

## Projects at school and the role of the child: dialogue with Reggio Emilia and Critical Mathematics Education

## Projetos na escola e o protagonismo da criança: diálogo com Reggio Emilia e a Educação Matemática Crítica

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### ABSTRACT

This study is part of the research line Culture, School and Formative Processes in Education of the Graduate Program in Education of the Federal University of Paraná (UFPR) and aims to propose a dialogue between the theoretical assumptions, which underpin the work with Projects in the Approach of Reggio Emilia, with the ideas of the mathematical educator Ole Skovsmose. Methodologically it is a qualitative research, which has used a bibliographic study as an instrument of data collection. Discursive Textual Analysis, which is a process of construction and understanding in which new understandings emerge from the data collected, was used in data analysis. The study showed that the development of projects aims at the participation of the student in the educational process, making it possible to break the ties of traditional teaching, developing its autonomy in the construction of knowledge. The idea of project development advocated by Skovsmose in critical mathematics and Reggio Emilia, is not just a different way of organizing an activity, but another way of conceiving the construction of knowledge. More than teaching content, both encourage the participation of students from the doubts and concerns brought by them to the classroom and from their daily experiences.

**KEYWORDS:** Projects. Reggio Emilia approach. Ole Skovsmose. Protagonism. Participation. School curriculum..

### RESUMO

O presente estudo insere-se na linha de pesquisa Cultura, Escola e Processos Formativos em Educação, do Programa de Pós-Graduação em Educação da Universidade Federal do Paraná (UFPR) e tem por objetivo propor um diálogo entre os pressupostos teóricos, que fundamentam o

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trabalho com Projetos na Abordagem de Reggio Emilia, com as ideias do educador matemático Ole Skovsmose. Metodologicamente trata-se de uma pesquisa qualitativa, que se utilizou de um estudo bibliográfico como instrumento de coleta de dados. A Análise Textual Discursiva, que é um processo de construção e compreensão em que novos entendimentos emergem a partir dos dados coletados, foi utilizada na análise de dados. O estudo mostrou que o desenvolvimento de projetos visa a participação do aluno no processo educativo, possibilitando romper com amarras do ensino tradicional, desenvolvendo sua autonomia na construção do conhecimento. A ideia de desenvolvimento de projetos defendida por Skovsmose na matemática crítica e Reggio Emilia, não é apenas um jeito diferente de organizar uma atividade, mas outra forma de conceber a construção do conhecimento. Mais do que ensinar conteúdos, ambos incentivam a participação dos alunos partindo das dúvidas e inquietações trazidas por eles à sala de aula e de suas vivências cotidianas.

**PALAVRAS-CHAVE:** Projetos. Abordagem Reggio Emilia. Ole Skovsmose. Protagonismo. Participação. Currículo escolar.

## First words

The proposal of working with projects has been presented as a way to rethink the daily life of the classroom, breaking with traditional teaching and inviting the student to participate in the educational process. The idea is to go beyond the limits of the classroom, and invite the student to reflect on daily life, to provide a space to question social, cultural, political and economic realities. Besides proposing to the student, a learning environment, experiences, exchanges, experiences, research and autonomy in the construction of knowledge that goes beyond lists of pre-defined content in the school curriculum.

In this scenario, project discussions are always present as innovation, methodology, practice or as a solution to the dilemmas of educational processes, in their different forms and interfaces. The theme of projects is not a "novelty" in Brazilian education. Historically, it begins in the period called Escola Nova, with the intention of "breaking the mold of the traditional school [...], increasing the desire and courage to take the risk of innovation and the conviction that it was necessary to create a professional posture" (BARBOSA; HORN, 2008, p. 19) and thus question the traditional educational models of teaching.

