



RESEARCH ARTICLE

OPEN ACCESS

THE RESEARCH COMMUNITY AS A SPACE FOR KNOWLEDGE MANAGEMENT, CONSTRUCTION AND COGNITIVE SKILLS IN MATTHEW LIPMAN'S THINKING

^{*1}José Aparecido Pereira, ²Reginaldo Aliçandro Bordin, ³Luiz Tatto and ⁴Thalita Beatriz Levorato

¹Master and Doctor in philosophy. Professor at both Pontifical Catholic University of Paraná and Postgraduate Program in Organization's Knowledge Management in UniCesumar. Researcher at Cesumar Institute of Science, Technology, and Innovation; ²Master and Doctor in education. Professor at the Stricto Sensu Postgraduate Program in Organization's Knowledge Management at Unicesumar and a productivity partner and researcher at the Cesumar Institute of Science, Technology, and Innovation. He is also a professor at the Pontifical Catholic University of Paraná; ³Master and Doctor in Business Administration and Professor at the Stricto Sensu Postgraduate Program in Organization's Knowledge Management at Unicesumar and a productivity partner and researcher at the Cesumar Institute of Science, Technology, and Innovation; ⁴She holds a degree in Pedagogy and a Master in Knowledge Management in Organizations, UniCesumar, Maringá – Pr

ARTICLE INFO

Article History:

Received 09th September, 2019
Received in revised form
21st October, 2019
Accepted 11th November, 2019
Published online 30th December, 2019

Key Words:

Education. Research Communities. Knowledge.

*Corresponding author:

José Aparecido Pereira

ABSTRACT

Matthew Lipman's Philosophy Program for Children has achieved significant recognition because it is a teaching model that aims to introduce the child to the field of philosophical knowledge. In fulfillment of this purpose, Lipman, in his *Philosophical novels*, proposed the so-called Research Community, whereby the classroom becomes a space for encouraging thoughtful dialogue. The primary purpose of this paper is to approach such a community in the context of Lipman's thinking. The problem to be reflected is formulated by the question: what skills and knowledge can be built through the Research Community in the Lipman's *Children's Philosophy Program*? The article's goal is to make a literature review on the subject in question. Therefore, the methodological procedures adopted for the realization of our approach were guided by the reading, analysis, and interpretation of the author's texts and his scholars. It will be seen that, among many other claims, Lipman's proposal aims at developing the skills of analytical, creative, and critical thinking in students.

Copyright © 2019, Neusilene da Costa Monteiro et al. This is an open access article distributed under the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

Citation: José Aparecido Pereira, Reginaldo Aliçandro Bordin, Luiz Tatto and Thalita Beatriz Levorato, 2019. "The research community as a space for knowledge management, construction and cognitive skills in matthew lipman's thinking", *International Journal of Development Research*, 09, (12), 32417-32421.

INTRODUCTION

North American thinker Matthew Lipman elaborated on a teaching program that aimed to bring the philosophical tradition closer to the education of children. His proposal gained worldwide repercussions because it was a teaching model that introduced children to a new way of knowing. To fulfill his purpose in the *Philosophical Novels*, proposed the so-called Research Community, whereby the classroom becomes a space for encouraging philosophical dialogue. Thus, he considered, Like Socrates, that the thoughtful discussion, developed in these communities, enables the construction of knowledge dynamically and creatively.

The fundamental objective of this article is to take a research community approach in the context of Lipman's thinking. The problem to be reflected is formulated by the question: what skills and knowledge can be built through the Research Community in the *Lipman's Children's Philosophy Program*? The goal is to make a literature review of the subject in question. Therefore, the methodological procedures adopted for the realization of this approach were guided by the reading, analysis, and interpretation of the author's texts and his scholars, highlighting especially the works of Matthew Lipman, such as, *Philosophy goes to school* (1990), *The Research Community and Critical Thinking* (1995), *Thinking in Education* (2001), and *Classroom Philosophy* (2006).

