attending the Law 5.540/68: a Basic¹⁹ and another Specific (with the course's own subjects). The Basic Cycle was composed of common compulsory subjects (in which all the students of the

¹⁸ According to the interviewees of the dissertation that supported this section, until early 1974 the only two graduates in Mathematics from the University were those who had graduated from ICLC: Luiz G. Coelho, who became a professor at the institution in 1972 and Nilda B. Ramos, who started working in 1973. Besides them, in the Department, Professor Claudio had a degree in Physics and the others were engineers, architects or economists.

¹⁹ Also known as the First Cycle, it aimed to make up for short comings in the training of students, which could be remedied in a short space of time. In addition, it aimed to provide guidance as to the career to be followed, integrating them into university life. It was a prerequisite for the Professional Cycle, with a minimum duration of two and a maximum of four periods (UFMT, 1973).

University participated); compulsory subjects of area (common to the courses of the same area); compulsory subjects of sector (specific to each course) and optional subjects (UFMT, 1973).²⁰ To attend the Professional Cycle, the student must pay 48 credits in the 1st Cycle. In the case of the Degree in Mathematics, the student had to pay 156 credits, 48 in the 1st Cycle, 44 in his/her Main Field of Studies, 24 in the Complementary Field, 16 in Optative Subjects and 24 in Pedagogical (UFMT, 1973). To fulfill these credits, the University also made available a program of studies²¹.

The course, during all these years, has gone through several reformulations, some departures from the Department itself and others imposed by higher instances. It began as a serialized course (ICLC), passing to the credit system (UFMT), restructuring itself as a degree in Sciences with a qualification in Mathematics (1975), to finally return to the Degree in Mathematics (1985), this one recognized already in the 1990s (SANTOS, 2014). In these periods of transition between the modalities, Short and Full term degrees, both remained in operation, since one was being extinguished and the other implemented.

The Short Term Degrees were created at UFMT by Resolution n°. 82 of the Board of Directors, on December 2nd, 1974. The Resolution extinguished Degrees in Mathematics, Physics, Chemistry and Natural History, replacing them with a Short Term Degree in 1st Degree Sciences, with Full Qualifications in the first three areas and Biology²². The Short Term Degree in Science was 1800 hours long²³ which could be paid for between 2 and 4 years. In this course, the 116 credits required by the UFMT were distributed in: 89 related to compulsory subjects, 4 to electives, 12 to pedagogical subjects, 4 to teaching/ supervised internship, 4 in study of Brazilian problems and 3 in Physical Education (UFMT, 1976).

²⁰ In Both (2014) are presented the subjects and their menus offered by the Department of Mathematics in 1972/1973.

²¹ A copy of it is available at Both (2014).

²² In Both (2014) is presented the curricular structure of the Degree in short term and full term Duration Sciences, with qualification in Mathematics.

²³ The Resolution indicated 1800 hours, however, when it was implemented, it became 1980 hours, distributed in 116 credits (UFMT, 1976).

Instead, the Degree Sciences with qualification in one of the four areas, totaled 2800 hours, which could be completed between 3 and 7 years, the average being in 4 years (UFMT, 1974). To obtain this qualification, in addition to the 116 credits on the Science part, the student had to complete another 82, totaling 1250 hours. These credits were divided into: 60 for compulsory subjects, 8 for electives, 8 for pedagogical subjects and 6 for Teaching Practice/Supervised Training (UFMT, 1976).

The Short Term Degrees were in force until 1985, when, by Resolution nº 64, from the UFMT Board of Directors, they were reconverted into Degrees in Mathematics, Chemistry, Physics and Biology, having the right to finish the Science course, who had started it (UFMT, 1985). With the reconversion authorized in 1985, there was no entrance exam in 1986, because the course was being restructured, returning to function in 1987²⁴.

Finally, on the Mathematics course offered over the years, analyzing its curricula and the speeches of the lecturers of the basic dissertation of this section, we can notice the strong presence of specific contents of Mathematics to the detriment of those focused on teaching, leading the degree course to have aspects quite similar to a bachelor's degree.

