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Numeracy, vulnerability, ethics and social justice

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Abstract

This article discusses the theme of numeracy, vulnerability, ethics, and social justice. The choice of this theme highlights its relevance to the processes of teaching and learning among vulnerable youth and adults, as well as its connection to issues of ethics and social justice. The discussion has a theoretical focus, even though its development is supported by episodes extracted from empirical research conducted by the author with the Brazilian Landless Movement in her academic activity, from an ethnomathematics perspective. This perspective draws mainly from the ideas of D'Ambrosio, the philosopher Ludwig Wittgenstein in his mature period, and Michel Foucault.

mathematics education, ethnomathematics, numeracy, ethics, social movements

Introduction

Numeracy, vulnerability, ethics and social justice -- the four elements that compose the title of this paper -- when put together in an articulated way, constitute a central theme throughout my academic trajectory, specifically, since I started my mathematics education work with the Brazilian Landless Movement, 30 years ago. The ideas I share in this paper are based on that work, which gave me not only a new way of looking at numeracy but also a new perspective for my own life as a human being.

The main argument I present here is the following: over these 30 years, the Brazilian Landless Movement has gradually become a less vulnerable social group thanks to its own struggle strategies, among which education, in particular numeracy, is a central part. To develop the argument, initially it is necessary to say some words about the Landless Movement and show how the vulnerability of this social group is being mitigated.

As is well known, like most countries in the world, Brazil is marked by economic and social inequalities which intersect and are reinforced by other cultural markers such as gender, race/ethnicity etc. In particular, historically, due to the large concentration of (productive and unproductive) land, Brazilian rural spaces were – and still are – areas of social conflict: we are talking about a country where less than 3% of the population owns two-thirds of the productive land. Nowadays, because of rural exodus, only 15% of the country population lives in the rural areas, but even so this corresponds to 30 million individuals (IBGE, 2022). They are basically poor people with low level of instruction. It is also in the rural areas where there are the highest rates of illiteracy in the country. The most recent data indicate that 6.6% of the population over 15 years of age in the entire country is illiterate, while, for example, in the Northeast region, this percentage reaches 13.9% (IBGE, 2022).

It is in this landscape of centuries of poverty that we can place the emergence of the Brazilian Landless Movement. It was founded in 1984. In its 37 years of existence it has become the largest social movement in Latin America. Nowadays it is organized in 24 states in the 5 regions of the country. These regions have very different climatic, cultural, economic and social characteristics. Regions located in the north have more precarious socioeconomic conditions than those in the South, which corresponds also to the standard of life of the Landless camps and settlements.

As a consequence of decades of struggle for land reform, the Movement currently encompasses around 120,000 families residing in precarious camps awaiting government recognition. While living in camps, the Landless peasants produce fruits and vegetables and have schools for their children, youth and adults. There are approximately 145,000 families living in settlements as a result of Landless actions. Land occupations are rooted in the Brazilian Constitution (1988), which says: land that remains unproductive should be used for a "larger social function".

The Movement is also internationally known for its educational project. This educational project, which has been developed by the Movement over its history must be understood beyond schooling, since Landless peasants educate themselves through their participation in the everyday life of their communities and also through the wide range of political activities developed by the Movement. Their schooling project, according to one of the Landless Movement official documents, considers the need for:

> two articulated struggles: to extend the right to education and schooling in the rural area; and to construct a school that is *in* the rural area, but that also *belongs* to the rural area: a school that is politically and pedagogically connected to the history, culture, social and human causes of the subjects of the rural area (...)" (Kolling et al., 2002, p. 19).

The movement has dedicated itself to conceiving the schooling of its children, youths and adults paying attention to these two struggles. In particular, such struggles are providing the guidelines for its adult mathematics education. This means that Landless educators considered peasant culture a key issue also for those teaching and learning processes related to numeracy. But they explicitly mention that this valorization cannot deny the relevance of acquiring mathematics tools connected to what they call "book mathematics" that can improve the use of new technologies for managing the production in rural areas and can allow the learners to go further in their schooling trajectory.