METHODS

The methodological approach adopted for the article's problematic investigation consisted of doing a bibliographic survey concerning the themes that deal specifically with the subject contemplated in our path. Second, the procedures adopted for our discussion were guided by the reading, analysis, reflection, and interpretation of the texts that deal with Lipman's and his scholars' thoughts. Thus, the results presented in this article were guided by the qualitative approach. It can be stated that "The qualitative methodology is concerned with analyzing and interpreting deeper aspects, describing the complexity of human behavior. It provides a more detailed analysis of investigations, habits, attitudes, and behavioral trends." (MARCONI; LAKATOS, 2008, p. 269). Therefore, the choice of this type of approach for our discussion is justified because of the nature of the article, that is because its problematic is entirely within the scope of speculative and theoretical research. Regarding the materials or theoretical framework, the discussions around the theme were limited to some texts that address the author's thinking, especially, *The Philosophy goes to school* (1990), *The Research Community and critical reasoning* (1995), *Thinking in Education* (2001) and *Classroom Philosophy* (2006).

RESULTS AND DISCUSSION

It can be said that Matthew Lipman was responsible for elaborating on a conception of knowledge and education supported in the philosophical field. His proposal was the first to be based on the discipline of philosophy, which he considered being the only one capable of developing *good thinking*. Thus, its program aims to develop thinking skills and reflection, i.e., the development of '*good thinking*' can be understood as independent, critical, and creative. Given this, the author's view of knowledge stays close related to reasoning skills, and language. Regarding the ability to reason, it can be considered that philosophy, from its origins, prioritized this feature. According to Lipman (1995, p. 18), philosophy is concerned with the "development of reasoning skills, the clarification of concepts, the analysis of meanings and the cultivation of attitudes that lead people to question, investigate and [...] seek the meanings and the truth". This concern involves the distinction, as the author suggests, between good and bad reasoning defined by the principles of logic. It is in this sense that, for Lipman, philosophy is the only one capable of fulfilling this requirement, since it is responsible for establishing logical criteria that distinguish good and bad reasoning. From this, Lipman (2001) states that there are many types of skills and that there are still behaviors that resemble them and that, moreover, they can be sorted or classified in different ways and by different criteria. Among the most pertinent, the author highlights primary reasoning skills, fundamental skills, and higher-order skills. The skills considered primary, according to Lipman (1995), in general, are formed by elementary logical skills that make up the logical apparatus of humans of any age. They are built-in skills, but despite being acquired naturally, they do not automatically increase or improve over time. Therefore, they need to be contextualized, decontextualized, and re-contextualized to achieve superior cognitive skills. Necessary skills, for Lipman (1995), involve reading, writing, calculating, speaking, and listening. Although they are the basis for educational development, they're still complex because it requires many skills and diverse-developed mental acts seen as *mega-skills*.

However, even though considered essential for further development, it is the primary reasoning skills that form the foundation for the development of these *mega-skills*.