These were the official teaching movements offered in Cuiabá, from the second half of the 20th century, focusing on the 1960s to 1980s, which we were able to discuss based on the narratives of our interviewees and the various other studies we carried out.

Teacher Training (of Mathematics) in Barra do Garças

In this subsection we will discuss, from a cutout of one of the authors' ongoing doctoral research, the teaching movements in the municipality of Barra do Garças during the second half of the 20th

²⁴ In Both (2014) is available the curriculum of the Degree in Mathematics that was installed from 1986 and in its Annex E the corresponding menu.

century. We will discuss the formations at the Teaching level and then the higher level courses developed in this city.

The first teaching formation movement in Barra do Garças, according to Both, Azevedo and Stefanoski (2016), was the Normal Course offered by the Madre Marta Cerutti School, an institution run by Salesian Sisters, created in 1961, which operated, at first, under state subsidy. Assisi and Moreira (2018) state that the school started offering the Normal in 1967. However, Law n° 2636 of August 2nd, 1966 elevated the Madre Marta Cerutti Normal Regional School to the category of 2nd Cycle Normal School. This publication leads us to believe that, before that, the School already offered the Normal Course of 1st Cycle, however, we have not located any other documentation or information about, even in the institution itself. In any case, it is worth mentioning the possibility that, before 1967, there was a teacher training course at that school, although we cannot confirm it.

According to Both, Azevedo and Stefanoski (2016), as well as the research that supports this section, both the Normal and the Teaching Technician courses (offered from 1972 onwards as a replacement for the Normal, by the same institution), allowed only female students. In the first course only nuns taught, while the latter had external teachers.

In our research we have identified school records of the Normal Course started in 1967, 1968 and 1971. In these documents we noticed great variability in the subjects offered and their relative workloads. Regarding to the Teaching course, we have located a diploma whose course started in 1972. In this document we could observe a division between General and Special Formation subjects that did not exist in the Normal course. In the diploma of our representative Enói C. Costa (class of 1973 - 1975), we noticed several curricular changes in relation to the previous year. In our researches we also found documents related to the Teaching Course (1976 - 1978) and we had access to the diploma of the Course made by our collaborator Maria R. Sousa (1979 - 1981). From the Normal to the Teaching curriculum, there is an expansion of subjects, with a considerable increase in specific ones. On the

other hand, something common is the inconstant offer of subjects, with the exclusion of some and later reinclusion, and the frequent change of workload. This leads to reflection on the trigger of these changes. Would it be a constant problematization of the teacher training, seeking to offer the best possible, or a criterion activated by the conjuncture, as adequacy to the available teaching staff and their respective aptitudes? Something that leads to the second possibility is the fact that some subjects are included in the curriculum of the course, but are not offered to certain classes.

The collaborators of the basic study of this section talk about the disciplines of the Teaching Course and their methodologies, prioritizing practice over theory. They not only study the contents, but also give classes about them to their colleagues. According to Enói, the mathematical topics studied were Primary Education, prioritizing the ways to teach them, being common to have debates about the contents, besides the resolution of exercises. It was a course, therefore, based on pedagogical practices and with many hours of internship in Primary Education schools. Enói, Maria and Adny C. N. Rocha paid some compliments to him, the first one even considers this to be the course that prepared her for teaching.

A national teaching formation project, also offered in Barra do Garças, was the Logos II, attended by our representatives José R. Carvalho and Lindomar A. Souza. Logos II was created in Mato Grosso at the end of 1979, with implementation in 1980. On May 23rd, 1980, the implementation of the Project in Barra do Garças was reported in the Official Gazette of Mato Grosso, specifying that its teaching would be at a distance and foreseeing a minimum period of 15 months and an average of 30 months to completion (MATO GROSSO, 1980b). According to Luz (2018), for the creation of a Pedagogical Nucleus (PN), the municipality assumed an agreement with Seduc/MT and the Regional Superintendence of Education and Culture (SREC).

