Ethical Formation in Professional, Scientific and Technological Education

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ABSTRACT – Ethical Formation in Professional, Scientific and Technological Education. The mismatch between technological development and human development is evident in the Federal Network of Professional, Scientific and Technological Education, making ethical formation an important point of discussion in this context. This article shows results of research that investigates how this education is represented in the speech of the pedagogical managers of the Network. From the data, the emphasis is on disciplinary approaches and professional or professionalizing representations of business and neoliberal ethics. It is concluded that the morality theme should integrate the debates about Professional Education, reconciling the technical and human dimensions of formation and thus guiding the educational process toward emancipatory.

Keywords: Professional, Scientific and Technological Education. Ethical Education. Moral Education. Barbarism. Representations.

RESUMO – Formação Ética na Educação Profissional, Científica e Tecnológica. O descompasso entre desenvolvimento tecnológico e desenvolvimento humano é evidente na Rede Federal de Educação Profissional, Científica e Tecnológica, fazendo da formação ética um importante ponto de discussão nesse contexto. Este artigo traz resultados de pesquisa que investigou como essa formação está representada na fala dos gestores pedagógicos da Rede. Dos dados, destacam-se a tônica nas abordagens disciplinares e as representações profissionais ou profissionalizantes da ética empresarial e neoliberal. Conclui-se que o tema moralidade deve integrar os debates sobre a Educação Profissional, reconciliando as dimensões técnica e humana da formação e assim orientando o processo educativo em direção emancipatória.

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Introduction

Whereas we develop ourselves instrumentally in proportions never imagined in the history of the civilization, we preserve traces of a self-destructive impulse disguised of ignorance, intolerance and hatred, drifting us away of an ideal of human development that follows the rhythm in which the technological is propelled. With the attribution of such features, so pertinent to the case of contemporary humanity, in 1969, Adorno (1995) talks about the concept of barbarism. For this article, this concept and the understanding that the goals of education must all convert themselves in restraining the barbarism from happening are overriding.

The education that occupies itself with this task is not restrictive to the performance of a merely instructive role. Kant (1923-1996) claimed that modern education would need to combine the scientific instruction with ethical formation, under the risk of our extinction. The main national educational guidelines (Brasil, 1996; 1997; 2012), that also lead the Professional, Scientific and Technological Education (PSTE), show that the premises of contemporary education incorporate the ethical dimension of formation, considering the educative process beyond the instruction.

The technological development has central character in guaranteeing the continuity of human existence. This is demonstrated as well in relation to the production of wealth of material order as regarding the execution of basic social rights, like health, nourishment, education, among other things. Partaking this insight, there are brazilian public policies for the professional education, especially the ones that blossomed between the years of 2003 and 2015, time when governments of progressivist and popular nature strongly invested in the sector, in order to place Brazil among the principal economic powers in the world, aiming to diminish the social inequalities (Pacheco, 2011).

Adorno’s concept of barbarism allows problematizing an intersection in the core of the professional education: the ethical formation. And this was the reason why in this work is manifested the interest in investigating the experiences on ethical formation accomplished at the federal network of the PSTE.

If such ethical formation is one of the ends of national education (Brasil, 1996), the question which provoked the need of investigation was: how has it been pushed through in the PSTE, in which the spotlights attach themselves heading the technological race? Further: how do the unities of the Federal Network of PSTE abide the imposed exigency by the legislation and by the guiding documents and, from this, seek to overcome this apparent paradox? At last, how does the ethical formation in the PSTE’s Network occur? To answer that last question was the main purpose of this research.

The ethical formation, under the most diverse conceptions and ways of doing, happens in every and any school, for “[...] the moral influence over the students is impossible to be avoided in the scholar en-
vironment” (Goergen, 2007). The paradigmatic north applied in this study, however, does not adjust to the absolute relativism, motive by which it was required to forge a conception for ethical formation that anchored itself on pedagogical and philosophical theories and that, at the same time, distinguished in name of which type of ethical formation we discuss here.

