

**PEDAGOGY OF ENCOUNTER: BUILDING RELATIONSHIPS BETWEEN
SCIENCE EDUCATION AND CLOWNING**

**PEDAGOGIA DO ENCONTRO: CONSTRUINDO RELAÇÕES ENTRE
EDUCAÇÃO EM CIÊNCIAS E PALHAÇARIA**

**PEDAGOGÍA DEL ENCUENTRO: CONSTRUYENDO RELACIONES ENTRE LA
EDUCACIÓN CIENTÍFICA Y EL CLOWNING**

 <https://doi.org/10.56238/sevened2025.038-078>

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ABSTRACT

This article reports on a formative experience conducted in a Pedagogy course. Its objective was to investigate the possible relationships between clowning and science education, identifying how clowning, as an artistic practice, can offer new understandings and transformations in the pedagogical practice of a teacher in the discipline of Methodology of Natural Science Teaching. Starting from a turbulent institutional moment that produced professional discouragement and unease regarding an excessively rational science education training for future pedagogues, the teacher returned to his clown, Melancia, to teach a class. The methodological approach of the research was based on self-study with an emphasis on the narrative of lived experience. The primary data sources for the research were the class notebook for the discipline of Methodology of Natural Science Teaching, offered in the fourth semester of the Pedagogy course, and the initial narrative constructed by the teacher, which was later analyzed and reformulated by the authors of the research. Three lessons emerged from the analysis of this narrative. The first lesson presents vulnerability as a pedagogical virtue and as a foundation for human connection. The second highlights the need to explain to students the pedagogical reasoning that underpins our teaching practices. The third, finally, values enchantment as a constituent element for a more holistic scientific education that values emotions and aesthetic aspects. It concludes that the dialogue between clowning and education offers a fertile ground for rethinking teacher training, promoting a more authentic, human, and sensitive pedagogy, capable of embracing uncertainty and reframing failure as a learning experience.

Keywords: Clowning. Vulnerability. Teacher Training. Science Education.

RESUMO

O presente artigo relata uma experiência formativa conduzida em um curso de Pedagogia. Seu objetivo foi investigar as possíveis relações entre palhaçaria e educação em ciências, identificando como a palhaçaria, enquanto prática artística, pode oferecer novas compreensões e transformações na prática pedagógica de um formador da disciplina de

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Metodologia do Ensino de Ciências Naturais. Partindo de um momento institucional conturbado que produzia desânimo profissional e de uma inquietação frente a uma formação em educação em ciências excessivamente racional das futuras pedagogas, o formador retomou seu palhaço, Melancia, para ministrar uma aula. A abordagem metodológica da pesquisa se fundamentou no autoestudo com ênfase na narrativa da experiência do vivido. As fontes primárias de dados da pesquisa foram o caderno de aulas da disciplina Metodologia do Ensino de Ciências Naturais, ofertada no quarto período do curso de Pedagogia e a narrativa inicial construída pelo formador que posteriormente foi analisada e reformulada pelos autores da pesquisa. Da análise dessa narrativa emergiram três lições. A primeira lição apresenta a vulnerabilidade como virtude pedagógica e como alicerce para a conexão humana. A segunda destaca a necessidade de explicitarmos aos educandos o raciocínio pedagógico que sustenta nossas práticas de ensino. A terceira, por fim, valoriza o encantamento como elemento constituinte para uma educação científica mais integral que valoriza as emoções e os aspectos estéticos. Conclui-se que o diálogo entre palhaçaria e educação oferece um campo fecundo para repensar a formação docente, promovendo uma pedagogia mais autêntica, humana e sensível, capaz de acolher a incerteza e ressignificar o fracasso como momento de aprendizado.

Palavras-chave: Palhaçaria. Vulnerabilidade. Formação de Pedagogas. Educação em Ciências.

RESUMEN

Este artículo relata una experiencia formativa realizada en un curso de Pedagogía. Su objetivo fue investigar las posibles relaciones entre el clown y la enseñanza de las ciencias, identificando cómo el clown, como práctica artística, puede ofrecer nuevas comprensiones y transformaciones en la práctica pedagógica de un docente de Metodología de la Enseñanza de las Ciencias Naturales. A partir de un momento institucional turbulento que generó desánimo profesional e inquietud respecto a una formación excesivamente racional en educación científica para futuros pedagogos, el docente recurrió a su clown, Melancia, para impartir una clase. El enfoque metodológico de la investigación se basó en el autoaprendizaje con énfasis en la narrativa de la experiencia vivida. Las fuentes de datos principales para la investigación fueron el cuaderno de clase de Metodología de la Enseñanza de las Ciencias Naturales, impartido en el cuarto semestre del curso de Pedagogía, y la narrativa inicial construida por el docente, la cual fue posteriormente analizada y reformulada por los autores de la investigación. Tres lecciones emergieron del análisis de esta narrativa. La primera lección presenta la vulnerabilidad como una virtud pedagógica y como fundamento de la conexión humana. El segundo destaca la necesidad de explicar al alumnado el razonamiento pedagógico que sustenta nuestras prácticas docentes. El tercero, finalmente, valora el encantamiento como elemento constitutivo de una educación científica más holística que valore las emociones y los aspectos estéticos. Concluye que el diálogo entre el clown y la educación ofrece un terreno fértil para repensar la formación docente, promoviendo una pedagogía más autêntica, humana y sensible, capaz de aceptar la incertidumbre y replantear el fracaso como una experiencia de aprendizaje.