It is important to mention that macro-socio constraints they are facing are really interfering in the implementation of those two pedagogical principles above mentioned. Even so, the educational Project of the Landless Movement has grown and expanded and nowadays involves more than two thousand public schools built in camps and settlements, providing 200 000 children, youth and adults with access to education, and resulting in 50 000 literate adults, 2 000 students in technical and university courses and more than 100 undergraduate courses in partnership with state universities around the country.

Theoretical Remarks

In this section, I present some theoretical ideas that underpin the discussion in this article. Intentionally, I have selected only remarks that provide the reader with the necessary tools to follow the development of the text, in which these tools will be used in different contexts. The theoretical remarks are based on the ideas of Wittgenstein's later work.

In his book "Philosophical Investigations" (1995), Ludwig Wittgenstein criticizes not only his earlier work presented in the book Tractatus logico-philosophicus (Wittgenstein, 1933) but also "the whole tradition to which it belongs" (Glock, 1996 p. 25). Through this critique, Wittgenstein provides us with valuable tools for thinking about rationality as forged from social practices of a form of life. This perspective entails considering rationality an "invention," a "construction"

(Condé, 2004, p. 29), and understanding mathematics "not as a body of truths about abstract entities, but as part of human practice" (Glock, 1996, p. 24).

Moreover, with the support of his ideas – and using the expressions that he coined – one can admit the existence of distinct mathematics – distinct ethnomathematics, in D'Ambrosio's words (D'Ambrosio & Knijnik, 2020). The basis of this statement can be found in the argument that these different mathematics – different language games in Wittgenstein's words – are produced by different forms of life. This is a term conceived by the "late Wittgenstein" as "stress[ing] the intertwining of culture, world-view and language" (Glock, 1996, p. 124), as "patterns in the weave of our life" (Glock, 1996, p. 129). In Wittgenstein's late work, especially in the new conception of language presented by the philosopher, Condé (2004) argued about the crucial role of the notion of *use*. It is considered pragmatic, not "essentialist." Meaning is determined by the use of words and such a use respects rules, which are themselves produced in social practices, constituting *language games*. They are produced based on sets of rules (rooted in social practices), each of them constituting specific grammar. Therefore, the grammar that marks each language game is itself a social institution.

From these brief remarks on the work of the late Wittgenstein and some of his interpreters (such as the aforementioned Condé and Glock), it follows that different forms of life produce different language games, each marked by specific grammar. Such a grammar, as a set of rules, constitutes a specific logic. This rationale suggests that there is more than a single language: there are different language games. Thus, we can ask: Is there some kind of relationship between them? If the answer is positive, how does it operate? Late Wittgenstein thought the notion of family resemblances provided the response to these questions. The philosopher would say (as shown in aphorisms #66 and #67 of Philosophical Investigations (1995)) that language games form "a complicated network of similarities overlapping and cross-crossing: sometimes overall similarities, sometimes similarities of detail" (Wittgenstein, 1995, p. 32).

The ideas developed by Wittgenstein in his maturity phase express a concept of language no longer with the marks of universality, perfection and order, as though they existed before human actions. His work challenges the existence of a universal language and problematizes the notion of total rationality, of an ontological foundation for language. Thus, since the meaning of a word is generated by its use, the possibility of essences or fixed guarantees for a language are questioned, leading us to also problematize the existence of a single mathematical language with fixed meanings.

Based on the ideas of late Wittgenstein, my conception of ethnomathematics perspective argues that the mathematics practices generated by specific cultural groups can be understood as a set of language games associated with different forms of life, aggregating specific rationality criteria (Knijnik, 2012). The ideas presented by the philosopher are productive for problematizing the understanding of a universal and foundationalist reason, which sustains modern thinking, in which mathematics holds a privileged place (Walkerdine & Silva, 1995). This productivity is one of the key points of interest for the ethnomathematics.

