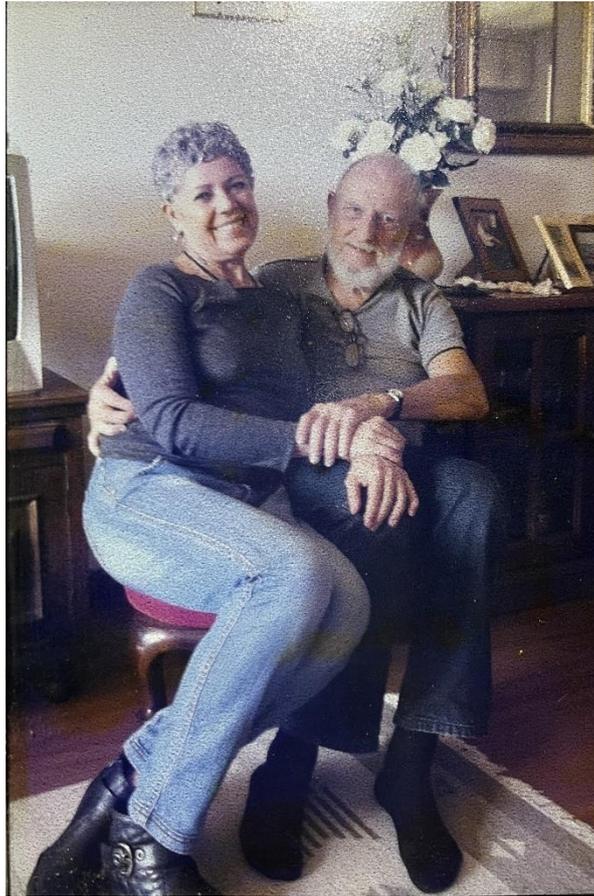


## **ROBERTO RIBEIRO BALDINO (1938–2025): A LIFE OF ENCOUNTER, CRITIQUE, AND UNCOMPROMISING SCHOLARSHIP**



*The “Cabralinos” Roberto Ribeiro Baldino and Tânia Cristina Baptista Cabral.*

### **Introduction**

There are people one gets to know, and there are people one encounters. Roberto Ribeiro Baldino was a man of encounter—someone who could not be simply accommodated into existing frameworks of understanding, who resisted easy classification, and who transformed all those who truly engaged with his work and his person. When news of his passing reached the Mathematics Education and Society community in June 2025, it marked the end of a life lived with extraordinary intellectual purpose, but also the continuation of a legacy that will challenge and inspire generations to come.

Born in Porto Alegre in 1938, Baldino's trajectory was anything but conventional. An engineer by initial training—graduating in Civil and Electrical Engineering from the Federal University of Rio Grande do Sul in 1961—he went on to pursue mathematics at the highest levels: a Master's at Stanford University (1965) and a PhD at the National Institute for Pure and Applied Mathematics (IMPA, 1972) under the supervision of Leopoldo Nachbin, followed by postdoctoral research at the École Polytechnique in Paris. This formation in pure mathematics could have led to a conventional academic career in analysis or functional analysis. Instead, it became the foundation for something far more radical: a lifelong project

to understand the mathematics classroom as a site of political economy, ideological reproduction, and potential transformation.

### **The Cabralinos: A Partnership of Intellect and Life**

No account of Roberto Baldino's work can be separated from his profound collaboration with Tânia Cristina Baptista Cabral. For 44 years, they were partners in life, in research, and in love—affectionately known as "the Cabralinos" by their students and colleagues. Theirs was not merely a professional partnership but a shared intellectual project that produced some of the most rigorous and far-reaching research ever undertaken on the vicissitudes of capitalist schooling.

As Tânia herself writes in her tribute: "Sharing intense daily experiences, outside of socially dictated standards, was the path we carved. Roberto never wavered regarding the ideas he believed in; the consistency of his sharpness was, at times, misunderstood. Were he alive now, he would understand what I am saying and would laughingly agree with me, for he was generous and, despite 'malicious tongues,' he knew how to be fun: Roberto existed 'with his liver' (viscerally)."

Their collaboration was not one of mere co-authorship but of mutual transformation. Together, they developed a theoretical apparatus that drew on Marx, Hegel, Lacan, and Žižek to understand the mathematics classroom—not as an oasis of enlightenment and emancipation, but as a site where students learn the fundamental lessons of capitalist society: the production and appropriation of surplus-value, the internalization of hierarchical evaluation, and the cynical consciousness that allows one to participate in unjust systems while recognizing them as such.

### **Academic Contributions: From Functional Analysis to Political Economy**

Baldino's early career was marked by contributions to pure and applied mathematics. His PhD thesis on "Holomorphic Mappings in Cartesian Products" and his postdoctoral work at the École Polytechnique on integral equations for mixed problems demonstrated a capacity for high-level mathematical research that would later inform his pedagogical innovations. Articles such as "An Integral Equation Approximation of the Mixed Problem for the Laplacian in  $R^3$ " (1981) and "A geometrical proof of Cramer's rule" (1978) show a mathematician comfortable with the most abstract and the most elementary aspects of the discipline.