In general, there is a concern that seeks to change the atomization of knowledge in educational processes anchored in disciplinary curricula, which produce a fragmented view of what is real, disconnected from a historical context and far from the reality in which the student lives. Some authors (Fazenda, 1979, 2002, 2012; Japiassú, 1976; Machado, 1993; Pires, 2000) have analyzed this issue from different perspectives and have made important contributions in terms of interdisciplinarity, viewing it as a possibility to overcome the fragmentation of knowledge and bringing the child as a protagonist in proposals in which he or she is heard and begins, together with the teacher, to organize their knowledge from their

experiences and curiosities. For this process, they use the project as a didactic proposal. The project, from this perspective, is a strategy to change the way the school curriculum is organized, aiming at the participation of the student so that he/she experiences the learning process and makes sense, building meaning for what he/she learns, giving autonomy in his/her choices about what to investigate.

This article aims to propose a dialogue between Ole Skovsmose's critical mathematics education and the Reggio Emilia Approach to think about the development of projects providing reflections on the possibilities of protagonism and the overcoming of a school curriculum with pre-established knowledge.

This article is the result of a literature review and is a bibliographic study, developed qualitatively. It is organized in three sessions: in the first one a historical context of the first manifestations that guided an innovative vision of the child and his education, as well as pedagogical practices that contributed to his participation in the educational process is presented. In the second, the contributions of Skovsmose (2008, 2010) thinking of the project as a scenario for research and the structural elements of the Reggio Emilia Approach in the development of learning projects. And finally, we weave a dialogue between the theoretical assumptions of Skovsmose and Reggio Emilia about learning projects.

### **Methodological aspects and data analysis**

This research is the result of a literature review and is a bibliographic study, developed qualitatively. The bibliographic study sought to investigate the theoretical contributions of Ole Skovsmose and the Reggio Emilia Approach to understand project work.

For Minayo (2014), the qualitative study refers to the study of interpretations and answers very particular questions. It works with a universe of meanings, aspirations, beliefs, values and attitudes, which corresponds to a deeper space of relationships, processes and phenomena that cannot be reduced to the operationalization of variables. It is therefore concerned with aspects of reality, focusing on understanding and explaining the dynamics of social relations. For Minayo (2014), the characteristics of qualitative research are: objectivity of the phenomenon and hierarchization of actions to describe, understand and explain the observance of differences between the social world and the natural world, in which researchers seek the truest possible results. The qualitative method, besides allowing the explanation of social processes, "propitiates the construction of new

approaches, revision and creation of new concepts and categories during the investigation" (MINAYO, 2016, p. 57).

The analysis of the collected data took place in the light of the Discursive Textual Analysis (ATD) which, according to Moraes (2013), is a process of construction and understanding in which new understandings emerge. This is a data analysis approach that moves between two forms enshrined in qualitative research, which are content analysis and discourse analysis.

Moraes (2013) defines the characteristics that configure the ATD process around three focuses: disassembling the texts, establishing relationships and capturing the new and the emerging.

The first step was the disassembly of the texts from the deconstruction and unitarization. In this stage, we carried out an in-depth reading of the documents (texts, articles, dissertations and books) which allowed for new understandings regarding the phenomena investigated. The second step is related to the establishment of relations between the authors and the conceptions that go through their research to define the categories of senses. The categorization process refers to the constant comparison between the units defined in the initial process of analysis, that is, the approximation of the theoretical currents on the object being investigated, in the case of this research the methodology of projects. This leads to the grouping of similar elements, which occurs through the construction of meanings and directions for each category. After being defined, the third step of the data analysis is directed to capture the new and emerging.

The materials analyzed in the previous stages enable the emergence of a renewed understanding of the whole. The investment in the communication of this new understanding, as well as its critique and validation, constitutes the last element of the proposed analysis cycle, the metatexts. They consist of description and interpretation, representing the whole, a way of understanding and theorizing the phenomena investigated.