Numeracy and the mitigation of the Landless Movement vulnerability

In this section, I show how I perceive the place numeracy has occupied and still occupies in the process of mitigating the vulnerability of the Landless Movement. To achieve this goal, I present some episodes relating to the ethnomathematics perspective I used in the numeracy work I did with the Landless over these 30 years. Using this strategy of presenting examples of my work, I follow Wittgenstein (1995) with the importance the philosopher gives to examples, when writing, in aphorism #71 of Philosophical Investigations (1995), "Here giving examples is not an indirect means of explaining – in default of a better."

Let us go back to the early 1990s when my work with the Landless began[1].

One of the projects I wanted to mention lasted 4 years and involved 7th grade students from a Landless settlement school, settler's families, the teachers and the agronomist who at that time worked at the settlement. The work carried out was guided by an ethnomathematics perspective. The adult peasants, most of them with few years of schooling, also had the opportunity to be involved in the learning of mathematics.

The adults were very much interested in participating in the project because it was about their own productive activities. As a settler who was farming lettuce in greenhouses said: "one can't work anymore just to let the devil have the last laugh" (Knijnik, 2006).

In a meeting in which the partial results of the Project were presented by the students to the whole community, sometimes their arguments once again were marked by the out-of-context, abstract, formal tone of traditional school mathematics in dealing with the problems of the broader social world. But this "coming back" to the school mathematics routine was disturbed by some voices from the audience. There were settlers who demanded further explanations about numerical results, saying they couldn't understand the accounts in the way the students were presented them (Knijnik, 2004).

By raising the issue of their concrete life-situations, they helped the research group (composed of me and my undergraduate students) to understand and problematize that displacement of formalism and apparent neutrality that produced the return to positions that the pedagogical work precisely sought to avoid.

In enabling this polyphony of voices in the school curriculum, the project produced important elements to allow us to go further in our thinking about the ethnomathematics field.

From that early period of my work with the Landless, I would also like to mention a relevant practice in Landless communities in the past and still today very much used in rural areas of Brazil. It consists of estimating the area of a piece of land. They called it: "Cubação da Terra"[2].

Precisely because it is relevant to those who work in rural areas, it is a theme which was and still is always requested by the participants in numeracy projects as a focal point of study. I learned from my Landless students their methods of "cubação da terra". Their methods, as compared numerically with those used by school mathematics, produce approximate results, with an approximation upwards. These upward approximations become smaller, the closer the shape of the land is to a square, and in this case coincide with official results.

Before presenting the example, I need to make an important methodological caveat: I am aware of the theoretical difficulties involved in expressing Landless mathematical practices using school mathematics. From an anthropological point of view this type of translation is very problematic. The objective of making this translation, as I have done in other works, is only in order to favour a faster understanding here and also when teaching the Landless students.

I am aware that in doing so, some (or maybe most of the) specificities that constitute the Landless' forms of life characteristics, which produced the practices of "land cubação" are suppressed. So, it can be said that those methods become "hostages" of the school mathematics. Later, I will return to this point.

1 In referring to this Project, I want to pay a tribute to two very dear colleagues ALM Honorary Trustees, Diana Coben and Alison Tomlin. They followed me in those early years of my work with the Landless, when the Movement was still extremely vulnerable. As I said in my ALM28 talk, that opportunity was a special time to express to them how important their support was for me.

2 Cubação da Terra" means to measure the surface of a piece of land.

Having taken these precautions, allow me to present an example that, for many reasons, has only traces of the methods of "land cubação" practiced by the Landless. The example is a polygon that was an artificial piece of land that I presented to the first group of Landless students I had, given their difficulties in understanding the results of those different methods of calculating the area of polygons. The methods were applied to a "land" that was a quadrilateral formed by two parallel sides, measuring 80cm and 60cm, respectively, and two equal length segments, which joined these sides.

