# INTERDISCIPLINARITY AND DECOLONIALITY IN DIFFERENT TIMES AND SPACES

## INTERDISCIPLINARIDADE E DECOLONIALIDADE EM DIFERENTES TEMPOS E ESPAÇOS

# INTERDISCIPLINARIEDAD Y DECOLONIALIDAD EN DIFERENTES TIEMPOS Y ESPACIOS

Artevaldo da Silva RAMALHO <sup>1</sup> Higo Thayrone da Silva COSTA<sup>2</sup> Josélia Carvalho de ARAÚJO<sup>3</sup>

ABSTRACT: It presents a discussion about interdisciplinarity and evaluative decoloniality and their contexts, their characteristics and records of production of interdisciplinary knowledge in theoretical documents, which indicate the clarification of this term in pedagogical teaching proposals. The purpose is to reflect on decololinity, evaluation and new teaching practices, seeking the meaning of interdisciplinarity as an educational and methodological action in basic education. The research was developed by bibliographic survey in articles and books; as well as based on reports from Posensino colleagues. Theoretical contributions and analyzes made possible reflections on the importance of this theme in education, so that interdisciplinarity can occur. It is necessary to break the invisible barriers present in many disciplines, difficulties in accessing shared knowledge. Interdisciplinary action is a way to improve different areas of knowledge, as well as the possible narratives that will be built through academic dialogues that this text will raise.

**KEYWORDS**: Decoliniality. Assessment. Interdisciplinarity.

RESUMO: Apresenta uma discussão sobre interdisciplinaridade e decolonialidade avaliativa e seus contextos, suas características e registros de produção de conhecimentos interdisciplinares nos documentos teóricos, que indiquem o esclarecimento desse termo nas propostas pedagógicas do ensino. O propósito é refletir sobre decololinialidade, avaliação e novas práticas docentes, buscando o significado da interdisciplinaridade como ação educativa e metodológica na educação básica. A pesquisa foi desenvolvida por levantamento bibliográfico em artigos e livros; bem como a partir junto a relatos de colegas do Posensino. Os aportes teóricos e as análises possibilitaram cogitações sobre a importância desta temática na educação, para que a interdisciplinaridade possa ocorrer. Faz-se necessário romper as barreiras invisíveis presentes em muitas disciplinas, dificuldades no acesso do saber

(cc) BY-NC-SA

<sup>&</sup>lt;sup>1</sup> State University of Rio Grande do Norte (UERN), Mossoró – RN – Brazil. Master's Student in Teaching. ORCID: https://orcid.org/0000-0001-9061-6287. E-mail: teoramalho1234@gmail.com

<sup>&</sup>lt;sup>2</sup> State University of Rio Grande do Norte (UERN), Mossoró – RN – Brazil. Master's Student in Teaching. ORCID: https://orcid.org/0000-0002-0062-2294. E-mail: higothayrone@yahoo.com.br

<sup>&</sup>lt;sup>3</sup> State University of Rio Grande do Norte (UERN), Mossoró – RN – Brazil. Professor at the Department of Geography. PhD in Geography (UFRN). ORCID: https://orcid.org/0000-0001-7513-6621. E-mail: joseliacarvalho@uern.br

compartilhado. A ação interdisciplinar é um caminho para o aperfeiçoamento de diferentes áreas de conhecimento, assim como as possíveis narrativas que serão construídas mediante diálogos acadêmicos que esse texto venha suscitar.

PALAVRAS-CHAVE: Decolinialidade. Avaliação. Interdisciplinaridade.

RESUMEN: Presenta una discusión sobre la interdisciplinariedad y la decolonialidad evaluativa y sus contextos, sus características y registros de producción de saberes interdisciplinares en documentos teóricos, que indican la clarificación de este término en las propuestas pedagógicas de enseñanza. El propósito es reflexionar sobre la decololinidad, la evaluación y las nuevas prácticas docentes, buscando el sentido de la interdisciplinariedad como acción educativa y metodológica en la educación básica. La investigación se desarrolló mediante levantamiento bibliográfico en artículos y libros; así como en base a informes de colegas de Posensino. Aportes teóricos y análisis posibilitaron reflexiones sobre la importancia de este tema en la educación, para que ocurra la interdisciplinariedad. Es necesario romper las barreras invisibles presentes en muchas disciplinas, las dificultades para acceder al conocimiento compartido. La acción interdisciplinaria es una forma de mejorar diferentes áreas del conocimiento, así como las posibles narrativas que se construirán a través de los diálogos académicos que planteará este texto.