To more clearly represent the difference between primary and higher-order skills, Lipman (1995) used the mechanic analogy. According to the author, the mechanic has fundamental skills to handle the tools in his workshop. Like him, everyone who knows how to handle tools has these same primary skills, even if they don't have great ability as a mechanic. However, this professional can use these tools strategically and sequentially to fix cars. Already people who are unaware of the profession are unable to do so. Thus, these skills, along with the knowledge of how the vehicle works, differentiate the type of power employed. Therefore, this tactical ability to use tools in a coordinated and strategic way to solve a problem represents higher-order skills. Higher-order thinking, advocated by Lipman (2001), is composed of several mental acts that, from their actions, generate some judgment. This is the kind of behavior that hopes to build in the Research Community: [...] Higher-order thinking is therefore rich in mental acts, which can collaborate or collide with each other as we develop ideas from other people's ideas either compete intellectually or criticize other people's reasons in the course of our deliberations (LIPMAN, 2001, p. 145-146). Another factor to be highlighted is the idea that cognitive skills evolve as a person matures. For Lipman (1995), this is partially true since, throughout life, one has the same core of cognitive abilities. An example of this may be the number of words added to an adult's vocabulary. Although they have a much more extensive repertoire than a child's, it is still composed of words that have the same letters as the basic repertoire, that is, the letters of the alphabet. Moreover, for the author, there is a continuity between primary and higher-order skills. In this sense, although they do not have different logical operations, fundamental skills and higher-order skills differ in their complexity. According to Lorieri (2002), higher-order thinking is *good thinking* that is critical and creative. This thinking requires that thinking skills should be used in a coordinated and integrated manner. The characteristics of higher-order thinking and the need for the child to develop this *good thinking* raise a question: How to teach higher-order thinking? According to Lipman, higher-order thinking in the classroom is stimulated by philosophizing: "Getting students to philosophize is an example of how higher-order thinking can be stimulated in a classroom" (LIPMAN, 2008, p. 38). To teach a high-order thinking is possible as you make use of the *Research Community*. According to Tonieto (2007, p. 27), "higher-order thinking should be taught directly in the classroom, without further ado."

The methodology based on the investigative dialogue can be used in all disciplines to develop debate and reflection on the contents. This dialogue opens an interdisciplinary perspective. In this sense, philosophy is not solely responsible for the development of this kind of thinking, but rather the methodology of the *Research Community* as a framework for content discussions. As regards educational skills, Lipman defines four main varieties of cognitive skills that need to be improved in school: "The most relevant areas of skills for educational purposes are those related to research processes, reasoning processes, information organization, and translation [...]" (LIPMAN, 2001 p.65). In his text, *Thinking in Education*, the author makes considerations about each of these skills. He characterizes research as "a self-corrective practice where a

theme is investigated to discover or invent ways to deal with what is problematic” (LIPMAN, 2001, p.72). For the author, research skills allow children to learn to make associations between their current experiences and what happened earlier in their lives or what they hope might happen later. It includes the development of the ability to explain and predict, identify the causes and effects for events, the means, ends and consequences, the formulation of problems, estimates, and measurements, among others. However, this investigative behavior depends on a self-corrective practice to be considered as such. According to the author, a traditional investigation is merely a practice and only becomes investigative if it is accompanied by self-correction.

By reasoning, the author understands “the process of ordering and coordinating what was discovered through research. It implies finding the correct ways to expand and organize what was discovered or invented [...]” (LIPMAN, 2001, p.72). In dealing with reasoning skills, he states that although knowledge originates from experience, the reasoning is how knowledge is expanded without the aid of experience. Reasoning allows discoveries to be made from what is known. In this sense, it is possible to start from true premises to reach conclusions through inference. Information organization skills, for Lipman, aim at cognitive efficiency. However, “the focus of the educational process is not the acquisition of information, but the perception of the relationships contained in the investigated themes” (LIPMAN, 2008, p. 29). They involve, as its name suggests, the organization of information received into networks of relationships that can be grouped into three types: a) sentences, which are units larger than words, but considered elementary when compared to even larger units, such as paragraphs. They are regarded as blocks for the construction of reading and writing; b) schemes involving a sequence of information that have an organic relationship of the parties to each other and the whole. They are dynamic and demonstrate an urgent need for a conclusion; c) the concepts: arise from groupings of things according to their similarities. Finally, the translation skills, the author defines them as “a process in which what is said in one language is then said without loss of meaning in another” (LIPMAN, 2001, p. 72). However, translations are not limited to languages and may occur with expressions and elements of interpretation in which the preservation of meanings is not always taken into account. To do so, one must also consider the relevance of language.