Adão, one of the students, presented the method used in his community as follows:

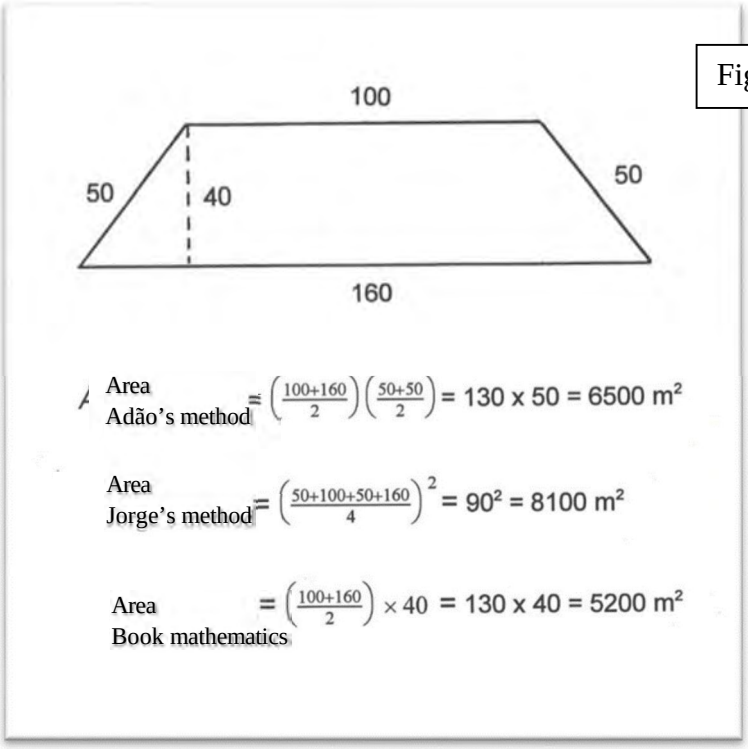
> This is a piece of land with four walls. First, we add two of the opposite walls and divide them by two. After, we add the other two walls and also divide them by two. Then, we multiply the first obtained number by the second one. This is the "cubação" of the land. (First calculus of Figure1)

Jorge explained a different method:

> Here is a piece of land with four walls. First, we add all the walls. After, we divide the sum by four. Then, we multiply the number obtained by itself. This is the "Cubação" of this land. (Second calculus of Figure 1) (Knijnik, 2006)

At this point in the work, as a teacher, I taught students to calculate the area of the polygon, using the "book mathematics method" [3] of "land cubação". (Third calculus of Figure1)[4]

Figure 1



Despite the great tension caused in the classroom, the results of the Landless methods, which give values so much higher than those given by school mathematics, allowed an important discussion. It was centered on the comparisons among their own methods and the school mathematics methods (which included the learning of the Heron's Formula of calculating polygonal areas – a

[3] This expression was used by some students to refer to traditional Western school mathematics.
[4] The results were very different: Adão found 6,500 m^2, Jorge 8,100 m^2 and the result of the school book mathematics was 5,200 m^2

formula that requires only the lengths of the polygon sides). In fact, when the land is not a flat geometric figure, but a real, concrete land, its undulations offer much more surface for cultivation.

Thus, depending on the shape and undulations of the land, the increased result given by the peasant methods can be suitable. Their methods lead them to obtain a value closer to that, which effectively corresponds to the surface that can be cultivated.

Sometime later, during a fieldwork, I learned with a Landless peasant another way of "cubação da terra". He used as parameter to determine the size of a surface the "tractor time used to hoe". "One places the tractor on the land. Working with it for 3 hours it makes exactly one hectare". (Knijnik, 2018)

This practice emerged as one among many examples of peasant ways of living in the south of Brazil (Knijnik & Wanderer, 2018). It was a way of living marked by material vulnerability, where the small farmer's work rarely managed to compete with the landowners. Thus, the cost of production, particularly the amount to be paid for the leasing of the machinery, was a central point. These were the conditions that give meaning to the rule that associated time-space, which characterized that practice. In that context, the precision, the exactitude of the area to be cultivated was no longer relevant. The landless practice produced an approximate result; it was not exact. Nevertheless, as Wittgenstein (1995) said in Aphorism 88 of Philosophical Investigations: "inexact does not mean useless".

Wittgenstein's arguments allow us to call Adão's method and Jorge's method of "cubação da terra" mathematical methods of calculating surface areas since they have family resemblances with the book mathematics methods of calculating surface area.