Thereby, we start out from the elaboration of the concept of ethical formation based on the debate regarding ethics and moral that inserts Sánchez Vázquez (2002). He understands that the moral resides on the practical field. It’s a term related to the moral behavior, the concrete scenario. Ethics, on the other hand, is “[...] theory or science of the moral behavior of men in society” (Sánchez Vázquez, 2002, p. 23). However, such definition bumps into the critic to the dichotomy theory/practice. As exposed by Sánchez Vázquez, the ethical dimension belongs to the philosophers and thinkers of morality. As for the morality, less complex and more ordinary, is up to the common individual (Sánchez Vázquez, 2002).

Refuting the binary character of this postulate, elements sought in the communicative morality were incorporated to this concept (Habermas, 2003). This theory comprehends morality as a collective construct originated from each singular situation of moral argumentation in which it tends to universality by means of freely agreed consensus. Understood this way, the moral action is possible to any and every agent inserted in a context of moral argumentation, not only to philosophers or thinkers of morality. Seeing morality like this implies on agreeing with Habermas when it comes to his denunciation of philosophy as keeper of place of other knowledge (Habermas, 2003), as the arts, the science and, in the case that interests us, the ethics.

Beyond the postulations of Sánchez Vázquez (2002) and Habermas (2003), works of Piaget (1930-1996; 1932-1994), Kohlberg (1984), next to other recent publications of brazilian researchers, served as basis to the elaboration of the ethical formation concept. Among them, there are some who discourse about ethical formation, moral education and education in values (Arantes; Araújo; Puig, 2007; Freitag, 1992; Gallo, 2010; Goergen, 2001; 2005; 2007; 2010; Kohlberg, 1984; La Taille, 2006; 2009; La Taille; Menin, 2009; Menin, 2002; Menin; Bataglia; Zechi, 2013; Menin et al., 2014; Piaget, 1930; 1932), school indiscipline (Aquino et al., 1996; Garcia, 2009; Lepre, 2009), among others also important and related to this research’s theme.

The set of debates promoted by these authors lit the construction of a conceptual basis for the locution ethical formation on which this study is supported. Thus, the ethical formation is comprehended as the one that accomplishes itself in a planned and organized way and aims the critical thinking about and in the concrete moral action, being possible for all individuals. This reflection breaks with the one-dimensional plane of thought, materializing itself from the action integrated to it. It’s build communicatively in the interaction among subjects that take an active part in this process and seek a consensus that tends to univer-
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salization, drifting itself away from absolute relativization. It’s oriented by the sense of search for autonomy, increasingly widely and complex and is intimately related to the idea of citizenship. It passes through all school contexts and environments. It’s in the classroom, as it is in the relations that are established in school or through it. It can be concretized by intermediate of distinct methodologies, provided that these are integrated in more embracing school projects and in which there is a wide participation of the school community. Towards its importance, the ethical formation should be taken as the main purpose of school education.

Once the matter is exposed, the general goal and conception of ethical formation taken by axis in the research, before presenting the methods, the shape adopted in the research should be defined. This text integrates a bigger study that sought to comprehend how the ethical formation in PSTE happens. Therefore, multiple dimensions of the issue were approached, which was done by a form with 18 questions. From them, the first three were highlighted for this case: a) The units of the PSTE Network should offer an ethical formation to their students? b) Why do they think that the ethical formation should or shouldn’t be offered by the units of the PSTE Network? c) How is that formation to happen? The three questions regard to, respectively, the representations of pedagogical managers who answered the form about the necessity of ethical formation, the motive and reasons for it to happen and how do they idealize it from the methodological point of view.

Here, the term social representations is applied on the mat of what Menin et al. (2014) elect as ideal in study that had this same nature. Following Moscovici (1978), Menin and other researchers understand as social representation:

[... ] forms of practical knowledge collectively constructed, in the informal communication and in the social practices regarding certain objects, which carry marks of the groups and the culture where they are bought up. They emerge, normally, from certain pressures provoked by the social environment concerning a new object that causes estrangement and needs to be explained [... ] (Menin et al. 2014, p. 136).