Palabras clave: Payasadas. Vulnerabilidad. Formación del Profesorado. Educación Científica.



1 INTRODUCTION

The pedagogy course, as a space for teacher training, is a space conducive to the experimentation of approaches that transcend the mere transmission of content and techniques, enabling formative experiences connected to the pedagogy of the sensitive, which can evoke admiration, enchantment, perceptions and critical reflections throughout the process of construction of professional identity. Thus, this text results from the curiosity and research of the authors, who are teachers in the pedagogy course, about the opportunities that certain non-conventional artistic languages can offer for the teaching of science. The choice of the theme was justified by the conviction that clowning, with its ethos of vulnerability, playfulness and human connection, could offer valuable perspectives to reimagine the role of pedagogues when dealing with science themes in Early Childhood Education and in the first years of elementary school.

Our experience in the training of teachers in the Pedagogy course shows that young children still have few opportunities to come into contact with scientific knowledge. In Early Childhood Education and in the early years of Elementary School, science themes are rarely treated as a priority, taking a back seat to other curricular areas such as mathematics and the literacy and literacy process.

On the other hand, we noticed that situations related to science cross the school routine, but are often not recognized by the teachers. A dinosaur carried by a child, caterpillars and butterflies in the garden, discoveries made on walks or visits to green areas, intriguing questions about planets or the bottom of the sea, the enchantment in front of a rainbow or the sunset, and even the unexpected visit of a bird in the schoolyard are examples of events that could turn into rich opportunities to explore science topics. However, most of the time, such situations are not incorporated into pedagogical practices.

Thus, in the Science Teaching Methodology courses we offer, we seek to encourage attentive listening to these moments and foster a feeling of admiration and enchantment in relation to nature, scientific knowledge and the world around us. In our pedagogical approach, clowning fulfills precisely this objective, providing the space, sensitivity and charm necessary for these situations to become educational experiences.

The relevance of this research lies in the contribution of clowning to expand the didactic-pedagogical repertoire in the initial training of teachers, proposing an innovative dialogue between scientific education and clowning. By articulating these two apparently dissonant fields, the study is justified by the need to think about formative strategies so that



future teachers not only master content, but also develop a sense of admiration for science, nature and the world.

In this sense, the research problem that guided this work was formulated from the following question: how can clowning, as an artistic practice, inform and transform the pedagogical practice of a trainer in the discipline of Methodology of the Teaching of Natural Sciences, enhancing the construction of more horizontal and sensitive relationships with scientific knowledge in a pedagogy course? To answer this question, we outlined as a general objective to analyze the possible interfaces between science education and clowning in the training of pedagogues, from a perspective of self-study of teaching practice.

This general objective unfolded into specific objectives that guided the structure of the work, which are: to describe and analyze the formative meetings developed within the scope of the research; identify and reflect on the moments of tension, discovery and insight experienced by the trainer-researcher; and synthesize the lessons learned through the narrative of the experience, reflecting on how clowning can meet and articulate with scientific education. The central axes that underlie this research will be presented and discussed in the following sections.

In the subsequent sections, the main axes that underlie this investigation will be presented and analyzed. At first, we will discuss the context of the pedagogue's training, as well as the role of Science Education in Early Childhood Education and in the first years of Elementary School, analyzing the challenges and potentialities of this area of knowledge in teaching practice. Next, we will address a less traditional domain, investigating the intersections between Clowning and Education, where the theoretical foundations that connect the art of clowning to educational processes will be discussed. In a subsequent moment, the methodological approach that guided the research will be presented, detailing the methods used for data collection and analysis. Finally, we will carry out an analysis of the experience, in which the narrative experience with the clown Melancia will be investigated in the light of the theoretical references previously outlined, aiming to extract lessons and implications for the training of teachers.

2 PEDAGOGY OF ENCOUNTER

2.1 THE FORMATION OF THE PEDAGOGUE AND SCIENCE EDUCATION IN EARLY CHILDHOOD EDUCATION AND THE EARLY YEARS OF ELEMENTARY SCHOOL

In Brazil, research in Science Education is configured as a solid field, with specialized journals, groups and lines of research in graduate programs, in addition to an agenda full of congresses, meetings and symposia that involve an extensive network of researchers. Despite this advance, it is possible to note that there is still a lack of research specifically aimed at Early Childhood Education and the early years of Elementary School. Despite the increase in interest in the last twenty years, the production is still small compared to the large amount of research focused on the final years of Elementary School and High School.