### **Projects: journey**

In order to understand the path of the project work, it is necessary to go back in time, seeking the historical context of the first manifestations that guided an innovative vision of the child and his education, as well as pedagogical practices that contributed to his participation in the educational process. In this session, we present the education advocated by Rousseau (2004), as the first manifestation of childhood education and the project idea. Later, we presented the origin of the term project in

education, developed by Dewey (1972) who inspired the novice schools to think of an education that would go beyond the traditional teaching model.

### **Emilio, de Rousseau: natural education project and child participation**

The work *Émile, or de l'éducation*, written in 1762, is a treatise on the nature of education and the nature of man written by Jean-Jacques Rousseau. It has become important in the field of education and philosophy to discuss some aspects related to traditional education and to think about the modern configuration of education. The author was already referring to a new model of pedagogical practice, a reformulation in the educational system of childhood education, "projecting" the first idea of project. A project of natural education for childhood, whose fundamental assumption, according to Dalbosco (2011, p. 73), "consists in the development of sensitivity in the child, so that he can consider himself as lady of himself, facing his own limits.

From the natural education project, Rousseau (2004) formulates a new pedagogical proposal to think about the development and education of the child. Dalbosco (2011), from the analysis of Emilio's book, brings the reflection that natural education has a central role in Rousseau's reflection on education, because it is the development of the child's physical and sensitive capacity. For Rousseau (2004), natural education begins for the child to be a child. In the author's idea lies the thought that the child is born naturally good but is corrupted by society. This pervades his education when he is taught meaningless routine content or content that does not make him think, leaving him alienated from what he is taught. In this way, the author defends that in the project the child is respected and listened to in his individuality, because he is the bearer of knowledge, yearnings, desires, curiosities and worries, that is to say, it is "a priority to respect the child in his world, letting him develop naturally" (DALBOSCO, 2011, p. 60).

Rousseau (2004) criticized formal education, the one that is more concerned with discipline and memorization of content, not considering the needs of childhood. He thought of a new concept of child education, focused on appreciation and experience, taking into account natural and spontaneous development. He emphasizes the importance of valuing and knowing the child in his own world. It is a different attitude from the traditional method, because it seeks pedagogical actions that, through the encouragement of natural expression, enable the child to constitute, with the help of the adult, principles of ethics and morality. Cerizara (1990), from Emilio's fragments, highlights the importance of considering the particularities of childhood and each child.

According to Queiroz (2010), we can say, in a simplified way, that his criticism is basically configured to the following aspects: projection of the adult world to the child universe; authoritarian teaching method based on practices of punishment and sermons and, finally, the use of reason as a starting point in the process of formation of the child. It refers to the traditional pedagogical method of projecting in the child a future that is strange, alien and harmful, shaping it according to the measures of the adult world and thus disregarding its own world. It denies the spontaneity, joy and naturalness that characterize the child's own condition.

The traditional education, criticized by Rousseau (2004), does not bring children happiness and pleasure in learning, only offers them an uncertain future. It is as if the child is stuck in chains and forced to listen only to what is imposed on him. Even him considering this reasonable education,

[...] how to face without indignation those poor wretches subjected to an unbearable yoke and condemned to continuous work like the galleys, without being sure that so many jobs will someday be useful to them! The age of joy passes amid tears, punishment, threats, slavery. (ROUSSEAU, 2004, p. 72).

Contrary to this form of education, the author believes that the child should be a child, play, laugh, jump and experiment, which does not mean, however, removing from his world the challenges, trials and difficulties, because, if we do that, we will also corrupt.

### **Origin of projects in the educational field with John Dewey**

The idea of project work had an important development in the educational field at the beginning of the 20th century, based on the thoughts of philosopher John Dewey and his follower William Kilpatrick. Dewey was responsible for formulating a pedagogical movement based on action and not on instruction, a method used by the traditional school.

It was the North American pragmatic thinking that prompted the first works on the pedagogy of the project. In the years 1915 and 1920 J. Dewey (1916) and W. H. Kilpatrick (1918) tried to oppose traditional pedagogy, which proved very costly in relation to the gains obtained, in a progressive pedagogy, also called open pedagogy, in which the student became an actor in his training through concrete and meaningful learning for him. (BOUTINET, 2002, p. 181).