For the authors, the contemporary pressure for answers in the moral education field justifies the use of the social representations theory. With what we agree, preserved the controversies about the different uses of the term representations, especially in the field of studies that deals with the levels of comprehension of social reality.

Methods

The elaboration of the instrument of data gathering had as starting point the adaption of the quiz used in the research Successful projects in Moral Education: searching for brazilian experiences, realized by a group of researchers linked to the ANPEPP – National Association of
Research and Post Graduation in Psychology (Menin; Bataglia; Zechi, 2013; Menin et al. 2014). The few adaptations that were necessary were based on bibliographic review and characterization according to the PSTE peculiarities. The period comprehended between 2003 and 2013 was chosen, decade in which new policies impacted the professional brazilian education.

The instrument was elaborated and forwarded using the Survey-Monkey platform. The units of the PSTE Network already implanted were participants in the research. The units that were in the implantation process were excluded, whereas some of them were only counting on the administrative apparatus, not having started the pedagogical actions, thereby being left out of the universe of study interest.

The available information on the online page of the PSTE Federal Network served as source for the selection of participating units of the research. In situations of uncertainty of information about the implantation process, the institutions’ web address and telephone number were searched for data confirmation. Of 382 identified units, the effective contact was possible with 297. The research forms were forwarded to all Federation Units, addressed to pedagogical managers (pedagogical coordinators, educational managers, teaching directors, among others nomenclatures attributed to this same duty). 106 free and enlightened consent terms were completed. Among these, only the valid fillings were considered, which corresponded to 69 participants (23,2%). Of the new number, there was at least one participating campus in each state, meeting the expectation of the research’s territorial reach.

The answers to the objective questions were quantitatively tabulated and analyzed. To the questions of discursive answer, were they independent or complementary to the quantitative, the given treatment was the qualitative. The reading and analysis of the qualitative order data were realized by using triangulation as method (Denzin apud Flick, 2009). By this way, the collected data, the bibliographic review and the documentary analysis were interwoven, giving the necessary support to the interpretative character analysis.

The subjects of the research were identified as participants, representing the integrative units of the PSTE Network. They were the Technical Schools linked to the Federal Universities, the CEFET’S, the School Pedro II, the Parana Federal Technological University, alongside the new Federal Institutes (Brasil, 2008). With the methodological considerations woven, we lead to the presentation, analysis and discussion of the acquired data.

**Regarding the Ethical Formation in the Network of Professional, Scientific and Technological Education**

The first question asked was if managers thought the units of the PSTE Network should offer an ethical formation to their students. The answers obtained allowed two different interpretations: if the impor-
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tance of this formation is known on any level and if managers believe that the school is the/ an appropriate place to the development of such formation.

The positive reply was unanimous and indicates that the knowledge gathered in the units of the PSTE Network on the relevance of the ethical formations is that, in terms of pedagogical result, it’s neither negative nor null, but beneficial. Likewise, one can infer that, in their representations, managers think school as a suitable space for this formation. Before a values crisis in contemporaneity (La Taille; Menin, 2009), the ethical formation, beyond being achievable, is understood by the participants as necessary. This result is similar to what Menin et al. (2014) found in 99% of the 1033 brazilian public schools they studied.

The tendency to positive answer in this case may have diverse origin. One of the possibilities could be the anchorage in which the legislation is preconized. However, only the Law 9.394/96, that establishes the Guidelines and Bases of National Education and applies also to the PSTE, explicitly brings up this matter. How put in the subsection III of its article 35, which handles the purposes of education, the ethical formation is one of the necessary elements to the “[...] enhancement of the student human person” (Brasil, 1996, art. 35).

The same forcefulness isn’t seen in the National Curricular Guidelines on Technological and Secondary Education (Brasil, 2012), either in the Law of the making of the Federal Institutes, 11.892/08. In this, a mere wave towards an ethical concern sees itself on one of its described purposes: “[...] to promote production, development and transference of social technologies, notably the ones focused on the environmental preservation” (Brasil, 2008, p. 4).