However, it was his turn to mathematics education—and specifically to the political economy of schooling—that would define his most original contributions. In the 1980s, while at the Federal University of Rio de Janeiro and later at São Paulo State University (UNESP) in Rio Claro, Baldino began to develop what would become his signature approach: treating the classroom not as a neutral space of knowledge transmission but as a site of economic production.

His 1998 article "Solidarity assimilation: school, surplus-value and cynical consciousness" (published in Portuguese as "Assimilação solidária: Escola, mais-valia e consciência cínica") laid out a framework that would guide decades of subsequent research. Drawing on Marx's analysis of the capitalist mode of production, Baldino argued that schools function to produce a specific commodity: qualified labour-power. In this process, students occupy a dual

position: they are simultaneously labourers, engaged in the work of raising the quality of their labour-power, and capitalists, as owners of the commodity in process of increasing value. This double function, Baldino showed, is the source of the fundamental contradictions experienced by students and teachers alike.

### **The School's Credit System: A Radical Critique**

Perhaps Baldino's most enduring contribution to mathematics education is his development of the concept of the "school credit system," building on the work of Shlomo Vinner. In a series of articles co-authored with Tânia Cabral—including "Lacan's Four Discourses and the School Credit System" (1999), "The productivity of students' schoolwork: an exercise in Marxism" (2013), and "The credit system and the summative assessment splitting moment" (2019)—the Cabralinos demonstrated that the system of grading, promotion, and certification is not a neutral mechanism for measuring learning but a fundamental structure for producing and appropriating surplus-value.

As they wrote in their 2013 article: "students are organized into classes and subjected to classification through criteria of evaluation. Certificates are the final prizes. With higher or lower pressure this system is the fundamental organization of schools at all levels and all around the world." The implication is radical: failure is not an unfortunate by-product of schooling but its structural necessity. "In order to perpetuate the process of production/seizure of surplus value," Baldino argued, "a certain amount of failure is necessary." Therefore, "failure of students means success of the institution."

This analysis cuts through the pious rhetoric that pervades educational discourse. It reveals that the preoccupation with "inclusion," "equity," and "social justice" that characterizes so much contemporary research in mathematics education is, in Baldino's terms, an attempt to "squeeze water from stone"—to save assessment from the logic of promotion, to make the credit system fair while leaving its fundamental structure untouched. The question that haunted Baldino, and that he posed relentlessly to his colleagues and students, was simple and devastating: Is it ethical to fail a student? And if not, why do we continue to participate in a system that requires failure?

### **Recent Projects: Political Epistemology and the Hegelian Legacy**

In his final years, even as his physical strength waned, Baldino's intellectual productivity continued unabated. His last project, "Political epistemology in mathematics education," initiated in 2019 and ongoing until his passing, sought to deepen the theoretical framework he had developed over decades. Drawing on the "Hegel-Marx-Lacan system," the project aimed to understand: (i) the teaching of mathematics as a practice that inserts subjects into the "identity-quilted speech" community of Mathematics; (ii) learning as an observable representation of the subject through a signifier not yet evoked; (iii) the learning process and its link to anxiety; and (iv) mathematics education as a practice of "teaching/learning amalgamation under permanent reflection."

This project produced some of his most sophisticated work. His 2020 article "Hegel and the mathematical community: a left-side history," published in the *Qualitative Research Journal*, offered a reading of Hegel that situated the development of mathematical knowledge within the broader context of class struggle. His contribution to the "Dialogue on Dialectics," completed just weeks before his death and scheduled for publication in the *Philosophy of*

*Mathematics Education Journal*, showed a mind still sharp, still engaged, still fighting "the good (intellectual) fight to the end," as Paul Ernest would later write.

The project "Epistemological paradigms and the mathematical training of engineering students" (2016–2019), conducted at UERGS where Baldino taught until illness forced him to step back, exemplified his commitment to bringing high-level philosophical reflection into the undergraduate classroom. Starting from the "current epistemological crisis raised by the results of quantum mechanics," the project examined paradigm shifts in the history of science and asked: "What role do debates on epistemological crises and paradoxes of scientific development play in the formation of the mathematical thinking of engineering students?" This was Baldino at his best: refusing to separate the teaching of calculus from the deepest questions about the nature of knowledge and reality.

### **Fearless Approach: The Scholar Who Would Not Compromise**

Throughout his career, Baldino was known for his fearless approach to addressing problems in mathematics education. He did not hesitate to name what he saw as the fundamental issues, even when doing so made him unpopular. As Paul Ernest notes in his tribute: "His radical communications sometimes shocked us, but he remained true to his mission of opening all our eyes to injustices that we sometimes unknowingly and ignorantly support."