The curriculum of Logos II offered a greater list of disciplines than Madre Marta's own regular Habilitation in Teaching (HT). Therefore, even

though it was an emergency program, it provided for a comprehensive formation, not only based on speediness in qualifying lay teachers. The subjects were divided into modules, so that each student determined the order and the time to study them. According to Ceteb (1984), when finishing a module, or grouping, the student went to PN to take exams about the studied contents. For approval, the student needed to get 80% of the test right. If she/he failed, she/he could take the test twice more and, if she/he still didn't succeed, they would go through a recovery, with classes given by the Advisors Supervisors Teachers - AST and new evaluations. There was no limit to the number of times students could take the recovery. According to the Pilot Project (PP) of Logos II, Brazil (1975), as many evaluations could be applied as there were recoveries.

José participated in the course as soon as it was created in Barra do Garças (from December 1980 to July 1982) and commented on this issue reporting that the Teaching Station made the handouts available to the students, then

We prepared ourselves, studied and on the day of the evaluation we all went to Barra do Garças²⁵ to do the tests. Drec²⁶ already had its own team to work with Logos II. Every time we went, we brought three modules, we studied those modules, and then we would take the exams, if we reached the grade, we would bring more modules to study, otherwise, we would come back and study again the ones we already had, to retake the exams next month. (Excerpt from José's narrative²⁷).

According to the participant of the interview, in Barra do Garças (differently from what was foreseen in the PP of Logos II) the autonomy of the course participants was not total, since there was an exact number of modules to be taken in the monthly stage. The other actions, apparently, occurred according to the stipulations of the PP. In addition to the study of

²⁵ José lived in Araguaiana - MT, today a municipality, at the time district of Barra do Garças - MT.

²⁶ Regional Education and Culture Office - RECO

²⁷ All the excerpts that we present in this section belong to narratives that will be made available in the thesis of the second author of this article.

the modules, Jose talked about the microteaching sessions, micro classes taught by students, as part of the Supervised Internship.

I remember that during the course, several times, we needed to make and take a small lesson plan and teach the class that we had planned to the teachers in Barra do Garças, so they could see if, really, we were developing ourselves inside the classroom. (Excerpt from Jose's narrative).

In the words of the interviewee, in addition to the practice of the class itself, the delivery of a lesson plan relating to it was charged. This requirement was not in the PP, maybe it was exclusive of Seduc/MT, or PN/Barra do Garças (BG).

Luz (2018) reports that the structure and functioning of the PN varied in each region and, depending on its size, the PN could have one or more AST. We concluded that the PN/BG had several, because the Ordinance n° 5.825/84 of Seduc/MT, named 3 AST responsible only for the 1st Degree level of Logos II in this Nucleus, indicating that there were other ASTs in operation at the site, since the PN also offered the 2nd Degree and HT (MATO GROSSO, 1984c).

For attending several educational levels, Logos II, which initially offered unified formation, was divided into the three stages mentioned, starting to offer three diplomas, referring to each one (CETEB, 1984). This measure aimed at reducing the evasion of the program, since “the relative ease of obtaining several certificates [...] [could] be considered an additional attraction” (CETEB, 1984, p. 57). Lindomar participated in Logos II years later²⁸ and made reference to it in his interview. According to her, there were students who attended both General and Specific Formation courses in Logos II and obtained the 2nd Professional Degree. However, she was studying Propedeutic High School in another school and the specific area in the Project. Thus, only at the end of both courses, she

²⁸ Lindomar does not remember exactly the period in which he took the course and his diploma does not contain the dates of beginning and end of the course, but his expedition is dated from 1992.

received the diploma of Logos II, since the HT was only provided to those who had the 2nd Degree (current High School).

An incongruence between the interviewee's report and the orientations of the Project is the fact that she attended it in person and on a daily basis.

The Logos classes were all face-to-face, I didn't have anything to do at home, it was a very demanding course, the most demanding of all that I took. [...] I spent the whole morning there, every day, and sometimes we had to go on Saturdays. (Excerpt from Lindomar's narrative).