PALABRAS CLAVE: Decolinialidad. Evaluación. Interdisciplinariedad.

#### Introduction

Given the "standards" of basic education imposed by educational policies and outdated methods, we find subjects, especially with non-interdisciplinary perspectives, which interrupt and do not facilitate the exchange of knowledge between the student and the teacher, making it impossible to take reflective action. How to perform good mediation without the proper practice to teach? It is very difficult to build a critical and interdisciplinary thought among curricular knowledge.

In this sense, an interdisciplinary procedure consists in the interaction of the various fields of knowledge, in the study of a phenomenon, in such a way that subjects operate together, at the same time, in a convergent direction. Teachers are people of extreme relevance to the teaching and learning process, as well as knowledge transmitters, which are shared with teaching materials, which are experienced in the classroom, which are interconnected by the sharing of experiences. Being a teacher is a very arduous task, because there are so many changes in schooling, that it is difficult to practice this profession.

The master's work, from the point of view of decoloniality, is not what is avoided from learning the exchange of knowledge with subjects, but makes it accessible in the everyday school reality. That evaluative mechanisms can be applied and implemented, which can RPGE- Revista on line de Política e Gestão Educacional, Araraquara, v. 26, n. esp. 4, e022111, 2022.

e-ISSN: 1519-9029

dialogue with each other to find the best result for student training. The class is a very significant moment for the construction of identities and rational development of all participants, not something boring, nor boring.

Many teachers cross the path of students, and take it for themselves the responsibility of showing the harsh reality of the labor market, and the competitive capitalist world. This eye opening gives the student the opportunity to make choices about the next steps of their academic journey. There is no shortage of teachers who inspire and help build future dreams. In addition to this dream, a teamwork is valid, involving all the subjects of the teaching and learning process. With this, interdisciplinarity and its similar segments (pluri; multi; trans) are introduced into the school curriculum, which should not be static or inflexible. In a way, it is feasible to develop methods of work that are no longer controllers of knowledge, and that can produce science together. This is because the construction of knowledge is done in the interaction between the subjects of the teaching and learning process, which bring to the fore the discussions around the objects of knowledge, their points of view, their experiences, in sum, their way of perceiving the world and its phenomena in treatment at some point in their learning.

### From disciplinarity to interdisciplinarity, a path to be followed by the school

We know that interdisciplinarity originated in European countries, particularly in France and Italy, in the middle of the 20th century, from questions and educational movements, which discussed the division of subjects, advocating new directions for teaching and school. Since the emergence, there have been several attempts to define interdisciplinarity. For Faria (2015, p. 107), interdisciplinarity consists of "[...] capacity to overcome subjects without abolishing them." In this sense, an interdisciplinary procedure deals with the interaction of the various fields of knowledge, in the study of a phenomenon of such configuration, that subjects work articulated. Co-participation and union between curricular subjects, in the resolution of difficulties, this is how we can think about the characterization of school interdisciplinarity. In such a way, interdisciplinarity, which seeks to promote dialogue between curricular practices, better preparing the student to live with the other, and with the world outside the school, still find so many barriers to maintaining their space in the daily classroom. According to Fazenda (2002, p. 29, our translation), interdisciplinarity "[...] it is the art of the fabric that never lets the divorce between its elements occur, however, of a well-braided and flexible fabric."