We can utilize Wittgenstein's ideas not only to scrutinize the particularity of "cubação da terra" but also to contemplate other mathematics education questions, such as: What happens when we take for granted that "It's important to bring 'reality' into mathematics classes"? What have we been doing in the work of schooling practices outside the school?

If we listen to Wittgenstein's teachings from Philosophical Investigations (1995), we will see that the domestication of mathematical practices of non-school forms of life, meaning when these practices are transported to school forms of life, is an unsuccessful operation. The practices are captured by the school machinery, becoming school practices and not, as one might ideally wish, practices of the 'reality' that would be introduced into the school in an intact way. This is because the "out of school" practices and the school practices, in Wittgensteinian language, are different language games governed by different logics.

This is why it is so hard and sometimes so frustrating to work in an ethnomathematics perspective. For example, it requires deep fieldwork and careful transcription that allows preserving in detail the language in which the peasants expressed their practices. It is necessary to make clear to students that the peasant language games are marked by immanence and book mathematics language games are marked by the transcendence of mathematics. Both have different logics. The logic of mathematics outside school mathematics practices is contingent upon the specific situations in which they take place. It is intimately connected to and influenced by the context and circumstances in which they occur, making it an immanent logic. Conversely, the logic of school mathematics practices is characterized by its abstract and general nature. It seeks to establish overarching principles and rules that can be applied universally. It is a transcendent logic. Therefore, we have to be cautious when saying that we teach school mathematics to be applied in everyday life and at work.

Let me present another example that is linked to an episode that happened during fieldwork completed some years ago. A peasant explained that, on estimating the total value of what he would spend to purchase inputs for production, he rounded numbers "upwards", ignoring the

cents, since he did not want "to be shamed and be short of money when time comes to pay". However, if the situation involved the sale of some product, the strategy used was precisely the opposite. In this case, the rounding was done "downwards", because, as he said, "I don't want to fool myself and think that I would have more [money] than I really had."

As we can observe, these language games have family resemblances with that practice of Western school forms of life, in which there is a fixed rule determining round up and round down numbers. This example shows the immanence of the peasant rationality versus the transcendence of the Western school mathematics. It also shows how what we teach in school is difficult to apply to everyday life without taking care to examine the situation involved.

It is also important to mention Rivera's statement: "a very important consequence of Wittgenstein's reflection about the expression "to follow a rule" is acknowledging the complete impossibility of the existence of "private rules" (Rivera, 2004, p. 86). The author argues that to follow a rule presupposes on the one hand, continuity of the practice and, on the other, the reference to a community that constitutes the system of referents in whose framework the rules acquire meaning" (p. 87). This idea is important to be highlighted, to show that the rule followed by that peasant is not something individual and private. In short, Wittgenstein's philosophy of maturity, denying the existence of a universal language, enables us to question the notion of a universal mathematical language.

This allows us to argue, from the philosophical viewpoint, about the existence of different mathematical language games – such as those of the Western school and those of the Brazilian Landless– with each corresponding to different forms of life and with specific rules. Both kinds of mathematical language games (and the forms of life to which they belong) have family resemblances.

Paul Ernest (1991) criticizes the uses of ethnomathematics in our school teaching practices. He says "there is a conflict between the location of mathematics in the world of the student's experience, and the need to teach mathematics to provide the powerful thinking tools of abstract mathematics. ... there is no way to avoid these conflicts" (p. 214). Wittgenstein's later positions help to justify the pertinence of such an argument: the meanings assigned to the language games practiced in outside school forms of life cannot be automatically transferred to the school form of life.

To move from one form of life to another does not guarantee the permanence of the meaning, which shows the complexity of this kind of operation (Knijnik & Duarte, 2010). Therefore, it is relevant to consider Ernest's positions if we do not want to trivialize an ethnomathematics perspective and take for granted what is, in fact, much more complex.