With no guidelines, programs, projects that clearly foresee or delineate actions that carry out the ethical formation in the PSTE, it’s curious that all managers have extended to professional education the responsibility for the offer of this training. What’s notorious is that the ethical formation happens in school even though there’s no legal, documental prediction or yet a program or project of any nature that was consolidated in the scope of the PSTE, endorsing the thesis presented by Goergen (2007). Nonetheless, without guidelines that providing ontological, epistemological or methodological clues to these practices, it’s inevitable that they happen according their own criteria, pushing through in a non-systematized, unarticulated way, according to parameters settled in more or less democratic ways, ultimately, without clear beacon.

In consonance with this verification, while answering the complementary question: Why do they think that the ethical formation should or shouldn’t be offered by the units of the PSTE Network?, the reasons presented were diverse.

All who have manifested referred to a determined purpose of education that would be being fulfilled by the offer of ethical formation. Hence, the answers were grouped in the following categories: a)
human formation; b) professional formation; and c) integral formation. There were participants that did not answer and, others, whose answer couldn’t be classified in none of the categories, for it didn’t offer enough resource for such, given the few and/or disconnected information that was shown.

**Graphic 1 – Why should the Ethical Formation be Offered by Units of the PSTE Network?**

It’s notable (Graphic 1) that the group that attributes importance to the offering ethical formation to human dimension of ethical formation amounts 27 of the participating units (39%). The ones that attribute such importance to formation for the professional performance are 15 (22%). Those who comprehend that it’s due to necessity that the Federal Institutes promote an integral education are 17 (24%). The null responses or the ones impossible to be categorized totaled 15%.

Human formation, for this study, is inspired on the National Curriculum Parameters (NCP’s) which aims full formation of the individual as human (Brasil, 1997). By this conception, the ethical formation would be comprehended as a formation for life, for the relationships among people, for a better acquaintanceship, for social and political participation, for citizenship. Generally, the human formation we’re talking of is summarized in educational efforts focused on preparing the individual for life, with no explicit mentions to professional dimension.

Show more clearly the common content of this category:

*First off, because the National Curriculum Parameters signal that the school education should enable the student to learn citizenship as social and political participation beyond positioning themselves in a critical, responsible, constructive way before conflicting situations, this automatically implies ethics and citizenship. The educational institution has a relevant role on ethical and citizenship formation, given the extension of transformation that education has on student’s lives (Participant 3, 2014).*

Source: Authors’ elaboration.
One of the FI's' goals is the improvement of full citizenship of life in society. The ethics are a fundamental component of brazilian society nowadays (Participant 39, 2014).


The majority representation of ethical formation as integrant of the human formation project at the Federal Institutes allows to considerate that there's an evident concern in reinforcing the idea of non-instrumental education. To say so implies on attributing greater value to the human dimension of the educational process, at the expense of a project of a subject whose fate is to become productive within an economical logic, which would end up being the condition for their existence.

The appeal to explicit principles in NCP’s (1997), as made by participant 3, points to the importance that this instrument has to the formation of representations regarding education by managers. There, an indicative of success on the propagation and reach of this instrument that orients educative practices in this country is found. On the other hand, it's perceivable the lack of specific guidelines for the PSTE that cope with its peculiarities, like, for example, the targeting to questions from the work world and the demands for science, technology and innovation, so strongly investigated in the formation projects.

As professional formation – or ethical formation while integrating part of the formation for professional performance –, all the answers that pointed strictly to the significance of ethics in the work field were classified. The expression of this representation by some participants shows that, for them, the ethics' duty is to integrate the professionals' curriculum that are going from school to the job market. The ethical formation, in this case, would have the duty of beaconing working relationships, conducing adequate and wanted behaviors by the job market, contributing to the formation of the most aligned with social expectations professional when it comes to good development in business.

Some examples of speeches in this way:

As they will leave straight to the job market, it's quite important that these young people are also ready in this enquiry (Participant 22, 2014).