The education he advocated was pragmatic, starting from concrete life experiences, presented through problems to be solved. As Barbosa and Horn (2008, p. 17) point out, "Dewey believed that knowledge was only obtained through action,

through experience, because thought is the product of the encounter of the individual with the world".

According to Souza (2004), Dewey, in his time, thought of an innovative proposal in terms of education. His conception was that the pedagogical activities developed in school had a "utilitarian purpose, that is, they should serve the practical and daily life in some way. Education and school should be organized in such a way as to allow the student to experience the world" (SOUZA, 2004, p. 11). Learning, for Dewey, consisted of experience with the world and social, cultural and political realities related to the knowledge studied in the classroom.

The intention to transform the student, from an object to the subject of his own formation will be, on the other hand, more or less contemporary of the efforts spent in different scholastic contexts: first with C. Freneit, M. Montessori, O. Decroly and A. S. Makarenko, four authors who value the freedom of the child, his needs for activities, in short, the school linked to life - the experiences that the student himself carries out in an appropriate educational environment are the factors of learning. (BOUTINET, 2002, p. 182).

According to Souza (2004), Dewey develops a new pedagogical movement that foresees a renewed practice based on new curricular methods and structures in which learning should allow different experiences. For him, education goes far beyond curriculum, methods and content lists.

John Dewey makes a criticism of traditional education that did not consider cultural and social aspects. The child received the knowledge systematized by the school, where only the transmission, often senseless, occurred.

In this understanding of pedagogy, the human being is trained by a formal discipline. To educate consists in forming habits, acquiring behaviors established by cultural standards (Greco-Roman), fixed forever. (SOUZA, 2004, p. 104).

The project idea from Dewey had as its main characteristic to start from a problematic situation and bring the school closer to daily life, breaking with the organization of the curriculum in fragmented subjects. This organization "makes possible a reflexive investigation that adapts to individuals and their respective needs and interests" (DEWEY, 1972, p. 93). In this way, there is a significant change in the organization of learning that begins with a problem and school subjects are understood from the problem.

### **Projects: a proposal to investigate**

### **Skovsmose: Projects a scenario for research**

Skovsmose's works are strongly influenced by the ideas of the Brazilian educator Paulo Freire, linked to the political dimension of the act of teaching and the perspective attributed to education as a practice of liberation. His ideas are linked to critical mathematics, thinking of a teaching that values and provides students with tools that "help them both in the analysis of a critical situation and in the search for alternatives to resolve the situation. In this sense, students should not only be taught how to use mathematical models, but should be led to question why, how, why, and when to use them" (SKOVSMOSE, 2008, p. 6).

By developing a project, we are inviting the student to question, analyze, criticize and participate in the whole learning process. For Skovsmose (2010) the project is an invitation to research, one that invites students to ask questions and seek explanations.

For Skovsmose (2010) the project must be organized within a scenario for research, which allows the student to participate in the process of creation, resignifying their way of learning, which goes far beyond lists of content. The development of projects, according to Skovsmose (2010), means leaving a comfort zone and challenging oneself in a risk zone. An invitation that is not easy, but that presents the possibility of creating, within the school context, a questioning space in which the student actively participates in the discussions and organization of the project.

A comfort zone in the sense that the teacher has a certain control over what can happen and the predictability index is high. A risk zone is a situation characterized by a high degree of uncertainty and challenges. (SKOVSMOSE, 2010, p. 8).

The author calls a "research setting" an environment that invites students to ask questions and seek explanations. When students assume the process of exploration and explanation, the research setting becomes a new learning environment. Within this scenario, children are responsible for the process. In a project that proposes a learning environment, "the references are real, making it possible for students to produce different meanings for the activities and not only the concepts" (SKOVSMOSE, 2008, p. 7).