Based on this argument, we show the complexity of teaching mathematics language games from diverse forms of life. Even so, I would argue for the importance of expanding our students' repertoire of mathematical language games by including in this repertoire mathematics language games practiced in non-school forms of life. The mathematics language games practiced by the Landless peasants to calculate the portion of land to be cultivated or to round numbers have the marks of contingency, of the immanence. They are considered valid in their respective forms of life. They are different from the school mathematics language games that have an outstanding transcendence, a universal character. We can see this same dichotomy: immanence versus transcendence when considering the mathematical language games of work forms of life and those of school mathematics.

We claim that it is necessary to broaden school mathematics curricula, but we must make explicit to our students the differences between these mathematics language games, if we want them to effectively learn to deal with everyday life situations and perform better in their work.

Very political numeracy episodes

In this section, I share two examples of my work with the Landless Movement that I consider particularly political because of the characteristics of the courses in which they are associated. The first one happened during a course developed for Landless leaders of the South of the country[5]. The episode was centered on a report written by a woman student who belonged to the Landless Movement National Committee (the group of elected peasants who coordinate the Movement at the national level). Her report discussed a march that the Landless Movement was conducting at the time in a specific region of the state of Rio Grande do Sul.

The march involved hundreds of peasant families – women, men and children -- who were walking along the main roads of that region, to press the state authorities to expropriate an unproductive large-holding whose owner had been in debt to the State for a long time. When the discussion about her report started, she interrupted what was going on in the class, stood up and, moving from a student subject-position to a leader subject-position, in a stentorian voice, as if she was in front of thousands of her comrades, explained:

> This is what is going on. We have 11 thousand 7 hundred families settled in the state. Following the data given by our Production Sector, the total amount of the State debts is 70 million *reais*, its total, counting everybody's debts. What is the point? The point is that *Senhor Southal*, the landowner himself, has a debt of 32 million *reais*. In fact, it is not 32, it is 37, but let's assume 32 million. Then, he alone has a debt of 32 million. And then I have a question because it is hard to debate about this in the schools, in the communities we are visiting during our march, in the media: What is the percentage that single farmer took of public government money compared to our debts, to the "claims" that we are making?(Knijnik & Wanderer, 2000:35)

This question was asked on the very first day of the march when we sat down to prepare the people who were going to talk at the schools. This question came up and we looked at each other and could not answer. Her talk was interrupted by applause from the other students. The continuity of the pedagogical work was centered in the analysis of her report. Initially the group was interested in discussing mainly the economic dimension of the situation, even if its social and political dimensions were always present. The group consensus was that it would be important to write a text with the results of the analysis of the situation we had carried out.

Thus, the next stage of pedagogical work involved writing a text, which not only showed the analysis results but also highlighted the reasoning developed by the group, marked by Landless mathematics language games associated to their form of life. From the following week onwards, the text was distributed in the communities through which the march moved.

Some elements of this episode deserve to be highlighted. The first concerns what I have called the use of "raw texts" in numeracy processes. I am calling raw text a mathematics text like the report presented by the peasant in this episode. It is a text which involves, for example, a non usual (dis)order provoked by the presence of data that, although a significant part of the situation, are not always necessary to perform the calculations. A raw text usually presents more complexity than the mathematics textbooks problems.

I argue about the relevance of using raw texts in numeracy projects because they effectively express how mathematical relationships present themselves in our daily lives, whether in domestic or work activities. Mathematical relationships are in the world connected with social, cultural, economic and affective relationships. And the problems we really need to solve are hardly just mathematical... In the case of this report, as the discussion progressed, other data were brought up

[5] This episode was described in Knijnik &Wanderer 2010)

for discussion and more complex calculations were performed. These calculations involved the use of a calculator.

Another aspect of the episode is the flexibility of the numeracy process, which allowed the peasants to redirect it. Peasants assumed the leadership of the numeracy process and the text to be distributed at the march gained priority. They considered the mathematics calculations indispensable to justify the reason for the occupation of that property politically.