It is noteworthy that the Brazilian educational system is organized through curricular subjects, and that in many spaces curricula do not work in a shared and integrated way,

forgetting that students are from different realities, from equally different family and social contexts, that these differences are not related only to a given discipline. As a result of this curricular organization, school subjects are still worked in a fragmented way, that is, disconnected from each other, as if reality were something divided. The author Luck (2007, p. 64, our translation) reinforces the importance of interdisciplinary practice:

Interdisciplinarity as a practice that allows overcoming the fragmentation and linearity of the process of knowledge and teaching production, and, consequently, the distance between them and reality. Applying the concept of interdisciplinarity to teaching, it defines the term as The process that involves the integration and engagement of educators, in a joint work, of integrating the subjects of the school curriculum with each other and with reality, in order to overcome the fragmentation of teaching, aiming at the integral formation of students, so that they can critically exercise citizenship, through a global vision of the world and be able to face the complex, broad and global problems of today's reality.

For a long time, the tendency was to teach the subjects and play their bureaucratic role in class, delimiting their boundaries and their spaces of action. However, the present context was modifying and bringing innovations, enabling an approximation of the "spaces" of other subjects, building a pluridisciplinary, multidisciplinary, interdisciplinary and, finally, transdisciplinary narrative.

With regard to school interdisciplinarity, for some time, this theme has been discussed tirelessly, in the wheels of conversations, among researchers and knowledge trainers. It is a proposal that seeks to unite one or more subjects of related areas or not, with the idea of cooperation between them, and with the intention of solving or producing a conversation between the subjects. In order to answer many of the questions that are still unanswered, we reinforce our thinking with Oliveira's ideas (2013, p. 2016, our translation):

The current context allows, and even demands, an interdisciplinary look and the attitude proposed by interdisciplinarity is up to rethink the teaching-learning process, offering the possibility of building ourselves as teachers who dialogue with their knowledge, with the knowledge of their students, who are not oblivious to the world in which they are inserted or to the knowledge that is part of this world. The look that is intended with the interdisciplinary proposal challenges to leave the comfort zone and seek the unknown.

As we reported earlier, leaving the comfort zone, and seeking the unknown, to solve problems that need solutions, this is the way. In addition to interdisciplinarity, there is pluridisciplinarity; multidisciplinarity; and transdisciplinarity. All these expressions, with your

place of speech. We will make a modest presentation and brief description of the pluri, multi and transdisciplinarity.

Multidisciplinarity is the organization of more traditional content, so to speak, didactic subjects that present themselves as independent subjects of each other, without intimate approximation. The subjects offered in the school, without any connection. On the *other hand*, pluridisciplinarity, is the existing cooperation between the subjects that are completed that may be more or less the same. It is the context of mutual contribution, such as philosophy, sociology, history and geography, the subjects of the human sciences. Finally, *transdisciplinarity*, this stage of integration of subjects, which is framed as the production of a unified action, without barriers and difficulties between subjects, which cooperates and includes structures of functional methodologies. They come together in favor of various possibilities, as well as in favor of the production of knowledge.

#### Interdisciplinarity, via technologies

Knowledge, which was previously centered on didactic material, in class, in school, today is dispersed in the digital age, circulating in a decentralized way, in other ways. We live in the era of mobility, connectivity, and classes by remote access, in which it is possible to be simultaneously in different times and spaces, via mobile phones, *iPads* and notebooks. In this scenario, we argue that the starting point between the subjects for the increase of an interdisciplinary task is the inclusion of technologies in teaching, since these are intimate to the student of basic education, being present in their lives. For its innovative and complex qualities, digital technology, especially the Internet, benefits, so that the student perceives the reality of the world, which allows him, therefore, to think interactively.

With classes by remote access, more present today in education, they have become tools that enhance expressive and interdisciplinary teaching, because they do the intermediary between the individual and education. For the educational system to be effective, and meets the demands of this media society, it is necessary a more harmonious school format with the new scenarios, and a teacher profile that conforms to the process of the digital age. It is necessary an interdisciplinary action, that is, that represent the theoretical and methodological connection of school knowledge. With this educational revolution in the teaching and learning method, cyberspaces, virtual classrooms, emerge, which enable the continuity of teaching remotely and /or hybrid. About this phenomenon, not ancient, because the famous Distance Education (EaD, in Portuguese) already existed, Lévy (1999, p. 17, our translation) discusses:

Specific not only the material infrastructure of digital communication, but also the oceanic universe of information it houses, as well as the human beings who navigate and feed this universe, broke with the idea of time and space, as it was known. With this, it began to allow teachers and students to interact both face-to-face and virtually, favoring a faster and more effective dialogue, in addition to awakening and arresting the interest of students, through the dynamism and diversity of situations that makes it possible to create, and to respect their own rhythm and time.