Peter Gates, recalling his first encounter with Baldino at the first Mathematics Education and Society conference in Nottingham in 1998, describes him as "an earnest Marxist—and there are too few of us around. He was a fervent scholar and never stepped back from making difficult and sometimes controversial assertions. He was a fine example of the dialectic." This fearlessness extended to his engagement with the most challenging theoretical traditions. Baldino brought Lacanian psychoanalysis into mathematics education at a time when such a move was virtually unheard of. Articles like "The drive in a case of special difficulty in calculation" (1994, with Tânia Cabral) and "Lacan's four discourses and mathematical education" (1999) demonstrated an extraordinary capacity to operationalize complex psychoanalytic concepts for the analysis of classroom dynamics. His concept of "situations of psychological cognitive no-growth" (2005) drew on Lacan to understand moments when learning becomes impossible—not because of cognitive deficit but because of the structure of desire and the position of the subject in the discourse of the school.

One colleague, reflecting on Baldino's legacy, wrote: "Roberto was a great critical academic who could see through the propaganda of, and the indoctrination perpetrated by the corporate media. In times when we are increasingly faced with the onslaught of fascist, racist, and genocidal oligarchies on whatever is left of democratic institutions or humanity, Roberto was vocal about the core issues, and its impact on education in general (and mathematics education in particular). Among his many contributions, his collaborative work on the application of dialectical methodologies to education research, and the machinations of capitalistic schooling will remain useful for generations of education researchers."

### **The Classroom as Laboratory: Solidarity Assimilation in Practice**

For all his theoretical sophistication, Baldino remained fundamentally a teacher. His pedagogical method, Solidarity Assimilation (SA), was not merely a research interest but a daily practice. At UERGS, in the computer engineering course, he taught calculus, vector calculus, linear algebra, epistemology, and numerical methods—sometimes teaching more than twenty hours per week across two campuses, in his seventies, in a "decrepit university,

not only physically (an old pavilion, with makeshift classrooms where rain enters and without insulation) but also politically."

Alexandre Pais, who visited Baldino and Tânia in Guaíba and observed his classes, provides a vivid portrait of Baldino the teacher: "With a camera mounted on his head, Baldino moves from group to group for an hour and a half, sometimes more, listening to and questioning the students. The wisdom with which he poses questions is the result of a life teaching mathematics and listening to the discourse of students. In proper psychoanalytic style, Baldino does not explain; rather, he poses and provokes, positioning the student in a position of learning. It is up to the student to discover their own path, their own learning. In SA, students are led to learn; there is no other possibility of passing."

The method was not always comfortable for students. Some reported feeling frustrated when their questions were met with further questions rather than answers. Others missed the security of traditional exposition. But as Pais notes: "The idea I formed is that students, once the initial resistance to a method so different from traditional teaching is overcome, appreciate his classes and feel that they learn through their work. Even more critical students recognize the rigor and correctness with which Baldino works in class."

What distinguished Baldino's teaching was its complete transparency. Every day, an updated spreadsheet with all the quantifications of student work was made available. At any moment, students knew their current grade and what they needed to do to pass. This was not assessment as a mysterious judgment handed down from on high, but assessment as a visible record of labour—labour that, if performed, would lead to learning.

### **The International Center for Research in Mathematics Education of Guaíba**

In his final years, Baldino and Tânia's home on Rua das Pedras Brancas in Guaíba became a kind of informal research center—what Alexandre Pais, only half-jokingly, calls "the International Center for Research in Mathematics Education of Guaíba" (CIPEMG). There, visitors from around the world would find a library of thousands of books: mathematics and mathematics education, of course, but also philosophy (the complete works of Hegel in multiple languages, the postmodern tradition, Wittgenstein, Badiou, Foucault), political economy, psychology, psychoanalysis, history, sociology. "There is simply no substitute for engaging directly with Baldino and Tânia's texts," Pais writes, "and experiencing firsthand the intellectual brilliance and political significance of their work—work which, I believe, time will only render more significant."

It was here that younger scholars came to encounter Baldino—not merely to know him, but to be transformed by him. Pais describes a conversation that lasted from afternoon until past midnight, fuelled by wine and the intensity of intellectual resonance: "Two spirits, incarnated in this life, encountered each other again. I will keep this conversation with Baldino as proof that eternity can fit within a life, in this case, within a single day, infinitely more special to me than the day of the defence itself."

### **The Legacy: Questions That Remain**

What did Roberto Baldino leave us? Not answers, primarily—though his work provides the most rigorous analysis we have of the political economy of schooling. What he left us are questions: questions that cannot be comfortably accommodated within the existing

frameworks of mathematics education research, questions that demand we examine not only our practices but our desires.