This is the only mention we have located (among the references about Logos II, offered in several places in the country) in which the course took place in face-to-face mode. As the participant attended it in the late 1980s, early 1990s, after the decentralization of the Project by the Ministry of Education (MEC), it is possible that the PNs received autonomy from Seduc/MT to offer it in a manner appropriate to their realities. The subjects of Lindomar's course were the same as those taken by José. However, her diploma is the only one with the relative workloads, since only her course was face-to-face. Another difference between José's diploma and hers is the reduction in internship time. The record of the course (1991 - 1992) that we identified in the documentary research, is the same as Lindomar's, but again offered at a distance.

Lindomar classifies Logos II as the course that most prepared her for teaching, placing it above the Pedagogy and the Degree in Letters, which she later did. She attributes this difference in training to the practical classes offered by the program. José also praised the Project, classifying it as deep, demanding and totally focused on practice.

It was not possible to determine exactly when Logos II operated in Barra do Garças. The last document we located regarding the program is a school transcript dated from April 1st, 1992.

About the teaching courses in higher education offered in Barra do Garças, the pioneer is a Parcel Degree in Pedagogy, with Qualification in

School Administration of 1st Degree, offered by the extinct State University of Mato Grosso (UEMT), in the decade of 1970, in which our representative Lenir N. Viana participated.

UEMT, during that decade, offered Short Term Parcel Degrees, in several municipalities of Mato Grosso Uno²⁹. These courses, according to Gonzales (2017), had the objective of providing higher education to lay teachers in the state. Data from Alves (1973) point out that, in 1970, 54.7% of the Mato Grosso teachers were laypeople, due to this, such degrees were created by UEMT, in 1972.

Alves, in a statement to Gonzales (2017, p. 81), comments that the State University, at the time, besides Campo Grande, had several campuses in the interior. Of these, “Corumbá would be responsible for offering Parceladas Degrees in Rondonópolis. Aquidauana offered in Coxim, Dourados offered in Ponta Porã, and Três Lagoas in Paranaíba”. Alves informs Gonzales (2017) that, at first, a class would be formed in each pole. However, after the first experience with positive results, there were new proposals in other municipalities, among them Barra do Garças.

Uetanabaro, in Gonzales (2017), commented that each pole served several localities around it. Lenir corroborates this by citing students from several cities in the region in the Parcel Degree in Barra do Garças, she herself would leave Torixoréu to study.

Alves (1973) reports that there was a pre-selection of candidates for the course, by Seduc/MT, being pre-requisites the 2nd Degree (current High School) and being in teaching. Alves explains to Gonzales (2017) that, after the selection, the admission was not automatic, the UEMT offered an entrance exam and the best classifieds participated in the course, being the number of vacancies close to 40.

According to Alves in Gonzales (2017), the teachers of the Parcel Degrees were all from UEMT. Uetanabaro, in an interview with the same author, states that each semester course was offered in one week in the

²⁹ Territory of Mato Grosso prior to the dismemberment of Mato Grosso do Sul.

Parcel course. According to Alves, the Parcel Degree had the same workload as the regular courses at the head offices (GONZALES, 2017).

Lenir no longer has the school transcript of the course, but in Alves (1973) it is available the curriculum of the Pedagogy with Qualification in School Administration of the 1st Degree, Parcel modality, offered by the Corumbá Campus. Perhaps, when it was offered in Barra do Garças, there were already alterations in the grid, but it is likely that it was similar, since the one presented by the author was the basis for the creation of the course. In such a curriculum the focus is on the subjects related to Education, more than 50% of the workload was dedicated to them. However, there is little space for practice, since the only stage foreseen is in School Administration with only 60 hours.

Uetanabaro, in Gonzales (2017), commented that the course was too fast and students had difficulty to understand what was taught. He says that the teachers sought to improve the situation, leaving materials for students to review the subjects, in the non-presential period. He also discusses how strenuous the course was for the students, since they were teaching and studying during the vacations, resulting in years without rest. Lenir corroborates this, telling that during the course he spent his vacations in Barra do Garças, with full-time daily classes. At the end of the face-to-face period, he returned to his city and teaching activities and also needed to develop work related to the non-face-to-face period of the degree, perhaps the reviews, mentioned by Uetanabaro.