From this perspective, according to Skovsmose (2010), there is a challenge: to innovate by moving from the paradigm of exercise, linked to traditional teaching, to work in a scenario for research. The author argues that it is an attitude that requires the teacher to leave a comfort zone to act in a risk zone.



The task is to make it possible for students and teachers to be able to intervene in cooperation within the risk zone, "[...] making this a productive activity and not a threatening experience. This means, for example, the acceptance of issues such as 'what happens if [...]', which can take research into an unknown territory" (SKOVSMOSE, 2010, p. 18). Within a research scenario or project work, taking risks makes it possible: unpredictability which means "the challenge of trying out new possibilities [...]" (ALRO; SKOVSMOSE, 2006, p. 127-128).

The development of projects does not arise as a search for solutions and overcoming educational problems, but as a way of contributing to the organization of pedagogical practice. To do project work means to approach the activity of research. Project work presupposes an investigative attitude that can take place at all levels of the educational system. Skovsmose (2010), calls a "research setting" an environment that invites students to ask questions and seek explanations. When students take on the process of exploration and explanation, the research setting becomes a new learning environment.

To act in the paradigm of research related to the organization of projects in situations of experience and collaboration of the students implies, many times, having to share doubts and uncertainties. For Skovsmose (2008), the teacher needs to develop the posture of constant search for information, be always open to investigate and learn more and more in exchanges with the group of students or teachers. For Biotto (2008) discussing work with projects and mathematics can be seen as something contradictory, "because the projects involve uncertainties and mathematics can bring the opposite idea when seen as something mysterious, neutral and true" (IBIDEM, p. 51). This is exactly what Skovsmose (2010) wants, to oppose the idea that the project should be linked only to mathematics, but that it can propose an analysis and a dialogue between mathematics and other areas of knowledge. It has no intention of working with a program with pre-defined contents, but to constitute a context of significant learning.

### **Reggio Emilia and Planning<sup>3</sup>**

Reggio Emilia consists of a pedagogical approach that brings inspiration to many scholars of education who seek alternatives to improve and reformulate pedagogical practices in the classroom. The approach refers to a small town in northern Italy where, over 50 years, educators, parents and citizens have set up a

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<sup>3</sup> Term used by the Reggio Emilia Approach to refer to learning projects.

public system of care and education. Its construction had as its protagonist the educator Loris Malaguzzi, who thought of organizing children's schools in which the children had the right to be protagonists in the search for knowledge, leaving their spontaneous curiosity always lit to the maximum in a space where they could be heard and participate in the educational process. It is in this perspective that the approach develops learning projects in their educational context, thinking about the protagonism of the child.

Currently the Reggio Emilia approach is gaining prominence in studies on Early Childhood Education and on thinking about new practices in everyday school life, by scholars from various parts of the world. It is a reference for studies of projects and protagonism of the child, for presenting in its spaces of Early Childhood Education a new look at the child and its learning process. In Brazil, the authors Paulo Fochi (2018, 2019) and Joe Garcia (2019, 2020) dedicate their research to the Italian approach, in recent years many studies on Reggio Emilia are published in Portuguese language, besides theses and dissertations that have as basis of studies Reggio Emilia.

Reggio Emilia presents a teaching proposal that aims to educate children with rights. The child is seen with a strong potential, powerful and competent. An education in which the child creates, investigates and provides an opportunity for constant dialogue with his group. They have the right to be listened to and respected, thus understanding the rights and needs of each individual. It is through these elements that Reggio Emilia is an inspiration for dialogue about projects and helps us to think of a project proposal in which the child actively participates in their learning and also becomes a protagonist.

The work with projects in Reggio Emilia does not take the pre-defined programs as a didactic form. The development of projects is a strategy that aims at the learning processes of children and adults, accepting doubts, uncertainties and mistakes. It is made from the process of observation, documentation and interpretation in a recursive relationship. In the Reggio Emilia Approach, they prefer to use the term project rather than curriculum.