Why is it that in a class of thirty students there will always be some who fail? Why do students develop strategies to pass without learning, often with the complicity of teachers? Why must teachers assign numbers or letters to students at the end of each year? What do people actually learn in schools?

Baldino's answer to this last question was radical and uncompromising: students learn to participate in—and accept—the conditions underlying the production and appropriation of surplus-value. They learn that their labour can be appropriated by others. They learn to base their decisions not on knowledge, argumentation, or principles, but on the gains or losses those decisions will bring to their lives. They learn to be silent when confronted with unjust practices. They learn to decide not with their brains or hearts, but with their guts.

This is not a comfortable lesson. It is not a message that educational researchers, policy makers, or administrators want to hear. It is much easier to fantasize about an education that empowers people to become active members of society, that promotes equity and inclusion, that prepares students for the challenges of the twenty-first century. Baldino's work refuses these fantasies. It insists on looking at what schools actually do, not what we wish they would do.

As Colin Rittberg notes, referencing the work of Neil Levy: "when we find a conclusion to be unpalatable, we engage in intellectual contortions to reject it." The school's credit system is one such unpalatable truth. Throughout their careers, the Cabraldinos challenged us to confront it. It was never a pleasant sight—and many felt disturbed by their interventions. Rather than engage with their ideas, some chose to ignore them or resort to personal attacks, substituting political and intellectual confrontation for ad hominem arguments. But for those who did engage, who allowed themselves to be encountered by Baldino's work, the transformation was irreversible. As Alexandre Pais writes: "I decided to follow the axis of evil and I decided to come to Guaíba. And that transformed me, irreversibly."

## **Final Days**

Roberto Baldino maintained his intellectual productivity to the very end. His last contributions to the "Dialogue on Dialectics" were made on June 1, 2025—just weeks before his passing. He was, as Paul Ernest notes, "still very active this month fighting the good (intellectual) fight to the end." He was a lucid thinker, "maintaining his intellectual productivity to the very limit allowed by the sunset of his life," Tânia writes, "a fact reported by colleagues with whom he debated philosophy until the eve of his passing." Tânia was with him until his final breath. "With a heavy heart and amidst tears," she writes, "I drew strength from my core to remain by his side until his final breath in the hospital bed, a life shared until the fading of a soul's brilliance."

He perceived himself, she notes, as "weary of fighting that inevitable enemy, death"—an enemy that, as Don Juan taught in Carlos Castaneda's *The Teachings of Don Juan*, every warrior must eventually face.

## **Conclusion: A Life of Encounter**

Roberto Ribeiro Baldino was not a man who could be known in the ordinary sense of the word. To know someone is to incorporate them into what we already know, to accommodate them to our existing frameworks, to mortify them into significance. Baldino resisted such mortification. He was, for all who truly engaged with him, an encounter—an obstacle to comfortable understanding, an opportunity for transformation.

His legacy is not a set of propositions to be memorized or techniques to be applied. It is a challenge: to look at the mathematics classroom without illusion, to recognize the structures of exploitation that shape it, and to ask the questions that no one wants to ask. It is an invitation to class struggle in mathematics, as the title of his last published article put it—an invitation to recognize that the classroom is a political space, that teaching is a political act, and that neutrality is complicity.

As Paul Ernest wrote in his farewell: "Farewell Roberto, master, guide, colleague, conscience, who contributed both from your intellect and your heart. We miss you, irreplaceable you, and will remember your generous heart, penetrating intellect and dauntless spirit."

Alexandre Pais, writing from the solitude of a Portuguese convent where he had retreated without knowing why, understood upon receiving the news: "I came here to mourn Baldino's passing—and to celebrate his life. To you, dear Baldino, who taught me so much and changed my life forever. Until death brings us together again."

Tânia Cabral, his partner for 44 years, writes simply: "This is a glimpse of Roberto forever. What is declared here is a sketch of a tribute to this man who leaves behind an eternal longing (saudade); the rest is nothing but rumour."

The rest is nothing but rumour. What remains is the work—dozens of articles, chapters, and books; generations of students and supervisees transformed by his teaching; a theoretical apparatus that will continue to illuminate the dark corners of mathematics education for years to come. What remains is the example of a life lived with coherence, with courage, with an unwavering commitment to truth-telling. What remains is the encounter.

Roberto Ribeiro Baldino is survived by Tânia Cristina Baptista Cabral, by his students and colleagues around the world, and by a body of work that will continue to challenge, provoke, and transform all those who have the courage to engage with it. He was, and remains, irreplaceable.

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*Born in Porto Alegre, Brazil, in 1938. Died in Guaíba, Brazil, in June 2025. Teacher, researcher, Marxist, dialectician, Cabraldino. He existed with his liver. He will not be forgotten.*

## APPENDIX

### Messages for Roberto

Paul Ernest

*Sad loss of Roberto Ribeiro Baldino and other major colleagues*

Dear Colleagues,

This has been a difficult year with the loss of several important and wonderful mathematics educationist colleagues.