According to Sá and Maués (2024), this scenario is not restricted to the Brazilian context. At the international level, there is also a predominance of research in the more advanced segments of schooling. However, since the 1990s, different documents and curricular proposals have sought to reaffirm the importance of ensuring the teaching and learning of science from childhood, recognizing that this initial stage is equally fundamental for the scientific training of subjects.

International research also shows that science teaching occurs sporadically when compared to subjects such as Portuguese Language and Mathematics (Blank, 2013). In the early years of elementary school, less than 10% of instruction time is usually allocated to this field (Engel et al., 2023; Trygstad et al., 2013). In addition, the literature specialized in Science Education also points out that this absence is largely related to the lack of confidence of many teachers to teach science. Researchers argue that the limitation in the mastery of scientific concepts compromises the safety of teachers and directly influences their pedagogical practice (Loughran; Mulhall; Berry, 2004; Traianou, 2006; Roth, 2014). Thus, professional insecurity tends to be reflected in a lower emphasis on working with science in the early years of elementary school.

In the context of the training of pedagogues, authors such as Lima and Maués (2006), Maline et al. (2018), Maués et al. (2023) and Sá and Maués (2024) denounce what they call the belief in the teacher's content deficit model that:

considers that the little time dedicated to teaching and learning science in the early years is due to the fact that teachers have limited knowledge of science content. This belief has as its background the debate about the profile of the most suitable teacher to teach science in the first years of Elementary School, pedagogues or specialist



teachers. Assuming that a good knowledge of science content is a necessary condition for teaching science to children. Such discussion ends up affecting the conceptions of training of pedagogues in sciences that work both in the first years of Elementary School and in Early Childhood Education. (Maués et al., 2023, p. 48).

According to these authors, the belief in the content deficit model still has a significant impact on the training of pedagogical teachers and on investigations into their teaching practice. This view usually limits teacher training to the simple compensation of lack of scientific knowledge. Such logic is criticized for not only reinforcing the idea of the ineffectiveness of science education in the early school years, but also for sustaining training practices and teaching materials that are based on the premise that it is necessary to "correct" the knowledge of pedagogues. In addition, they point out the inconsistencies of the model when applying conclusions from studies carried out with high school specialists to generalist teachers in the early years, without clarifying which would mean having a proper understanding of science for this situation. This creates an incessant cycle of demands, where it is always assumed that there is a lack of content, endlessly increasing the requirements for initial and continuing education (Maués et al., 2023).

These researches produce relevant reflections for teacher training, defending a perspective that recognizes teachers and their knowledge, adopting a broader approach to training needs and criticizing the content deficit model. However, they still show themselves in a predominantly rational way, focusing on the development of investigative and analytical skills, but paying little attention to the affective, aesthetic and enchanting aspects that could bring the teacher closer to science in a more sensitive and inspiring way.

2.2 THE CLOWN AND EDUCATION

At its core, the clown represents both the vulnerability and the imperfection of the human being. Their slips and mistakes are not just elements of humor, but reflections of an experience that is universal: that of learning and transforming from our mistakes. It is precisely in this failure that we identify ourselves, since it reveals the fragility and inadequacy that constitutes us. By exposing what is most laughable in us, the clown touches the deepest essence of the human condition, which is the fragility of life. With genuine innocence, he navigates the unexpected and transforms small everyday gestures into great achievements, making simplicity a form of greatness.

Although he is often reduced to the image of a simple entertainer, whose role is to make people laugh to soften the harshness of life, the art of the clown is much more than that. Those who surrender to understanding their language realize that the laughter they generate comes from an attentive reflection on their own life. The clown represents what we often try to hide: the complexity of our emotions and the tension between joy and pain. He does not allow himself to be trapped by the social norms that stifle us, but remains receptive to the totality of human experience. Its power lies in not submitting to the standard, but in fully embracing its own inadequacy, transforming itself into an authentic mirror of human reality.

The modern clown is a portrait of human inadequacy in a world that has become mechanized. His melancholic representation, gestated in the heart of the Industrial Revolution, is that of the man who has lost his place. Coming from the countryside to the city, he became the stranger, the unemployed, the vagabond, the one whose worth was measured only by his productivity, a gift he lacked. His appearance is a visual testimony of his displacement: a pile of other people's patches, colors that scream with dissonance, and huge shoes, which are not his, prevent him from even walking with dignity. He is the personification of the 'outsider', the one who, because he cannot adapt, is forced to transform his own misery into a spectacle, offering his failure as a gift of laughter to the audience (Bolognesi, 2003).

Clowns play a variety of roles in society, performing in different contexts, such as circuses, streets, theaters, rodeos, hospitals, nursing homes, orphanages, conflict zones, refugee camps, disaster regions, and wars. Some, such as Hotxuá, a shaman of the Krahô ethnic group of Indians from northern Tocantins, play specific roles in sacred rituals, promoting harmony and balance in the villages. Despite the diversity of their roles, it is notable that clowns' visits to schools usually take place during children's week. This raises questions about why the clown's presence is often viewed with hesitation in schools.