We train professionals and if we don't contemplate an ethical formation during the educational process what else is there to expect from these professionals? (Participant 54, 2014).

Because the technicians, technologist and teachers that the Federal Institutes are training must have an ethical formation, given that they're going to work with human resources (Participant 54, 2014).

Such answers are diverse from the ones that value the human formation. This is noticed by the fact that they privilege the professional dimension. evidencing the focus on serving the demands from the job market. Therefore, it is possible to identify in these speeches the representation of ethical formation as something whose main purpose is to
produce a desirable behavior by the market. The Law 11.892/08 (Bra-
sil, 2008) is unclear regarding the ethical issue and the inclination on
attending the demands from the job market. In comments to the Law,
Pacheco (2011) aims to settle this problem. He says that the current
project of Professional Education is opposed to the yearnings of global-
izing neoliberal policies. Still, that Brazil fights to unleash itself from
the problems created through twenty years of privatizations and that a
democratic project that has built itself collectively cannot bend to par-
ticular interests.

We refuse to train consumers instead of citizens, to sub-
mit education to the logic of capital, putting the resume
as instrument of the simple training of abilities and tech-
niques at the service of the capitalist reproduction (Pa-

It happens that the legal device, even discussed by complemen-
tary texts to Law, carries within itself different signs that point to di-
rections that are more linked to an instrumental education rather to
a humanizing education. But, if it’s possible to talk about ethics from
a humanizing perspective as well as from a vocational point of view,
what to think when the purposes of these two patterns contradict one
another? According to Paulo Freire (1996, p. 9) us “[...] educators and
learners, cannot, really, escape from the ethical rigorousness. But, it
must be made clear that the ethic I’m talking about is not the smaller,
restrict, from the market ethic that bends itself to the profit interests”.
Paulo Freire’s idea helps us, bringing the understanding that there are
two fundamentally antagonistic ethics: one neoliberal and, the other,
the universal ethic of the human being (Freire, 1996, p. 9).

Sensible to the general appeal for ethics, the corporations take
ownership of the concept ethic and start embracing this word as some-
thing capable of aggregating value. In this scenario, the term ethics
arises euphemized in the composition of the advertising and corporate
language, however, now imbued of another kind of value, the economic.

I hear a lot of saying, here and there, I read on the press, as
well professional press as for the general public, observa-
tions like these: ‘The ethics (implied, in this context, the
business ethic) improves the internal atmosphere of the
company, therefore the productivity’; ‘The ethic improves
the image of the company, therefore the sales’; ‘The ethic improves
the quality of production or service, therefore, again, the sales’... To sum up, ethic is efficient, ethic sales!
‘Ethic pays’ [...] Some even forge the curious neologism ‘markethic’, to designate the offspring, bizarrely made,
from the strange loves between marking and ethic...
(Comte-Sponville, 2011, p. 42).

Within the common sense speech, this confusion is ordinary.
Nevertheless, ethic is not a neutral term. An ethical formation that
elects the competition as main guideline and appreciates attitudes
which align with business success takes on the speech of the neoliberal
or managerial ethic to the detriment of the universal ethic of the human being. Thereby, it goes against the conception of ethical formation taken from the north of this study.

Participant 54’s answer exemplifies the dichotomy among the types of formation. In their speech, the ethic is represented as necessary to the professional dimension, because the future workers will come across situations in which they will have to handle human resources, that is, how they treat people. That excludes an understanding of ethic in a broader way, as condition for the individual to see and act in the world critically and reflexively, regarding the own work issues – in a macro perspective – as well as its role in science and technology development and in the paths this development may take while humanity.

Lastly, the last category originated by the analysis of the answers to the second question is the integral formation. It’s certain that this term has figured in the everyday language of the researches on education coated with several meanings. In this study, nonetheless, one of them was used. Here, the concept is comprehended as the formation that articulates two dimensions, human and professional. In this perspective, the work dimension is considered integrant of the formative process, approaching conceptually the discussions about the idea of integration in the PSTE. According to Ramos (2008), this integration is deep and wide, more than mere articulation. In the PSTE, it has three meanings: the omnilateral formation, the inseparability between professional education and basic education and the integration of general and specific knowledge.