We have just lost dear Roberto Ribeiro Baldino who maintained his professional and political integrity and activity to the end.

Sadly, we also lost Ole Skovsmose and Julian Williams earlier this year.

In the Philosophy of Mathematics Education Journal No. 42 (January 2025), proudly dedicated to Ole Skovsmose before his death, we also carried one of Roberto's (The Cabralino's) most recent publications Roberto Ribeiro Baldino and Tânia Cristina Baptista Cabral *Hegel's dialectics as an invitation to class struggle in mathematics* See <https://sites.exeter.ac.uk/pmej/pome42/>

Over the course of the year Roberto participated with a dozen others in A Dialogue on Dialectics which is now complete and will be published in Philosophy of Mathematics Education Journal No. 43 (Target publication date March 2026).[ed. This issue.] Julian Williams was also part of this dialogue. Roberto made his last contributions to this dialogue on 1 June 2025, so he was still very active this very month fighting the good (intellectual) fight to the end.

He was a tireless campaigner for justice for the oppressed, and for shining a light on some of the atrocities being committed around us. We will deeply miss his committed scholarship, his very productive partnership with Tania Cabral in research and life, his forthright and heartfelt contributions. His radical communications sometimes shocked us, but he remained true to his mission of opening all our eyes to injustices that we sometimes unknowingly and ignorantly support.

Farewell Roberto, master, guide, colleague, conscience, who contributed both from your intellect and your heart. We miss you, irreplaceable you, and will remember your generous heart, penetrating intellect and dauntless spirit.

Paul Ernest

Emeritus Professor, Education, Exeter University, Exeter, EX1 2LU, UK  
Homepage <https://sites.exeter.ac.uk/pmej/> for The Philosophy of Mathematics Education Journal.

Peter Gates:

I first encountered Roberto when he attended and gave a paper at the first MES (MEAS at the time) conference in Nottingham 1998. "School and surplus value. A contribution from a third country" ( I still have a Word version of that paper if anyone wants a copy). [Ed.: Included in this issue.]

He always struck me as an earnest Marxist - and there are too few of us around. He was a fervent scholar and never stepped back from making difficult and sometimes controversial assertions., He was a fine example of the dialectic.

Peter

Dr Peter Gates

School of Education  
University of Nottingham  
Jubilee Campus  
Nottingham NG8 1BB  
Tel: +44 (0)773 0808 353

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Roberto was a great critical academic who could see through the propaganda of, and the indoctrination perpetrated by the corporate media. In times, when we are increasingly faced with the onslaught of fascist, racist, and genocidal oligarchies (such as those in the US and Israel) on whatever is left of democratic institutions or humanity, Roberto was vocal about the core issues, and its impact on education in general (and mathematics education in particular). Among his many contributions, his collaborative work on the application of dialectical methodologies to education research, and the machinations of capitalistic schooling will remain useful for generations of education researchers.

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Farida Khan:

This is very sad news indeed and a tremendous loss to the MES community. Our deepest condolences to Tania, he will be greatly missed

Farida Khan

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Alexandre José

Roberto—or Baldino, as many knew him—was one of the first participants in MES and a foundational figure in Mathematics Education in Brazil. Alongside Tânia, his work profoundly reshaped the way we think about mathematics education as a political practice, inspiring generations of educators in Brazil and beyond. For over fifty years, he dedicated himself to teaching mathematics, continuing well into his eighties until illness required him to

step back. His unwavering commitment to his students and his transformative vision remains unparalleled, leaving a legacy that will endure through all who were fortunate enough to learn from him.

My deepest condolences to Tânia, and love to all of you. Warmly,

Alexandre

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Alexandre Pais:

This year, I decided to spend two weeks of my holidays in a Catholic convent in the north of Portugal, called Convento de Balsamão. Although I hold a deep admiration for all things religious, and although I am Portuguese—thus inevitably marked by the Catholic faith—my decision was not rooted in religion per se, nor was it part of any ritual or personal journey.

In truth, the reason I chose to retreat into the solitude and silence of the convent wasn't entirely clear to me until this past Monday, when Tânia Cabral, my friend and intellectual comrade, sent me a message with the heartbreaking news that Roberto Baldino—her partner in life, in work, and in love—had left this world.

I had just arrived at the convent when I received her message, and in that moment, I understood why my soul had drawn me here months earlier. I came here to mourn Baldino's passing—and to celebrate his life.

To you, dear Baldino, who taught me so much and changed my life forever. Until death brings us together again.

Alexandre

Note: A much longer tribute can be found at <https://xande.substack.com/p/what-do-people-learn-in-schools> It is attached to this document.