The early stages of a child's development are considered moments in which the child learns to reason. In this period, Lipman (1990) assures that the initial acquisition of language also occurs, and, from this, the child acquires the fundamentals of logic and syntax, which are intrinsic to the language itself. As such, children learn the pronunciation of words, their bending, grammatical properties, and ways to talk significantly before they even attend school. Language development is related to the family environment in which the child is inserted. Lipman (1995) indicates that insofar as language acquisition occurs within the family and through the child's coexistence with the environment, the ideal would be for this linguistic communication in the family to prepare the child to reason in the academic language of the school. This is because, according to Lipman, if acquired correctly before school, then these syntactic and logical skills would enable the child to perform better throughout his or her school life, as they are considered the basis of cognitive abilities. If they do not

develop optimally before school or are not corrected in the early grades, children may reach adolescence, when these skills are critical, with many difficulties in acquiring new skills.

However, as family communication does not usually meet all language needs, Lipman (1995) points out that philosophical dialogue becomes essential to compensate for it. The discussion involves transformations such as translation and the substitution of the natural language of speech for the expression of writing, reading, and specific academic areas such as the symbolic language of mathematics. These transitions are often difficult for children, and elaborate systematizations are required without providing them with intermediate means to understand changes. A clear example of these difficulties is due to the devaluation of the intimate relationship between conversation, reading, and writing. Which may result in a child's blocking of reading and writing skills: “If instead Moreover, reading and writing were seen as natural consequences of conversation, and if discussion were seen as the child's native mode of communication, a pedagogical property quite different from that which generally exists could be established [...] (LIPMAN, 1990, p.123). Therefore, the difficulties faced by children in the transition of their skills, in a way, are imposed on them. Thus, if the help offered to students in coping with transformations were adequate, they (difficulties) could be less traumatic. This finding is confirmed by Lipman when the author points out that in writing, reading and symbolic language of mathematics children are faced with ambiguities, syllogisms and rules that are not evident to them at first and, therefore, generate difficulties: [...] children who have discussed and reflected on the nature of the questions in their natural language are prepared to understand that $y = 7 + 9$ is functionally equivalent to the question “What is $7 + 9$? (LIPMAN, 2001, p.55).

For Lipman (2001), knowing the skills to be developed and the aspects that involve them is fundamental for teacher education. This observation also warns that teachers are prepared to correct children as well as reprimand grammatical errors. However, they are generally not prepared to pay attention to the logical mistakes made by students and, mainly, to correct them. That is, a lot of attention is devoted to language teaching (reading/writing). Still, it is not taken into account that reasoning skills develop in parallel with language skills and need to be diagnosed and corrected. From what has been said so far, it can be said that the primary purpose of the Lipman Children's Philosophy Program is to make children think for themselves. This independent thinking is considered by the author as *good thinking*, as an expression of the construction of knowledge. According to Lorieri (2002), Lipman understood that higher-order thinking is good thinking, which is critical and creative. This kind of thinking requires thinking skills to be used in a coordinated and integrated manner. It is composed of specificities that characterize it as such. Thus, for the author, “critical thinking is responsible and skillful thinking that facilitates good judgments because it is based on criteria, is self-corrective and context-sensitive” (LIPMAN, 2008, p. 172). For Lipman, Sharp, and Oscanyan (2006), thinking is a natural process such as breathing and, therefore, occurs all the time, even without people realizing it. In this sense, during an interesting discussion, for example, thoughts arise so quickly that it is impossible to identify them separately or distinct from bodily activities, unlike the writing process, which requires much more sophisticated thinking in choosing each word. By