The potential of cyberspaces and machines are communication routes, discourses, trend of resources such as: image, sound, and text, and flexibility of navigation, which are driven to the exercise of teaching, in favor of education.

Digital Information and Communication Technologies (TDIC), link local and virtual, and disseminate new knowledge, promoting skills and skills necessary for existence in the modern world. In interdisciplinary teaching, its use can transform the classroom into a space for students and teachers to learn together, problematizing, debating, researching producing and sharing knowledge. In partnership with educators, the process can go through paths that have not yet been explored. According to Monasta (2010, p. 34, our translation) states:

Education as a process of conformation and hegemony can trouble the majority of teachers, especially those who want to help their students to achieve a greater degree of freedom and personal independence. However, the master's awareness, with reference to political hegemony as an educational process for good or evil, could be the starting point of a new professionalism of teachers and educators.

We understand that the implementation of the teaching and learning process only contemplates the purposes provided for in the curriculum, if the teacher is open to possibilities of this art. This work requires the teacher, flexibility to get out of the "traditional box" of his discipline, and to get involved in the structure of teaching that is often complex.

Since interdisciplinarity and technology are taken as fundamental in the training methodology, which are understood in a web of information, this way of information presupposes a friendly relationship between forms of knowledge. Interdisciplinary practices, as they are understood as foundations, have helped to maintain the continuity of teaching in such difficult times. Therefore, it is how the contents of this discipline are interconnected, crossed with the content of the other subjects, directing to an interaction capable of promoting the student's critical and reflective capacity, in view of their academic history.

### Interdisciplinary evaluative decoloniality

The unprecedented growth of the lines of knowledge in our day has made the issue of acquiring new thoughts and innovative ways in teaching and learning real. The value and decoloniality in basic education are characterized by the way in which students have been evaluated by school performance mechanisms in recent years. With the intention of breaking colonial paradigms of education and building an interdisciplinary dialogue, we point a path to motivation, in relating the discourses promoted with the area of education, with regard to selective and classificatory works and tests, while active in the participatory teaching process with the reconnection of knowledge. Thus, this text brings to the center of the debate the preestablished education model, as well as an interdisciplinary attitude, which necessarily, by the idea of rethinking our own thinking, considering that we were taught in the tradition of disciplinarity.

Evaluative decoloniality is, among others, an important mechanism to fight against the domain of knowledge over the other, as a subject of self. In interdisciplinary actions, for which this theme devotes its concern, it is necessary to analyze the intellectual powers of knowledge acquired by its own people, in a kind of narrowing between different aspects of knowledge.

This reflection in the development of new methods of educational evaluation based on concepts and research carried out by interdisciplinary practices, which do not come from tradition, it is necessary to stop thinking the other, and promote the decoloniality of critical knowledge, without borders. And so, we need to question how teaching, so rich in culture and knowledge, was dominated by crystallized methodologies, and did not wake up to interdisciplinary practices, to its own way of evaluating its students through diversified means.

The interdisciplinary and technological development, in addition to post-colonialism, seeks an epistemological detachment from education, promoting an alternative for new forms of learning in Brazilian basic education. The central idea of educational decoloniality is to have autonomy of thought, to have its place of production, from its own place of creation, and no longer an exogenous vision.

Teaching, being a fundamental field for the development of the student's critical sense, is also a range of opportunities for the improvement of the techniques used by teachers. The teacher, who is largely responsible for the schooling of individuals, carries on his shoulders the task of improving his potential more and more, but for all purposes, he needs to be committed to the changes of a globalized world.