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## **What do people learn in schools?**

A tribute to The Cabralinos

JUN 29, 2025

ALEXANDRE PAIS



**The ocean's classroom.** *Beach Scene*, by Winslow Homer, 1869. Carmen Thyssen Collection.

Given the exploitative and oppressive nature of capitalism, one might expect people to categorically reject such a system and revolt against its injustices. Yet, despite the protests, conflicts, and revolutions that have challenged capitalism since its inception, the truth is that it has evolved into a global system—largely supported or unquestioned by the masses. It requires a substantial amount of indoctrination for people to normalise living in such an unjust and exploitative conditions. As Louis Althusser famously argued, schools—and formal education more broadly—are key ideological apparatuses in the constitution and maintenance of dominant ideology.<sup>1</sup>

These apparatuses operate in such a way as to make us believe that capitalist values (and the liberal ethos that underpins them) are congruent with human values and interests. To use Althusser's terminology, we are interpellated—"hailed"—to perceive capitalist values as natural. This naturalisation begins, first and foremost, in schools and through formal education. Through schooling, people learn to accept what would otherwise be hard to swallow. But what, exactly, do students learn in schools? Students learn many things in school. They learn how to sit quietly and listen to adults speak for hours, absorbing the spectacle of mastery. They learn how to appear busy to avoid being given more work. They learn how to be idiots, and to accept their place in the social hierarchy. They learn the alchemy of passing exams without truly learning. They learn how to perform—and even profit from—boring, meaningless tasks in which they do not believe.<sup>2</sup> They learn the rules and mechanisms of capitalist exploitation.

Amid the vast body of studies seeking to understand the role of schooling in political economy, the work developed over decades by **Roberto Baldino** and **Tânia Cabral** stands out as the most rigorous and far-reaching research ever produced on the vicissitudes of capitalist schooling. Affectionately known as the Cabralinos by their students, their work testifies to the importance of teachers treating their classrooms as laboratories—sites for developing research rooted in lived pedagogical experience. This approach sharply contrasts with the dominant model of educational research, where those conducting the research rarely teach or use their teaching as a site of inquiry. Instead, they prefer to study other people's classrooms—a practice that reveals the rot at the core of contemporary education research (and social science more broadly). The field thrives on hierarchies that manufacture "experts" while doing little to improve education or society. These structures serve primarily to inﬂate academic careers, alienating teachers and other practitioners from the very possibility of researching their own practice.

Baldino and Tânia's research was rooted in intervention, with their own classrooms always at the centre. They allowed themselves the freedom to draw on whatever theoretical frameworks they found useful for understanding the problems and contradictions of their work—both as teachers and as researchers. Their work can be found in dozens of papers published across a wide range of journals and books, in the discussion forums where both actively participated, and in recordings of the study groups in which they took part.<sup>3</sup> The sheer wealth of ideas, original insights, and cross-disciplinary connections is breathtaking. There is simply no substitute for engaging directly with Baldino and Tânia's texts and experiencing firsthand the intellectual brilliance and political significance of their work—work which, I believe, time will only render more significant.



*Roberto Baldino and Tânia Cabral aka The Cabralinos*

One of their core insights is the recognition that, above all, students in schools learn to participate in—and accept—the conditions underlying the production and appropriation of *surplus-value*. Their research bears witness to the role of schools in reproducing a specific kind of commodity: *qualified labour-power*. As Baldino and Cabral put it:

[I]n the social practices that occur at school, students, teachers and the administrative personnel participate in a process of transformation of students' labour power, initially simpler and less qualified, into a commodity of higher value, to be sold in the future for a higher salary, which is expected to pay off the investment of muscle and nerves of students as well as salaries of teachers and staff.

In the process of qualification of their labour-power, students exert a double function: while actively engaged in the work of raising the quality of their labourpower, they function as labourers; while owners of the commodity in process of increasing quality, they function as capitalists.<sup>4</sup>

This process, often euphemistically tailored as the just consequence of a watchful evaluation<sup>5</sup>, places each student within a structure of equivalences through which their value can be assessed: students are organized into classes and subjected to classification through criteria of evaluation. Certificates are the final prizes. With higher or lower pressure this system is the fundamental organization of schools at all levels and all around the world.<sup>6</sup>

This system of accreditation is what Shlomo Vinner referred to as the *school's credit system*.<sup>7</sup> Contrary to the assumption that school education empowers people because it provides them with some kind of knowledge or competence, Vinner suggests that this empowerment has instead to be understood in the field of value. The value of the ones who fail is appropriated by the ones who pass as surplus-value. Failure, then, is not an unfortunate by-product of schooling, but its structural necessity: “in order to perpetuate the process of production/seizure of surplus value, a certain amount of failure is necessary”.<sup>8</sup> Therefore, “failure of students means success of the institution”.<sup>9</sup> In the process, students learn how to appropriate the work of others for their own benefit.<sup>10</sup> This constitutes fundamental learning for the life ahead.