maintaining the comparison between the naturalness of breathing and thinking, one could believe that there is no way to breathe better and, therefore, to think better. However, thinking is a skill that can be honed. In this way, Lipman's interest was mainly related to the development of thinking skills, which, as stated by him, are governed by the principles of logic. In suggesting logic as a criterion for skillful thinking, Lipman, Sharp, and Oscanyan (2006) do not intend to teach children philosophy so that they can think. He claims that children are capable of this kind of reasoning since, for example, "If we tell a very young child 'if you do that you get it,' we assume that the child understands that 'if I don't want to get it, I shouldn't do it'" (p. 34). In this way, children learn logic as soon as they learn to speak and, therefore, they're able to reason according to their principles. For the author, "Children learn logic while learning a language. The rules of logic, as well as those of grammar, are acquired when children learn to speak (LIPMAN, 2001, p. 34). Apart from the differences between more or less elaborate thoughts that are evidenced by logic, they highlighted that the thinking process also involves several activities, such as "mathematical thinking and historical thinking; practical and poetic thinking; the thinking we have when we read, write, dance, play, talk" (LIPMAN, SHARP, AND OSCANYAN, 2006, p.36). All these activities that involve the thinking process are part of the school context and should be encouraged in the Research Communities. In this sense, Lipman (1990) points out that although the need for quality thinking in schools is very much stated, little has been discussed how to do it; that is, few studies aimed at demonstrating how the teacher should teach his students to learn how to do this. Think better. In the book *Thinking in Education*, Lipman (2001) suggests a way of teaching high-order thinking in schools. According to the author, this is possible through the philosophical exercise provided by the *Research Community*. Taking into account the complexity of reasoning, one understands the great importance of proper education aimed at the full development of reflective thinking. However, according to Lipman (2001), the educational system assumes that children go to school to learn, and this learning involves only developing the necessary skills of reading, writing, and doing mathematical operations. Besides, they need to know about geography, history, and literature, and thinking, in this case, would only be a consequence of their activities and not the primary function of the school.

However, although the focus of education is given to the subjects, thinking accompanies students from their entry into school as it is an innate attribute in children: "Those children think as naturally as they talk or breathe - I did not doubt that. But how do you help them *think well*?" (LIPMAN, 2001, p. 5). In this regard, the Research Community is presented as a pedagogical alternative because they act to raise students' level of understanding to enable them to build more systematic knowledge and to think: "They will not grasp the meanings simply by learning adult knowledge; they need to be taught to think and, in particular, to think for themselves" (LIPMAN, 2001, p. 32). Given the above, Lipman, Sharp, and Oscanyan (2006) highlight the need for the school to transform a thinking child into a *good thinking* child. This involves empowering her to deal with problems to be solved, decisions to be made, making them more discerning, and enabling the development of judgment of thoughts and actions. It seems that Lipman understood that education needs to foster good thinking that allows the integral formation of a child. This finding leads to

the understanding that this elaborate thinking is indispensable for the child to build meaningful knowledge. If rational thinking that is critical and creative seems to be the basis for knowledge building, how does the student develop his or her knowledge in the Children's Philosophy Program? Based on the contributions of philosophy, Lipman thought of mediation between the contents and the students, dynamized through dialogue. In this sense, it is through him "that the development of cognitive skills, the development of reasoning and reasoning capacity governed by logic, as well as the investigation of problems that concern us as human beings" is possible (TONIETO, 2007, p. 31). The dialogue triggered in the *Research Community* is made up of rules and principles of logical argumentation. These rules, according to Lipman (2001), are based on the logic of conversation. According to the author's considerations, the conversation starts from a more personal philosophy that seeks a balance between its participants. It contemplates the exchange of feelings, thoughts, information, and interpretations cooperatively. Dialogue, on the other hand, involves investigation and questioning that seeks an imbalance, as each argument generates a counterargument. The relationship between its participants becomes collaborative, as it implies collective action. In this way, the logic of a conversation becomes progressively accentuated as it becomes a dialogue.