In Gonzales (2017), Alves comments that even though it was an emergency formation program, the Parcel Degree did not meet the demand of the state because the number of lay teachers at the time was very high. In Barra do Garças, the situation is analogous. Even the UEMT licensing a class in the region, many were still working only with the HT (or not at all) in the teaching of 1st and 2nd Degrees, as interviewees of the basic research of this section.

Participants Marta M. Gama and Lindomar took their higher education courses at the UFMT's Barra do Garças campus. The creation of

the Pedagogical Center of Barra do Garças - CPBG of UFMT took place by Resolution nº 13 of the Board of Directors (Codir/UFMT), on January 27, 1981. According to the first CPBG coordinator, in Both et. al. (2017), it began its activities in Barra do Garças with the administrative sectors operating in a space in the City Council and two classrooms in the Gaspar Dutra State School (on loan at night).

The UFMT campus was to be built in Barra do Garças, a regional hub city, but due to disagreement between municipal and academic authorities, it was built in Torixoréu, near the district of Pontal do Araguaia (BOTH et. al., 2017). Thus, since 1989, the CPBG no longer operated in Barra do Garças and, by Resolution nº 40/89 of the Codir/UFMT, was transformed into the Centro de Ensino Superior do Médio Araguaia (Cesma).

Resolution nº 13 provided in its article 4, three Degrees: Letters and Physical Education, and Short Term Degree in Science. Article 5 dictated the immediate implementation of the first two and the later of the other. However, Both et. al. (2017) stated that only Letters and Sciences were in force during the period, since Physical Education had no demand.

The classes of these courses began in the second semester of 1981. Marta participated in the first Science class and claims to have faced difficulties in the course, due to the content teaching and without concern with applications or contextualization. She believes that the training did not qualify her to teach, precisely because of the extremely conteudist characteristic, reaching, in her opinion, almost the level of a Bachelor's degree. Marta reports several clashes with her teachers, for asking for a training more focused on teaching and the reality of teaching, but nothing has changed.

In Marta's records, we see great privilege in specific disciplines, if, to paraphrase Silva (2015), there is something more specific in a teaching degree than training focused on pedagogy. Of the 1980 hours of the course, less than 25% are related to education and there are only 75 hours of Supervised Internship, which would be the real contact with the teaching profession.

In addition to the Degree in Science, the CPBG offered, since its inception, the Degree in Letters, Lindomar took this course in the 1990s. She also comments on the content of the course she took, with a few hours dedicated to teaching preparation. Lindomar says that she had practically no practical subjects, summarizing some observations of classes in schools during the course and 15 days of internship in the last year. She says that the Degree did not prepare her for teaching (due to the prioritization of theory over practice), especially when comparing it to Logos II, a course in which she considers she learned how to be a teacher.

In Lindomar's school records, as in Marta's Science course, we perceive a priority to 'specific training' subjects, over pedagogical ones. Among the 2754 hours of the course, less than 25% was educational. Therefore, the content characteristic was not exclusive to the Exact Sciences, but, possibly, an understanding of the meaning of teaching formation by UFMT Barra do Garças/Pontal do Araguaia.

The Short Term Degree in Science, created in 1981, worked at CPBG/Cesma even longer than at Cuiabá's UFMT, having been there until 1987, and in the capital until 1985. In 1987, the Council/UFMT Resolution n° 01 suspended the entrance exams for such a degree, with gradual extinction of the course, guaranteeing the right of the students to conclude it (UFMT, 1987a). Besides the possibility of concluding the Science course, Resolution 09/87, of Codir/UFMT, offered the students the option of migrating to one of the courses implemented by the same Resolution: two Degrees, unfolded from the Short Term Course, in Mathematics and Biology, with 20 vacancies each (UFMT, 1987b).