The school's credit system structures students' desire.<sup>11</sup> Classes can be fun, engaging, and intellectually enriching, contributing to a student's overall growth. However, if by the end of the year all this experience does not translate into a “positive” grade, students are left with a sense of failure.<sup>12</sup> The further students progress through the school system, the more this logic takes hold. Their desire becomes increasingly shaped by the needs of capital, which demands a morally justified system of systematic selection and exclusion. What students come to desire in schooling is not so much the lofty goals of enlightenment and knowledge, but a place in the socio-economic hierarchy.<sup>13</sup> In turn, teachers, often tailor their instructional practices to the format of the exam, fearing that alternative approaches might leave their students unprepared and at the risk of failing. Even if they are familiar with innovative, student-centred pedagogies, these are often sidelined when the ultimate measure of success is performance on standardised tests. If passing the test is what counts, then that is how they will “educate” their students.<sup>14</sup>

All teachers assess students' work, and this is vital for their work together. The problem arises when we confuse assessment with promotion and fail to recognise that teachers are asked not only to assess students, but to promote them. This demand is crystallised in the small number or letter that appears next to a student's name at the end of the year. It has nothing to do with the quality of the assessment. One can build the most sophisticated forms of assessment, including assessment that shows respect for the diversity of the students, and still have exclusion. What produces exclusion is not the assessment itself, but the system of promotion to which all students are subjected. This is a question that haunts every teacher: *is it ethical to fail a student?* Promotion, grading, the numbers and letters we assign to students have always been a thorn on the side of researchers concerned with equity, social justice and inclusion.

We sense there is something inherently unethical about it and go into great lengths producing purging narratives that justify our compliance with it. Educational research is remarkable in trying to squeeze water from stone in its attempt to save assessment from the logic of promotion. Could it be that assessments per se are not unethical or ethically bad? May be if they are ‘dispassionate’, ‘objective’, ‘fair’, ‘equal’ and ‘balanced and well developed’? No matter how carefully crafted, once an assessment is translated into a grade, it assigns *value* to people. This value is not equally distributed. If all grades were the same, there will be no need for grading. Grading exists because we need to differentiate, to indicate which students are better and which ones are worse. Those who can move forward, and those who stay behind. Those who are included (in a top university, in good positions of the labour market) and those who are excluded.

Whilst researchers, policy makers and administrators keep fantasising about an education that empowers people to become active members of society, the credit system follows its path untouched making sure that students do learn what really matters.

The credit system can be a traumatic reality to live with. We need to tell ourselves that the system is fair. That exclusion is carried out reasonably and equitably. As Colin Rittberg, referencing the work of Neil Levy, notes: “when we find a conclusion to be unpalatable, we engage in intellectual contortions to reject it”.<sup>15</sup> The school’s credit system—and its inseparable counterpart, promotion—is one such uncomfortable truth that many researchers, in their fervour for knowledge production, struggle to confront. Why this resistance? No matter how much you know the system to be wrong, you keep on going because you enjoy all the benefits that it brings to your life. Our careers, material security and social status are a result of us subjecting ourselves to the credit system. In schools we learn to base our decisions not so much on knowledge, argumentation, or principles, but on the gains or losses those decisions will bring to our lives. We learn that to question teachers, and the overall school system, means compromising our final mark, jeopardising our future.<sup>16</sup> One learns how to be silent when confronted with unjust practices. In schools we learn to decide not with our brains or hearts, but with our guts. It is what feeds us that determines what we say and do.<sup>17</sup>

Throughout their lives, the Cabralinos challenged us to confront our guts. It was never a pleasant sight—and many felt disturbed by their interventions. Rather than engage with their ideas, some chose to ignore them or resort to personal attacks, substituting political and intellectual confrontation for ad hominem arguments. Now that Baldino—arguably the more contested figure of the duo—is gone, perhaps it will become easier for people to engage with their ideas. Time will tell. In the meantime, their legacy lives on through Tânia’s ongoing teaching and research, and in the classrooms of those fortunate enough to have learned from them.

#### Notes

1 Althusser, L. (1994). Ideology and ideological state apparatuses (notes towards an investigation). In S. Žižek (Ed.), *Mapping ideology* (pp. 100-140). New York and London: Verso.

2 Elsewhere, in discussing youth participation, I have shown how formal education teaches people to engage in—and profit from—activities they do not believe in. Pais, 2022, What do young people *learn* in formal settings of youth participation? In Z. Bečević and B. Andersson (eds.), *Youth Participation and Learning. Young People and Learning Processes in School and Everyday Life*, vol 7. Cham: Springer.

3 Baldino and Tânia were regular participants in at least three discussion forums: the SBEM list, the most important forum of the Sociedade Brasileira de Educação Matemática; the discussion list of their university, UERGS—Universidade Estadual do Rio Grande do Sul; and the listserv of the Mathematics Education and Society (MES) conference.