The *Research Communities* need to be able to establish a meaningful dialogue that contemplates logical argumentation, and this is not possible in a simple conversation. As evidenced by Lipman, Sharp, and Oscanyan (2006), teachers and students can elaborate questions and answers in the classroom, but this does not necessarily mean that they are actively exercising their thinking. If the questions are mechanical and planned, they can occur without really generating doubts that stimulate reflection and investigation. On the other hand, forming a *Research Community* will provide moments when doubts arise about the discussions, raising interest in the subject. Therefore, a conversation that involves questions would not represent the philosophical investigation available to this community. As classrooms become *Research Community*, discussions and philosophical inquiry take place in them. Thus, it is from them that children develop elaborate thinking and can find answers to everyday problems, make decisions, and make choices. To clarify what they understand by philosophical discussions, Lipman, Sharp, and Oscanyan (2006) in the book *Philosophy in the classroom* makes some distinctions that need to be considered between any discussion and a philosophical discussion. According to the authors, the active participation or confrontation of some members of the debate is not synonymous with a good discussion: "A good discussion occurs in any area when the result marks definitive progress compared to the conditions that existed when it began. [...]" (LIPMAN; SHARP; OSCANYAN, 2006, p. 154-155). Given this position, the complexity of the dialogue involved in the *Research Community* compared to any conversation is evident. This is not a conversation in which some questions are asked: some people participate and come to a satisfactory conclusion. As indicated by the authors, the attempt to dialogue does not always give rise to the reflection and development of the investigative activity.

Conclusion

The primary purpose of this article was to answer the following question: What skills and knowledge can be built

through the Research Community in the *Lipman's Children's Philosophy Program*? At a time when education sought a model and profile to respond to the challenges of the twentieth and twenty-first centuries, Matthew Lipman's proposed *Research Community* made a significant contribution. Far from being a finished closed proposal, Lipman's program, mainly from *Research Community* contains some relevant traits that deserve the attention of contemporary educators and researchers.

The understanding of education and knowledge from his work suggests a criticism and opposition to what he considered traditional teaching, which he mechanically cast in a repetitive and authoritarian formation. Contrary to this educational conception, he assumed that children could learn to think, and, for this, the dialogue is a form of research made possible by the *Research Community*. They have the task of disciplining dialogue, by the rules of logic, by promoting joint learning in which teachers and students work by sharing experiences and critically examining them. It seems that it can be concluded that, amidst its innovative characteristics and pioneering work on Child-oriented Philosophy, Lipman's Children's Philosophy Program sought to overcome traditional teaching, which, for him, was inefficient about its function. Thinking from this perspective, the American philosopher elaborated the curriculum, the didactic material and the methodology of his program establishing an active role for the student in the construction of his knowledge.

REFERENCES

- _____. O pensar na educação. 4. ed. Petrópolis: Vozes, 2008.
- _____. A Filosofia vai à escola. São Paulo: Summus, 1990.
- _____. O pensar na educação. 3. ed. Petrópolis: Vozes, 2001. 402 p. Tradução de Ann Mary Fighiera Perpétuo.
- LIPMAN, Matthew; SHARP, Ann Margaret; OSCANYAN, Frederick S. A Filosofia na Sala de Aula. 3. ed. São Paulo: Nova Alexandria, 2006. 256 p. Tradução de Ana Luiza Fernandes Marcondes.
- LIPMAN, Matthew; SHARP, Ann. A comunidade de investigação e o raciocínio crítico. São Paulo: Centro Brasileiro de Filosofia Para Crianças, 1995. Tradução de Ana Luiza F. Falcone e Sylvia J. H. Mandel.
- LORIERI, Marcos Antônio. Filosofia: fundamentos e métodos. São Paulo: Cortez, 2002.
- SHARP, Ann Margaret. Algumas pressuposições da noção "comunidade de investigação". In: LIPMAN, Matthew; SHARP, Ann. A comunidade de investigação e o raciocínio crítico. São Paulo: Centro Brasileiro de Filosofia Para Crianças, 1995. p. 5-16. Tradução de Ana Luiza F. Falcone e Sylvia J. H. Mandel.
- TONIETO, C. A prática dialógica na comunidade de investigação: possibilidades de uma educação para o pensar. In: FÁVERO, A. M. et al. Diálogo e investigação: perspectivas de uma educação para o pensar. Passo Fundo: Méritos Editora, 2007