Among the participants, 17% attributed the need of offering Ethical Formation in the PSTE to the understanding that this formation is a required item to an integral or integrated formation. We’ve highlighted some responses:

*The current Professional needs, beyond the Professional formation, the human and ethical formation. For, we don’t want to train mere screw tighteners* (Participant 2, 2014).

*Ethics is part of the human being’s formation. A teacher, when coming to a classroom, provides specific content (content of the subject they teach) and nonspecific content (attitudes, values and abilities) that are part of the formation of the integral being* (Participant 55, 2014).

*The Professional Education that should be offered to students nowadays should be considered in a integral formation of individual, and no longer in preparing manpower for the job market, based on this assumption, there is no ethical formation without ethical approach* (Participant 64, 2014).

This topic illustrates the emerging issue in the PSTE scenario, the integration issue. Even though the integration concept isn’t expressed in the Law 11.892/08, its discussion gets more visible in more theoretical level documents, like the Base Document for the PSTE (Brasil, 2007) that preceded the promulgation of the aforementioned Law, however, seemingly not influencing it. Even so, the concept of integration crosses the speech of some participants. The participant 55 brings up the idea...
of integration between general and specific knowledge and, in accordance with participant 2, implies that basic and professional education are indissociable dimensions. The participant 64 reinforces the integral formation as a reason for the ethical formation to be offered in the PSTE, highlighting the meaning of the omnilateral formation (Ramos, 2008).

The participant concludes with an interesting statement: there’s no integral formation without ethical formation. The theoretical subsidies used to base this research ratify this idea. This way, it’s believed that the contribution that the results from this study provide to the debates concerning integration in PSTE is that the ethical formation should take central stage and not only build itself as addendum of the cultural dimension in the triad work, science, culture, which represents the omnilateral meaning of the term integration.

Taking up the already mentioned issues, the unanimity about the need of offering the ethical formation in the PSTE is notable. As for the reasons for this offer to occur, we no longer see much homogeneity in the responses. Once the results of the third and last question are analyzed – how this formation should happen? –, the diversification in the responses is superior.

The analysis provided subsidies to creating the following subcategories: a) curricular approach (subjects); b) server examples; c) extension actions; d) integration of methods. Besides these, some answers couldn’t be categorized since they offer insufficient and/or disconnected information and, other participants, didn’t answer the question.

**Graphic 2 – How the Ethical Formation in the PSTE should Happen?**

This topic (Graphic 2) was not a matter of descanting how the projects of ethical formation in the Institutes are developed, but rather how the managers think they should occur. Having said that, 57% (39) understand that the ethical formation should occur by means of subjects; 9% (6) indirectly, by examples of the institution’s servers; 3% (2) through extension activities, like lectures or courses; and 21% (14) say the proj-
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pects of ethical formation should integrate more than one method, including the aforementioned in other categories.

The contrast with the research from Menin et al. (2014), although some differences of point of view when it comes to category elaboration, shows some interesting approximations. In the PSTE Network, the disciplinary approach corresponds, in that research, to the category space: disciplines and or transversal themes, with the percentages of 57% and 43.99%, respectively. The examples, on the other hand, refer to the category role of the responsible, corresponding to 9% and 16.25%. Integration among methods and extension activities, summed up, correspond, in the study of brazilian public schools, to the category diversified strategies, representing 24% of the answers of those and 29% of these. In other words, considering the PSTE peculiarities regarding the regular education, the representation of how the ethical formation / moral education should happen is quite similar in every case.