Larrosa (2010), when discussing the comic and laughter, questions why there is so little laughter in the educational field, both in pedagogy, understood as a discourse about education, and in the educational institutions themselves. For the author, this situation originates in the simultaneously moralizing and excessively optimistic discourse of pedagogy, a perspective that tends to be incompatible with the detachment inherent to laughter and the comic. In this context, the teacher's discourse is commonly associated with a rational, virtuous and normative attitude, which often leaves no room for doubt, enchantment or vulnerability. It is in this gap that, therefore, the figure of the clown and his characteristic hesitation are inserted.



When we think about the approximations between education and clowning, it is not a matter of imagining that teachers should enter the classroom as clowns, nor of directly adapting their practices to teaching. Its meeting point is deeper, in the way of looking. To be a clown is to relearn to see the world as if it were the first time, with childlike eyes that are surprised by science and nature. It is to let yourself to touch through naivety, to cultivate admiration, to open oneself to the game and play that bring teacher and child closer. It is accepting improvisation and failure, welcoming empathy and walking courageously through the spaces of discomfort that teaching and learning require. In this spirit, education also becomes an act of enchantment and wonder.

The methodological path of this work is based on the qualitative approach, with emphasis on self-study. According to Loughran (2004), this perspective gained strength from the 1990s onwards, when teacher educators began to investigate how their own practices influenced the learning of future educators. By researching and publishing about their work, these professionals sought to value their role as producers of knowledge, record the complexity of their practice, and question assumptions consolidated in teacher training. In this sense, self-study, which initially emerged as a form of "internal investigation", has become a field of research that admits and values the knowledge of trainers, both in the direct context of practice and in the broader organizational and structural scenarios in which their work is inserted.

Considering the diversity of uses of self-study in teacher education research, this article elects the Narrative of Lived Experiences as a strand of self-study to be investigated. From this perspective, the narrative report is an act of reflection in which the subject, when revisiting his experience, seeks to produce knowledge. As Lima, Geraldi and Geraldi (2015) define it, this knowledge emerges by "extracting lessons that are valid as knowledge produced a posteriori, resulting from the clash between experience and theoretical studies carried out after the narrated experience" (p. 19).

For the generation of data, the research is based on the reflections and narratives of one of the authors of this work, recorded in his class notebooks of the discipline Methodology of Natural Sciences, taught in the fourth period of the Pedagogy course at a public university throughout the year 2023. Although the focus falls on the formative experience of a single teacher-researcher, the analytical process assumed an essentially collaborative character, sustained by the continuous dialogue between the co-authors and the joint analysis of the narratives. As LaBoskey (2004) and Samaras (2011) argue, self-study, even if it has individual

practice as its starting point, gains in validity and interpretative depth when developed collaboratively, with the participation of critical peers who accompany, question and enrich the reflection on what has been experienced. Thus, the co-authorship in this article is justified by the collective construction of the analyses and by the theoretical-methodological contribution of all those involved in the process of systematization and interpretation of the narrative data. The object of investigation is the construction of a clown presentation developed in the discipline, analyzing its relations with the training of future pedagogues and with the principles of Science Education.

As for the procedures, the research followed the stages of an initial dialogue, in which the professor-researcher who experienced the experience discussed his records and impressions with the other co-authors. Based on this exchange, he elaborated a descriptive narrative of the experience, which was shared with the group. This initial narrative was then submitted to a collaborative analysis, being discussed collectively in the light of the theoretical references of self-study and teacher training. Finally, from the insights generated in this process, a final reflective narrative was produced, in which the analyses, understandings and lessons collectively constructed from the investigated experience are made explicit. It should be noted that, although the narrative presented in the next section is written in the first person, it is, in essence, the consolidated product of this collaborative interaction between all the authors of the investigation.

4 ANALYSIS OF THE EXPERIENCE

My experience with clowning began in 2006, when my daughters were still young and I was looking for new ways to play and learn from them. At that time, I began to participate in various workshops, watch plays and attend festivals. I bought the clown nose and shoes, and so the clown Watermelon was born. Always very rational, I used to be, and still am, the worst student in the workshops, due to a difficulty in improvising. My body remained stuck, often without grace or expression. Embarrassments and failures were frequent, but I understood that, if failure is one of the clown's trademarks, perhaps I was on the right track.

During this period, I read several books on the subject and noticed similarities between children's thinking and clown thinking: the fantastic and syncretic character, the presence of animism, artificialism, finalism, egocentrism and unusual solutions to problems. These characteristics inspired me, in 2007, to prepare a short presentation integrated with a class in the pedagogy course of a college particular. At the time, I considered this experience



extremely positive, being probably the best experience of the course. However, I could not continue, since I only had that opportunity to teach the discipline and, with that, life took me down other paths.

In 2018, I started teaching in the disciplines of Science Teaching Methodology in the pedagogy course at a public university. The course has three disciplines in this area. The first, offered in the third period, mainly addresses the genesis of scientific concepts in childhood, as well as notions and practices of Health Education. The second, taught in the fourth period, mainly discusses the methodological trends of Science Education. Finally, the last discipline, in the sixth period, focuses on evaluation in the teaching of Science, teacher training and topics related to environmental education and sustainability.