Knowledge building is a group process. The individual feeds on the hypotheses and theories of other individuals and the conflict with others [...]. Children produce their theories, important theories by which they are inspired. They have values and meanings of their own as well as a sense of time of their own that simultaneously provides meaning and directs the course of their learning processes. This notion of time needs to be understood, respected and supported. (RINALDI, 2014, p. 238).

With this in mind, it is believed that the terms curriculum, curriculum planning or lesson plan become inadequate to represent the different strategies that underpin the children's knowledge construction process. With this, the term project or "progettazione" is used to describe "multiple levels of action that are defined and undefined at the same time, present in the dialogue between child and adult" (RINALDI, 2014, p. 239). The author adds that the word project "evokes the idea of a dynamic process, of itinerary. It is sensitive to the rhythms of communication and incorporates the significance and timing of research and investigation of children" (RINALDI, 2014, p. 239, emphasis added). The project, then, can be of short or long duration, continuous or discontinuous, with pauses and restarts. As Pagano (2017) points out, education in Reggio becomes a research and research context, in which children and adults are principal researchers.

The project proposal developed in Reggio Emilia allows for a change in pathways, adapting choices throughout the process based on the ideas and interests demonstrated by children. "The work with projects gives rise to questions and hypotheses that little by little find some answers to questions. They are a way for adults to handle ideas" (PAGANO, 2017, p. 40). Thus, the project arises from a hypothesis that gives the directions to be taken and, above all, increases the expectations of welcoming the unexpected. "Progettazione" is, for Reggio, a way of thinking strategies to create relationships and bring out elements of chance and the space that is contemplated from the idea of the other, specifically what the child has to say. However, the projects developed in Reggio have as their main objective to help children to perceive themes that are focused on their experiences and interests.

### **Weaving a dialogue between the critical mathematics of Ole Skovsmose and Reggio Emilia**

Although Reggio and Skovsmose present different fields between critical mathematics education and the teaching of young children, they bring a tenuous dialogue that intersects in a main point: the development of projects that go beyond the pre-defined programs of a school curriculum and emphasize the participation and protagonism of the student.

Starting from the idea that for many the teaching of mathematics is accurate and does not open spaces for questioning, Skovsmose defends the idea of critical mathematics. Skovsmose (2001) highlights that, in critical education, the teacher-teacher relationship is fundamental since the contents of this approach need to be developed with the students, in the search for ideas and experiences that give

meaning to their lives. Moreover, he defends in his work the right to democracy and the teaching of mathematics from work with projects, discussing "[...] mathematics education as part of a democratic enterprise in a highly technological society" (SKOVSMOSE, 2010 p. 103).

The Reggio Emilia Approach has in its pedagogical principles the development of projects that are characterized by the opportunity of children's participation. In this context, they live rich experiences and build knowledge from an investigative perspective.

The proposal of working with projects from an investigative perspective invites the student to reflect on his/her daily life, establishes experiences, provides opportunities for different ways of learning and breaks with the traditional vision of teaching, considering him/her as the protagonist of his/her learning.

The development of projects presented by Reggio and Skovsmose refers to the articulations about teaching, critical formation and the active participation of (the) student in the educational process. Also, as Biotto (2008) infers, it provides a questioning space, allowing the student to have autonomy for the construction of his/her knowledge. More than teaching content, both encourage the participation of the students from the doubts and concerns brought by them to the classroom and from their daily experiences.

The idea of project development advocated by Skovsmose and Reggio Emilia, is not only a different way to organize an activity, but a way to conceive how to build knowledge, teaching and learning, to think about the role of (the) student and (the) teacher. They invite us to reflect on our position as educators, enabling us to revisit and re-signify the pedagogical and transforming knowledge in which the students participate in the educational process, giving them different experiences that go beyond the encyclopedic contents stipulated in the school curricula.