To think ethical formation thought curricular units or subjects refers, ultimately, to a traditional school model, transmissionist, that reaffirms the content in detriment of the development of abilities and intellectual, affective and social skills. However, in this group of answers, one is able to notice some nuances that distinguish themselves and can give a better notion of how close they come to one or another understanding on moral education. In this case, within the subjects category, there are subcategories in which different understandings are accommodated:

**Graphic 3 – Curricular Approaches to the Ethical Formation**

We’ve seen (Graphic 3) that, from the 39 participants who pointed that the ethical formation should happen through a curricular approach, 17 (44%) understand that it should happen transversely, 9 (23%) by creating a specific subject which handles the theme, 8 (20%) think it should be addressed in all subjects and also by creating a specific subject and 5 (13%) that it should be present in all subjects, but, particularly, in the subjects of philosophy and/or sociology.
The Institutes which indicated that the ethical formation should occur transversally correspond not only to the majority inside the subjects category, but also to the absolute majority, in relation to other ways of understanding the ethical formation in the PSTE. So, it’s majority as well the understanding that the ethics, alongside themes like cultural plurality, environment, health, sexual orientation, work and consumption are developed through the perspective of transversality, following the NCP’s (Brasil, 1997). Some of the participants who illustrate well this representation:


*This formation should have a character of curricular transversality, since, in my opinion, ethics, translated in only one subject, cannot obtain the needed resonance to the experience and intellective/personal clarification between student and school community, as a whole* (Participant 41, 2014).

*It must be present in every subject, as transversal theme, as already foreseen in the curricular parameters* (Participant 60, 2014).

If themes are really so important to the life of the students today and it, in fact, school should be committed to such questions, the orientations contained in the document *presentation of the transversal themes* appear to be insufficient for the success of the proposition. Menin (2002) establishes the *laissez-faire* in terms of values in school, suggesting that, done like it has been, the transversality doesn’t contribute for this paradigm to be broken. Instead, the omission regarding the ethical formations seems to meet its perfect refuge in the transversality speech, in which there’s no explicit intention, project, planning, method or assessment.

**Final Considerations**

The pedagogical managers (teaching directors, pedagogical coordinators, etc.) affirm in unison that the ethical formation should be offered by the units of the Federal Network of the PSTE they’re part of. Among them, there might be identified three reasons why this formation should happen. It may has the purpose of guaranteeing an human formation, a professional formation or of serving the integral formation that articulates the two previous dimensions. *How it should occur?* is the question that ramifies the answers even more. The majority responds through a disciplinary approach (transversally, more than just by a specific subject or by the subjects of philosophy or sociology). Not many think of strategies to promote the integration of methods, there are also few who bet on the example of the servers (teachers, technicians, managers) as more efficient strategy.

This multiple and diffuse scenario is a symptom of the absence of clear guidelines that may steer the actions of ethical formation in the PSTE, so that the most direct orientation comes from the LDB, which reaches all basic education, professional education included.
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The strength of this device, corroborated by the transverse themes that integrate the National Curriculum Parameters, is the background that holds the majority of the managers’ responses. However, the way in which this formation is addressed fails to consider some important specificities of PSTE when it comes to regular education. It’s the case of proximity to issues of the world/job market and of the scientific and technological advances.

The initial univocal agreement regarding the adequacy of the PSTE as place of ethical formation is converted, on this account, into wide diversity as its actors’ speech is more deeply explored. In the guiding laws and documents, on the other hand, the forecast of this formation is practically absent. The ethical formation isn’t proposed by the ways of progressive thinking that suggests new airs to the PSTE. As an example, the debate concerning the concept of integration – that has become important in the scenario of the new PSTE – puts itself on second plan, constituting only part of the dimension culture that, alongside work and science, composes the omnilateral meaning of the term integral.

Attributing to the ethical formation this cultural dimension of integral formation isn’t much of an integrative action, given the fact that it’s still based on this disciplinary model of schooling process, proper to technical modernity. The desirable thing is that like Buarque (1993) did with words, the pyramid in which the technical modernity is placed high is inverted, converting its apex to ethical modernity. Therefore, it’s necessary that the vanguard of debates handles ethics as capital concept, not transversal. May the fruits of these reflections about the PSTE inspire laws, guidelines, programs and projects. Lastly, that from this, in the educational day-to-day, it is possible to reorder the PSTE’s goals with the purpose of reconciling human and technologic development and, this way, educate against barbarism.

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References


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