In the first semester of 2023, when teaching classes for the fourth period of the course, I register in my notebook a concern that had accompanied me for some time about the training of pedagogues:

In methodology classes, I seek to offer theoretical support and strengthen the students' self-confidence, since many arrive at the course insecure to teach science content. Over time, I notice that this perception changes: they begin to recognize the value of experimental activities, to explore argumentation and investigation, in addition to approaching socio-scientific issues. Still, I realize that there is a feeling that teaching science requires excessive effort and that it is easier to prioritize the mother tongue and mathematics. I feel that my approach, which is very rational, does not touch their hearts. I think that it is necessary to rethink training from other perspectives, based on strategies that awaken enchantment, create mystery, surprise and reveal the beauty of science. Perhaps in this way, they can realize the value of teaching science.

What I perceived was more intuitive, coming from my experience as a trainer. I realized, for example, that inquiry, with its whole set of practices such as observing, classifying, arguing, analyzing data, etc., was often approached without any connection to what students felt when learning. In fact, science teaching is still, for the most part, thought of as a purely cognitive process, without considering aspects such as the mystery, surprise, and enchantment that a phenomenon or a scientific experience can generate.

This gap became a constant source of unease for me. Although I had an urgent need to address it, I had no theoretical basis for discuss this topic and did not know how to proceed. I was sure of one thing: I considered it essential that my students, who would one day be teachers, not only experiment with investigative approaches, but also experiment aesthetically with science and cultivate a true enchantment for it. He believed that only by



integrating these dimensions would they be able to cultivate the self-confidence and motivation indispensable to teach science to children.

The search for a more human and aesthetic dimension of science education, however, encountered concrete challenges in the institutional environment. The unit in which I work has gone through difficult times during this time. The course's Pedagogical Political Project was reformulated and the changes significantly affected the teachers' routine, which generated heated debates and a troubled atmosphere.

The pedagogy course was until then guided by the principle of an integrated and interdisciplinary training, which was based on the investigation of practice. This model was materialized in components such as the Pedagogical Integration Activity, taught collectively by all teachers during the period, and in weekly meetings dedicated to the study of themes common to disciplines previously articulated in the curriculum. This structure fostered constant collaborative action, with teachers teaching classes in pairs or groups throughout various moments of training. Despite its innovative character, the model required a high number of professors for its operation.

In 2023, external pressures resulted in a curricular reform that suppressed these integrative and interdisciplinary activities. As a consequence, there was a reduction in the workload of many teachers, and some requested removal to other units, in an exhausting process for the collective. It was in this climate of instability that, at the beginning of the second half of 2023, I recorded in my notebook a reflection that translated my feeling in the face of the situation:

The imposed changes start classes, empty schedules, silence voices, leave teachers adrift. Even so, there are those who defend them. Going to college is no longer exciting. The runners weigh down, the faces get tired. Teaching, which has always been my shelter, became a shadow. I can't stay like this. They may try to take everything away from me, but they will not take away from me the desire to be a teacher.

At this difficult moment in the profession, when discouragement was already setting in, my daughter, who had started a technical course in circus arts, commented on the clown workshop in which she had participated. When I showed her my clown books, I began to leaf through them and, during our conversation, rereading marked passages, the presentation I made to my students in 2007 came to mind. In my lecture notes, I recorded:



... I can't continue with this feeling of discouragement. I think the best thing to do is to get involved with new projects. Every time I went through something similar, the classroom was always my way out. Perhaps clowning is a path. I can go back to the 2007 presentation, at the time, it had very interesting aspects to work with the students on children's thinking. The clown, as a comic figure, is an unusual response to everything that happened. I'm going to put my nose on red, bring humor, irony and laughter to the classroom, discuss the training and teaching of science from other perspectives and, who knows, transform my misery into joy. The challenge is figuring out how to do it!

So, I resumed my studies in clowning and began the creation of a show that combined classical numbers, scientific experiments and some magic tricks. It took me approximately a month and a half to put together the presentation, doing an in-depth research on YouTube about clowns like Márcio Libar, David Larible, Avner Eisenberg, Gardi Hutter, Oleg Popov and many others. Throughout the process, I realized that I should be careful not to transform clowning into something purely instrumental, emptying its meaning and reducing its language to a mere technique or tool at the service of an educational end. In this context, clowning could not be subordinated to education or science teaching, but rather be recognized as a dialogue partner, capable of revealing dimensions and raising issues that previously went unnoticed by me.

In the performance, the clown Watermelon alternated between playing alone with his props and experiments and inviting audience members to join him. In the planning, I sought to emphasize magical thinking, creative solutions, ingenuity, discovery and the playful aspect of the game. Understanding that the clown's essence is intrinsically linked to his "inner child", I thought of Watermelon as a boy who would like to share with the audience his magic tricks, his unusual scientific inventions and his curiosity about the world. At the same time, I added to the presentation the trampling, clumsiness and frustration typical of clowning.