They argue that learning does not happen through transmission or reproduction, that is, it is a process of construction in which each individual elaborates the reasons and the whys, giving them meaning through the development of a project, which is not conceived as a theme of study developed around a certain topic, but a structuring based on the interest of one (a) student or a group. As Edwards, Gandini and Forman (1999, p. 160) put it, "children are active and competent protagonists who seek fulfilment through dialogue and interaction with others". The function of the project is to favor the creation of strategies for the organization of school knowledge, as regards the treatment of information and the

relationship between the different contents by means of problems or hypotheses that facilitate the construction of knowledge, as well as the transformation of disciplinary contents into one's own knowledge.

Another relevant point presented is the issue of the "school curriculum". Thus, the question arises: which curriculum do the projects report on? To realize it is exactly the opposite idea of a project. The project work presented aims to overcome the organization of the subjects presented in the school curriculum and their division of knowledge. Depending on the style adopted by the institution we have the curriculum that orders and classifies learning, delimits the components and imposes rules and norms, however, the project proposes a curriculum that emerges from collective reflections, starting from the participation of the child and the process of constant dialogue with those who are part of the process, that is, it proposes a curriculum that emerges from the space in which the student-school is part, meeting the needs of the space that is linked to social, political and cultural characteristics.

With this, it is necessary to reflect on a curriculum in order to break with paradigms rooted in school culture and thinking about curricular innovation leads us to changes towards a curriculum that goes beyond the teaching of only contents and the separation of them into disciplines. To think about the Veiga-Neto school curriculum (2008, p. 1) raises the following questions:

After all, if the curriculum disappears, how will school practices work? How will the contents be selected and organized? How will the teaching processes be carried out and how can the learning be effective? What will be the new mechanisms for the control and evaluation of what is taught and (eventually...) learned? Or will even these questions lose their importance and meaning today? After all, can school education be thought of without our well-known curricular processes of goal planning, content selection, ways of putting such content into action in school and evaluation?

The curriculum, as Veiga-Neto (2012, p. 35) points out, "sometimes saying how our curricular practices should be conducted, sometimes presenting themselves as remedies to save education and society, sometimes denouncing the productive role of the curriculum in the modern school" no longer meets the demands of the school and the (student's) attending it. Today's education requires planning that takes into account the previous knowledge of the student and the challenge in the search for knowledge.

## **Final readings**

Thinking about learning projects is a challenge! Working with projects is a possible scenario for research, one that creates strategies and helps the student to take part in the educational process. For Skovsmose (2008), "to investigate", among many nuances, is to project something uncertain, is to launch oneself to challenges and daydreams, is to leave the comfort zone and venture into a zone of risk. Perhaps, "venturing" into a risk zone is not an easy and acceptable invitation, but it is necessary for those who seek an education with new looks and perspectives.

Based on the structuring elements of the Reggio Emilia Approach, the project work supports the idea of giving the child the opportunity to participate in the learning process. This way of organizing education is characterized by the opportunity of child participation. In this context, they experience rich experiences and build knowledge from an investigative perspective.

Teaching and learning through a project is a great opportunity. It allows students to experience the school with greater motivation and interest, offering the possibility of keeping knowledge connected, organized in other ways. The school ceases to be UNATTRACTIVE, OBSOLETE AND USELESS - DOI<sup>4</sup> (D'AMBRÓSIO, 2003) and becomes VANGUARD, INNOVATIVE AND PROFITABLE. - VIP.

The project approach considers both the teacher and children protagonists in the organization of teaching and learning processes. The work with projects is a pedagogical proposal that involves the participation of children in all stages of their development. Action planning is permeated by research and collective participation is required. Certainly, the proposal of working with projects requires a reorganization of the traditional school, including a possible reconceptualization of the curriculum, as well as the role of the (the) teacher. In closing this stage, it is undeniable that many worries emerge and perhaps the most important is about the effective contribution of research to education, thinking about how to carry out projects in school, from an investigative perspective, in which the child is really the protagonist.

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