The Mathematics Degree matrix initially implemented, according to Both et. al. (2017), was adapted from those of Cuiabá and Rondonópolis, where the course had already been taken by UFMT. By the curriculum of the initial years, the Degree of Cesma was almost a Bachelor's degree, whose most of the course was focused on Mathematics and few pedagogical subjects. Interviewees of Both et. al. (2017) stated that this generated

problems in the career of the graduates, since they were only prepared for the contents they would teach, but not for the issues inherent to teaching. Thus, the curriculum needed to be reformulated to meet such formative needs. Since teachers did not give up their time dedicated to Mathematics, they excluded general education subjects, such as Physical Education, to insert didactic-pedagogical subjects (BOTH et. al., 2017).

In Barra do Garças, according to our participants, the Araguaia Valley University Center (Univar) also collaborated in the teaching formation during our time cut. Maria, Terezinha P. da Silva and Marta studied there for their Pedagogy Degrees.

The institution (then Faculdade de Ciências Contábeis e Administrativa de Barra do Garças) was created in 1990, due to the regional context of development and consequent educational expansion. It started only with Accounting Sciences, but soon the Administration course was authorized (UNIVAR, 2018). After that, it implemented two degrees: History and Pedagogy, under the name Faculdades Integradas de Barra do Garças (FIBG). In 1993, it became Faculdades Unidas do Vale do Araguaia - Univar and, in 2020, Centro Universitário do Vale do Araguaia, maintaining the acronym Univar.

Maria studied in the second Pedagogy class of the institution, graduating in 1995. She evaluates to have been a difficult and quality course, with face-to-face classes, in the night period. She comments that the formation was basically theoretical, but, in her opinion, the practice is really learned in service, because in the graduation the concept of education presented is utopian. Despite having been an intern, she considers that it was a few hours for an effective formation. She says that 80 students started the course and only 30 concluded it, either because of formative or financial difficulties, due to being a private college.

Terezinha says she took her Pedagogy course, at Univar, in Parcel mode, during school vacations. According to her, she and other teachers

from Torixoréu went to Barra do Garças, in the body of a dump truck of the city hall, to take the course.

Marta, when she was in Pedagogy, already had a degree in Science, but because she was in a position of deviation, in the school administration, she lacked an education that would guide her in her activities. In addition, she says she perceived a pedagogical deficit, left by the Science course. The teacher reports that Pedagogy has changed her way of understanding teaching and education. Despite considering it a quality course, Marta criticizes the lack of teaching of mathematics. She says she believed that this course would fill her math learning deficit, but this did not occur. In the Pedagogy curriculum she took (1995 - 1997), there is no mention of Mathematics components. Perhaps because Marta did it as a second degree, the subjects she had studied in Science were used in Pedagogy. However, this is not specified in the school records of the course.

These were the official teaching movements that took place in Barra do Garças, both at the level of teaching and higher education, during the second half of the 20th century, of which we learned from the contact with our interviewees, from bibliographic research and the consultation of documents available in the schools of the municipality.

Conclusion

From what is presented in the text, both in Cuiabá and in Barra do Garças, we reinforce what is already perceived in other studies on the History of Brazilian Mathematical Education: the training of teachers in these two places is strongly marked by need and urgency. When the need was shown to be urgent, it was attended, for example, by those trained in the Normal School or technicians in Teaching governing classes at different levels, or the creation of programs for speed training, such as Cades and Logos II, being another formalization of the practice, before access to higher education for most national and Mato Grosso teachers.

The higher education in Cuiabá arrived when the need and urgency were already unsustainable. The ICLC was then established to license teachers, which was expanded from the creation of the UFMT, which incorporated the higher education level institutions existing in the capital. In Barra do Garças, this level of education, on a regular basis, was implemented by the UFMT interiorization process, 15 years later than in the capital.

Another approach, between Cuiabá and Barra do Garças, besides the lack and urgency in teacher training, is the presence of the Normal School fulfilling the role of teacher trainer until the 1970s. In addition, we can mention the characteristic of the Degree courses offered by UFMT, in both places, to appreciate more the specific contents than for a training focused on teaching, in general, revealing an understanding of the institutional role in teaching training at that time. However, if there are approximations, we also realize singularities, such as, for example, the courses of Cades, whose relevance in the formation of teachers in Cuiabá is outstanding and that did not come to operate in Barra do Garças.

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