The experiments used had strong visual appeal with unexpected results, many of them being common in clown or magician acts. An example was the trick of pulling the tablecloth without knocking over the objects. To do this, Melancia called four students with cell phones. Three were seated, facing the audience, and had their devices placed on the table. The fourth student was invited to film the scene. The clown asked the audience to count to three and looked at the students, implying that he would pull the towel. When the audience shouted "already!", Melancia did not pull, generating momentary relief in the students. However, by surprise, he quickly pulled the towel, keeping the cell phones intact on the table.

Another experiment was the nail chair. The master of ceremonies presented the clown Watermelon as a great knife-swallowing fakir. As there were no knives, Melancia swallowed a "spaghetti" balloon and then called someone from the audience to sit on a chair covered by a cloth. When he removed the cloth, he revealed himself to be a chair of nails, posing the question: who would risk sitting down first? The clown, seized by fear, hesitated in the face of the challenge.

We also used the famous experiment of the four benches, quite recurrent in clown performances. In this number, Melancia said that he would demonstrate his powers of hypnosis. Four people were called to the stage and positioned on benches so that each one lay on the other's lap. Then, the clown removed the benches, leaving the group suspended, supported only by the human structure in balance.

These were some examples of the experiments incorporated into the presentation, which we seek to describe here so that the reader has an idea of how they were explored on stage. In the figure below, we present the number of the four banks.

Figure 1

Number of the four banks



Source: researchers' personal archive

The presentation lasted approximately forty minutes. To create expectation, he told the students that he would invite a former student, the clown Melancia, who would do a number and then a lecture on the dialogues between education and clowning. When I arrived in character, the surprise was immediate and had a great impact. The lecture itself was a process that required prior study and revealed to me that clowning opens up a range of relational possibilities, the complexity of which would require a more in-depth investigation, both from the point of view of the teacher-researcher and the clown. Throughout this process,



several concerns have emerged, many of which still need to be answered, while others manifest themselves only as intuitions or initial ideas.

In the lecture, I sought to share these issues with the students, hoping that a collective dialogue could, later on, contribute to the construction of more consistent arguments. I laid out the motivations behind the presentation, explored the comic figure of the clown, his origins and essential characteristics, and proposed possible connections between clowning and education. To instigate reflection, I raised concerns such as: What is the role of humor and comics in the school environment? How can the clown help us to reframe the error in the educational process? What resonances exist between the thought of the clown and the children's universe? Considering that interactions and games are guiding axes of Early Childhood Education, could the clownish logic inspire new understandings for the pedagogical practice of teachers? And, going further, how can it foster a more sensitive listening and a pedagogical relationship based on the ability to affect and be affected? Finally, and possibly the most instigating: would it be feasible, under the guidance of the principles of clowning, to imagine a teacher training that not only recognizes, but also embraces the fragility of the educator, converting their failures into instruments of learning and strengthening of human relationships? I wasn't a clown of the best. At first, Melancia was a little shy and blushing, but as time went by, he adapted and managed to make some people smile and laugh. As the audience was familiar, everything went smoothly and no one left the performance. Then, I started the class talking about the origin of the clown, his role in society and explained to the students the reasons that led me to make that presentation. I detailed the entire preparation process, showing how the comic numbers related to the ideas I wanted to discuss.

The students asked me how I performed certain actions, such as swallowing the balloon or taking off the towel without letting the cell phones fall. I took advantage of this moment to explain that I had chosen tricks based on scientific principles. In addition, I showed that, in situations where there were no experiments, the numbers served to illustrate how the clown's thinking and feelings resemble those of children. Some students commented on the importance of hearing about class planning, as this made my actions, justifications and choices clearer, something that, according to them, teachers usually do not make explicit when planning their activities.

I went on to discuss the themes I had prepared, addressing vulnerability and failure in the art of the clown. I commented on how teacher training emphasizes reflection and success



stories, but little is said about failure. I mentioned that, in the first years of their careers, a large number of teachers leave the profession or face serious difficulties due to what Huberman (2000) calls the "reality shock".

From then on, I began to narrate my own cases of failure in teaching, emphasizing that such experiences are common to all teachers. I stressed the importance of discerning, in these situations, what is the responsibility of the educator, the students or the institution. Throughout the class, I noticed that some students were visibly moved in three different moments. The participation was intense: they asked questions, shared comments and many mentioned that they started to see the figure of the clown in a totally new way. In the end, they thanked me for the class.

As a teacher, I left there very happy, with a clear feeling of accomplishment and, at the same time, taken by a certain perplexity in the face of the depth of the experience. Soon after, I recorded in my class notebook:

I need to understand what that was... I'm impressed. The class felt like a catharsis. I've had good classes, very good indeed, but nothing like today. The energy was different, an intense exchange, a strong connection with the group. Melancia helped, of course, relaxed, made the students happy, light... But it wasn't just that, it can't have been just that. What did I do differently? What happened there to make them so emotional, so connected in class?