With the presence of new forms of knowledge production, one cannot be trapped in fixed practices in education. The schooling process goes through some twists and turns, and these changes need to be monitored. Therefore, by rejecting a traditional, fragmented and rigid teaching, and stimulating autonomy and collaboration, in this interdisciplinary and technologized context, the line that provides the exchange of knowledge in subjects develops more and more. Therefore, the school made the space more desirable to occur this change in the educational environment. Among several authors, we can observe Freire (2014, p. 31, our translation):

> That is why thinking right puts to the teacher or, more broadly, to the school, the duty to not only respect the knowledge with which the students, especially those of the popular classes, come to it socially constructed knowledge in community practice, but also, as I have been suggesting for more than thirty years, to discuss with the students the reason for being some of this knowledge concerning the teaching of the contents.

The school, as an agent of the appropriation of scientific language by the subject who historically learns, must be zealous with the teaching and learning process, because its role is not to destroy the knowledge inherited by the primary culture of the student, but to provide this individual from a new decolonial perspective.

### **Final considerations**

With the set of thoughts presented, we list intersections that may help investigations on new aspects in basic education, in theoretical and methodological terms that point to a decolonial practice that has not yet been explored. Interdisciplinarity has always been current within subjects, as an indispensable and necessary practice for the schooling process. Teamwork among disciplinary, therefore, a methodological role.

Thus, pluridisciplinarity, multidisciplinarity, interdisciplinarity and transdisciplinarity will not only be taken as tools of pedagogical action, but that bring together a set of knowledge in a school environment, with the purpose of cognitive understanding of a particular field of knowledge, as well as the reality that surrounds them. The need to grow professionally, through the interdisciplinary, technological and decolonial mentality, is reflected in the educational context, and is extremely important for the individual's reasoning.

The autonomy of teachers and students, in the construction of cyberspaces, gives the opportunity to release methodological traditionalism, which in various realities is imposed by the action that naturalizes the culture that says: "I can only work like this". Given the scenario presented, what this paper proposed was the interaction of curricular subjects in teaching, based on the understanding of the subject and about the knowledge that hold the structure of education, through the interdisciplinary and decolonial view, which decentralizes the teaching restricted by the methodological barriers of some education professionals, with a view to an inclusion that allows the exchange of knowledge, that transcends the curriculum.

Therefore, from the definitions discussed so far, the articulation of teaching with interdisciplinarity has, therefore, a dual objective to promote the conversation of subjects with the present time, and to unite them to the teaching mechanisms, in an educational context in which it is currently on the agenda, of course, without forgetting the sociocultural side of each reality.

#### REFERENCES

FARIA, J. H. Desenvolvimento Socioeconômico e Interdisciplinaridade. **RDSD**, v. 1, n. 1, p. 5-36, 2015. Available:

https://periodicos.unesc.net/ojs/index.php/RDSD/article/view/1827/1801. Access: 10 Apr. 2021.

FAZENDA, I. A. **Interdisciplinaridade:** Um projeto em parceria. 5. ed. São Paulo: Loyola, 2002.

FREIRE, P. **Pedagogia da autonomia**: Saberes necessários à prática educativa. 49. ed. São Paulo: Paz e Terra, 2014.

LÉVY, P. Cibercultura. São Paulo: Editora 34, 1999.

LUCK, H. **Pedagogia interdisciplinar**: Fundamentos teórico-metodológicos. 14. ed. Rio de Janeiro: Vozes, 2007.

MONASTA, A. Antônio Gramsci. Recife: Joaquim Nabuco, 2010.

OLIVEIRA, N. A. S. Ensino de história e interdisciplinaridade. *In:* SILVA, C. B.; ZAMBONI, E. (org.). **Ensino de história, memória e cultura**. Curitiba, PR: CRV, 2013.

#### How to refer to this article

RAMALHO, A. S.; COSTA, H. T. S.; ARAÚJO, J. C. Interdisciplinarity and decoloniality in different times and spaces. Revista on line de Política e Gestão Educacional, Araraquara, v. 26, 4, e022111, 2022. e-ISSN: 1519-9029. esp. https://doi.org/10.22633/rpge.v26iesp.4.17125

**Submitted**: 01/06/2022

Revisions required: 28/07/2022

**Approved**: 30/08/2022 **Published**: 01/09/2022

Processing and publication by the Editora Ibero-Americana de Educação.

Correction, formatting, standardization and translation.