A third aspect linked to the episode that must be highlighted concerns the march itself. As happens in all other marches, the Landless children who participated in that specific march with other members of their families did not stop their schooling thanks to the itinerant school to which they belonged. The itinerant schools were instituted by the Landless Movement in 1996 and had some unique characteristics: the students and teachers were Landless people living in the movement camps; teacher training was performed in Secondary School courses and courses of Higher Education belonging to the Movement; the students entered at any time during the school year; the general organization of the schools and the pedagogical work was implemented by the teachers and by the camp community; the school curriculum was structured by stages that were the equivalent of the initial grades of Brazilian Elementary Schooling and supported by the principles of the Landless Movement Pedagogy. Many times, there were attempts to close the Landless itinerant schools, and only the resistance of the Landless Movement made it possible for these schools to continue to exist.

A final episode refers to the Higher Education Course in Technology of Management of Cooperatives in which, different from the other examples presented, we faced difficulties in using our ethnomathematics approach in the numeracy process.

The main challenge of the Course was to advance agricultural cooperation, introducing the management of cooperatives in the neoliberal business model, but taking into account that such an advance needed to be subordinated to the political and social positions defended by the Movement in its history.

The Course, lasting three years, aimed to train 40 technicians of the Landless Movement and other Peasant movements of Latin America and was run by the Landless Movement Education Sector in partnership with the Universidad de Mondragón of the Spanish Basque Country. This university was in charge of the teaching of the subjects linked to technology and business management.

Nevertheless, when the Course started, its Pedagogical Team noticed that the students had difficulties in the subjects of Accounting and Financial Management, which are central in the Course curriculum. The Pedagogical Team considered that these difficulties were due to deficiencies in mathematics. Thus, the Team made the decision to introduce a subject of Mathematics into the Course, even though this had not been foreseen before. The Mathematics syllabus was developed by Basque teachers who taught Accounting and Financial Business subjects. The syllabus included topics such as percentages, fractions, equations, areas, and volumes.

We were invited to be in charge of the teaching. One of my students was the teacher.

If we analyze, in a global way, the first Course in Technology of Management of Cooperatives promoted by Landless Movement, we can affirm that its results were very positive. Its repercussions in the productive sector of the Landless Movement were notorious. However, from a numeracy point of view, the Course can be criticized.

The fact that the students' difficulties were not foreseen and, therefore, there was not enough time for them to be worked on throughout the teaching of Accounting and Financial Business, implied that the numeracy was carried out separately. This, in itself, made it impossible to implement the

ethnomathematics perspective that until then had been central to our work. Numeracy ended up being restricted to something routine: A list of contents to be taught with the purpose of being applied after.in their professional life. After learning from Wittgenstein his notion of use, we know how inefficient his pedagogical approach is. For the philosopher, meaning is given based on the use we make of it in different situations and contexts, meaning is determined by the use.

But there is one more aspect that can be criticized in the Course from the standpoint of numeracy: the subjects of Accounting and Financial Business, which can be considered themselves in some way as numeracy, were taught by the Spanish Basque teachers, in a very traditional way. The methodology: first theory and then application was implemented. In essence, we can say that the Basque university methodological perspective was imposed upon us....

Ending words

Throughout my trajectory as a researcher working with the Landless, I have always tried to mobilize all my efforts to never forget to problematize my own discourse, since it is necessarily marked by my 'privileged' voice as an intellectual working with what can be seen, even today, as "subaltern 'subjects'". In my attempts I have been favored by this social movement, which is very much aware of the risk of exposing themselves to academic research and of being narrated by "the others" and being represented by us.

They chose to take this risk not only because of my "good intentions" of being vigilant about my role in the work I have been developing with them for decades. Rather, they made this decision because they put education as one of the key issues of their struggle and saw the importance of having academics contributing to the construction of new alternatives within their educational project.

In this journey, I have come to realize that the Landless peasants have taught me far more than I could ever teach them. Their wisdom extends beyond the realm of mathematics language games and encompasses invaluable life lessons.

Through their generosity, they have shown me the importance of selflessness and placing the collective well-being above individual interests. Their tireless determination and unwavering strength in struggling for a more just world have been truly inspiring. They have imparted upon me a profound understanding of resilience, justice, and the power of collective action.

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