After reflecting on the episode, I understood that Melancia highlighted my own vulnerability. At that moment, I did not present myself with the symbolic authority of the teacher's toga, but with the threadbare cloak of the vagabonds, the hat of jester's bells and the clown's red nose (LARROSA, 2010). By assuming and sharing his fragility, the clown establishes a bond of empathy with the audience. In this process, failure is re-signified as a possibility of success, and vulnerability and foolishness are constituted as mediating elements of the relationship with the other.

As a teacher, we often seek to hide our vulnerabilities. In academic culture, there is a tendency to maintain a certain distance between those who teach and the act of teaching itself. Although the educational field values multiple forms of knowledge, a cult of objective knowledge, associated with reality, to the detriment of subjectivity, still predominates. In this scenario, teachers see objective facts as something pure, while feelings are viewed with suspicion and considered impure. The "I" is rarely recognized as a source of exploitation, being treated more as a threat to be eliminated. For this reason, teachers often hide their



vulnerability, try to be bulletproof, cloister themselves in a virtuosity of knowledge by distancing themselves from their students. Today I realize that on that day, Melancia, both in the presentation and in the class that followed, made it possible for the teacher to reveal all his vulnerability and establish a connection with the fragility of the students.

Vulnerability is a central element in both teaching practice and the art of clowning. Palmer (1998, p. 17) defines it as a "daily exercise" in the context of teaching, emphasizing that the teacher's exposure to the students does not represent fragility, but a necessary condition for the construction of bonds. Similarly, in the artistic field, the clown's vulnerability sustains the close relationship with the audience. In both cases, it is configured as a resource of strength and authenticity, capable of deepening the connection with the other. However, unlike clowns, we teachers are still, at many times, reluctant to demonstrate our vulnerability to students. We often prefer to exercise control over the teaching-learning process to reinforce an image of competence and expertise. In the face of this stance, Brown (2015) offers a powerful perspective, considering vulnerability as:

Vulnerability is not knowing about victory or defeat, but understanding the need for both; is to get involved. It is to be completely dedicated. Vulnerability is not weakness, and the uncertainty, risk, and emotional exposure we face every day are not optional. Our only choice is a matter of engagement. Our willingness to take on and interact with our vulnerability determines the depth of our courage and the clarity of our purpose; the level to which we protect ourselves from being vulnerable is a measure of our fear and disconnection (BROWN, 2015, p.2).

In this episode of life, marked by a troubled moment full of professional uncertainties, the clown Watermelon taught me that vulnerability can be a great gift for genuine connection. Education, after all, is always situated at the dangerous intersection between personal and public life. When teaching classes, we are permanently exposed to student evaluations and judgments. For this reason, we usually rely on our intellectual authority and our didactics to win their trust. However, the clown presented us with other paths: the courage to be vulnerable, to welcome and to meet the other in their difference. The clown showed that all of us, teachers and students, share this vulnerability and have maladjustments in relation to life, time and the world. Thanks to her example, I was able to establish a closer and truer relationship with my students, and these teachings were recontextualized throughout the semester.



During this class, the students made a relevant observation that, until then, had gone unnoticed by me: the explanation of the process of class construction and presentation. In teacher training, teaching is often conceived as a self-explanatory process. Methodologies, strategies, learning theories and educational themes are usually presented, but the act of teaching itself is rarely made explicit. In general, the principles, reasoning, mediation strategies, paths and justifications that pedagogically support the teachers' choices are not socialized with the students. Although the importance of reflection on practice is affirmed, little is effectively taught about how to reflect, nor is a reflection built in a shared way with students about the activities carried out in the classroom (LOUGHRAN; RUSSELL, 2007). This was another lesson we learned in this episode: the need to make my teaching more transparent to the students, an aspect that currently constitutes one of the central axes of my pedagogical practice.

5 FINAL CONSIDERATIONS

We believe that the experience that the teacher-trainer had as a clown Melancia went far beyond a playful activity or a different pedagogical strategy. It represented a milestone of rupture and discovery about the

The essence of the educational relationship, with lessons that have become permanent and have come to guide its practice. Among them, three stand out as the most central.

The first lesson was to understand that vulnerability should not be seen as a weakness to be hidden, but rather as a strength that deserves to be shared. The professor-researcher, by presenting himself as Watermelon, without the "symbolic toga of the teacher", revealed his vulnerability, his fear of not succeeding and his lack of ability. Unlike the academic posture that, in many cases, preserves an image of unshakable wisdom, this authentic exposure did not diminish her authority, on the contrary, it created a connection of empathy and trust with the students. They related not to a "perfect" teacher, but to a real human being, who, like them, also makes mistakes and feels insecure. Genuine connection, based on daring to be vulnerable (BROWN, 2015), proved to be a solid basis for transformative learning.

The second lesson stems from a shrewd observation of the students: the importance of making visible the backstage of teaching. It is perceived that, in teacher training, ready-made products are often presented, such as theories, methodologies and lesson plans, without exposing the process that constituted them, including errors, doubts, choices and



untrodden paths. By detailing the process of construction of that class, the teacher demonstrated how to teach, making the pedagogical act an object of reflection. This transparency allowed the students to view teaching not as the mere application of a technical rationality, but as a deliberate practice, constantly rethought and based on criticism. Experience has thus shown that the trainer should aim not only to instruct future teachers, but to act as a teacher of teachers, one who unveils the complexity and deliberations inherent to the profession, forming autonomous professionals with their own thinking.

Finally, the third lesson that the experience has brought us is the confirmation that education is not only about knowledge, but also about feeling, the aesthetic and the relational. Clowning, with its humor, its absurd character and its ability to evoke both laughter and amazement, awakened an aspect that had been forgotten in the rationalist formation of teaching degree courses: that of enchantment. By incorporating the playful aspect, surprise and aesthetics into the classroom, Melancia showed that it is feasible and essential to know both by reason and by heart. This training should

To contemplate, above all, training processes that enable these educators to resume their enchantment with nature, with science and with the world, an essential element in the training of teachers for early childhood education and for the early years, especially with regard to the teaching of natural sciences. Recovering the affective and sensitive face of scientific knowledge is indispensable for future teachers to be able, based on their experiences of enchantment and amazement in the face of natural phenomena, to provoke such experiences in children.

In short, the clown Watermelon taught us that teaching is an act of courage. This courage is present in the openness to vulnerability, in the sharing of the backstage of the educational process and in the search for the formation of the integrality of the being. Far from constituting definitive conclusions, these lessons have been consolidated as guiding principles of a teaching practice committed to being more humane, reflective and transformative.

ACKNOWLEDGMENTS

The present work was carried out with financial support from the Foundation for Research Support of the State of Minas Gerais (FAPEMIG) through the Research Productivity Scholarship Program – PQ/UEMG.



REFERENCES

- Bolognesi, M. F. (2003). *Palhaços*. Ed. Unesp.
- Brown, B. (2015). *Daring greatly: How the courage to be vulnerable transforms the way we live, love, parent, and lead*. Penguin.
- Engel, M., Jacob, R., Claessens, A., & Erickson, A. (2021). Kindergarten in a large urban district. *Educational Researcher*, 50(6).
- Huberman, M. (2000). O ciclo de vida profissional dos professores. In A. Nóvoa (Org.), *Vidas de professores* (2nd ed., pp. 31–61). Porto.
- Laboskey, V. K. (2004). The methodology of self-study and its theoretical underpinnings. In J. Loughran & M. L. Hamilton (Eds.), *International handbook of self-study of teaching and teacher education practices* (pp. 817–869). Kluwer Academic Publishers.
- Larrosa, J. (2004). *Pedagogia profana: Danças, piruetas e mascaradas* (A. Veiga-Neto, Trans.). Autêntica.
- Lima, M. E. C. C., & Maués, E. (2006). Uma releitura do papel da professora das séries iniciais no desenvolvimento e aprendizagem de ciências das crianças. *Ensaio Pesquisa em Educação em Ciências* (Belo Horizonte), 8, 184–198.
- Loughran, J. (2004). A history and context of self-study of teaching and teacher education practices. In J. J. Loughran, M. L. Hamilton, V. K. Laboskey, & T. Russell (Eds.), *International handbook of self-study of teaching and teacher education practices* (pp. 7–30). Kluwer Academic.
- Loughran, J., Mulhall, P., & Berry, A. (2004). In search of pedagogical content knowledge in science: Developing ways of articulating and documenting professional practice. *Journal of Research in Science Teaching*, 41(4), 370–391.
- Loughran, J., & Russell, T. (2007). Beginning to understand teaching as a discipline. *Studying Teacher Education*, 3(2), 217–227.
- Maués, E. R. da C., Sá, E. F. de, Lima, M. E. C. de C., Maline, C., & Vaz, A. (2024). Conhecimentos pedagógicos de conteúdo de professoras ao ensinar ciências para crianças. *Boletim de Conjuntura (BOCA)*, 18(52), 41–68.
- Maline, C., Sá, E. F., & Maués, E. R. C. (2018). Ressignificação do trabalho docente ao ensinar ciências na educação infantil em uma perspectiva investigativa. *Revista Brasileira de Pesquisa em Educação em Ciências*, 18(3).
- Palmer, P. J. (1998). *The courage to teach*. Jossey-Bass.
- Roth, K. J. (2014). Elementary science teaching. In *Handbook of research on science education* (Vol. II, pp. 361–394). Routledge.
- Sá, E. F. de, & Maués, E. (2024). Reflexões de uma professora acerca das tensões de ensinar ciências para crianças. *Debates em Educação*, 16(38), Article e18289.
- Samaras, A. P. (2011). *Self-study teacher research: Improving your practice through collaborative inquiry*. SAGE Publications.



- Traianou, A. (2006). Teachers' adequacy of subject knowledge in primary science: Assessing constructivist approaches from a sociocultural perspective. *International Journal of Science Education*, 28(8), 827–842.
- Trygstad, P. J., Smith, P. S., Banilower, E. R., & Nelson, M. M. (2013). *The status of elementary science education: Are we ready for the next generation science standards?* Horizon Research, Inc.