4 Baldino, R., & Cabral, T. (2013). The productivity of students’ schoolwork: An exercise on Marxist rigour. *Journal for Critical Education Policy Studies*, 11(4), 1–15.

5 Baldino, R., & Cabral, T. (2006). Inclusion and diversity from Hegel-Lacan point of view: Do we desire our desire for change? *International Journal of Science and Mathematics Education*, 4, 19-43.

6 Baldino and Cabral, 2013, op. cit., p. 11.

7 Vinner, S. (1997). From intuition to inhibition—mathematics education and other endangered species. In E. Pehkonen (Ed.), *Proceedings of the 21th conference of the*

*International Group for Psychology of Mathematics Education* (Vol. 1, pp. 63-78). Helsinki: Lahti Research and Training Centre, University of Helsinki.

8 Baldino, R. (1998a). Assimilação solidária: Escola, mais-valia e consciência cínica [Solidarity assimilation: School, surplus-value and cynical consciousness]. *Educação em Foco*, 3(1), 39-65.

9 Baldino and Cabral, 2006, op. cit., p. 34.

10 Imagine a student who attends every class, engages in the activities, completes all homework—and still fails to pass. The energy and time they invested is not simply lost; rather, it is transferred. It adds value to the success of those who do pass. This “lost” labour is what gives meaning and weight to the achievement of others. Without it, the credit system could not function. In this sense, the system relies on failure just as much as it relies on success.

11 Pais, A. (2015). Symbolising the real of mathematics education. *Educational Studies in Mathematics*, 89(3), 375-391.

12 Remember when a teacher proudly brings something extra into the classroom—a practical application, a historical anecdote, or an intriguing curiosity—only to be met with the inevitable question: “Will this be on the exam, teacher?” To maintain students’ interest, teachers often feel compelled to say yes. While many educators try to shift students’ attention away from the exam and toward the intrinsic value of learning, students know all too well that, in the end, it is the grade that matters most.

13 In many countries today, education no longer appears to guarantee social mobility—and this presents a serious challenge for teachers. In the past, when students questioned the purpose of schooling or the relevance of certain subjects—mathematics being a common example— teachers could still respond with a familiar promise: that the effort invested now, however disconnected it may seem from real life, would pay off in the future. But today, that justification no longer holds. Students are well aware that even after completing the full range of educational qualifications, they may still face unemployment or precarious, low-wage work. As robotics and AI become ubiquitous, we’re approaching a watershed moment that will radically transform both formal education and the labour market.

14 Biesta, G. (2009). Education in the age of measurement: On the need to reconnect with the question of the purpose of education. *Educational Assessment, Evaluation and Accountability*, 21, 33–46; Lerman, S. (2000). The social turn in mathematics education research. In J. Boaler (Ed.), *Multiple perspectives on mathematics teaching and learning* (pp. 19–44). Westport, CT: Ablex.

15 Colin Rittberg, “Social justice and the objectivity of mathematical reasoning”, in Paul Ernest (ed.), *Ethics and mathematics education* (pp. 342-356). Springer, 2024.

16 It’s no wonder that students feel the need to stay in their teachers’ good graces.

17 In his account of the 2015 Greek bailout negotiations with the European Union—when Greece was effectively blackmailed into accepting the Eurogroup’s conditions for a new bailout, thereby continuing the very austerity and debt policies that had caused the crisis—Yanis Varoufakis describes how, despite overwhelming support in Greece and the simple logic of his economic arguments, Eurogroup officials showed a persistent refusal to engage with any broader reflection on Greece’s situation or the European Union’s structural predicament. Their refusal reached surreal proportions. As he recounts: “it was as if I had not spoken, as if there was no document in front of them. It was evident from their body language that they denied the very existence of the pieces of paper I had placed before them. Their responses, when they came, took no account of anything I had said. I might as well have been singing the Swedish national anthem. It would have made no difference”. This passage captures the total disregard—and intellectual stonewalling—that Varoufakis endured, even

when presenting carefully reasoned proposals. (Varoufakis, Y. (2017). *Adults in the room: My battle with Europe's deep establishment*. Farrar, Straus and Giroux, p. 309).

## **Discussion about this post**

### **Comments**

[Alexander Moore 9 Jul 2025](#)

This is beautiful, Xande. I cried reading it. I miss him so much already.

[Tânia Cristina Baptista Cabral 29 Jun 2025](#)

Tânia Cristina Baptista Cabral Obrigada, Alexandre. Nesse momento, a perda de parte de meu próprio ser é dolorosa, mas encontro conforto no seu texto que fala do ideário que nos manteve unidos por 44 anos. Bjs

[Alexandre Pais 30 Jun 2025](#)

Obrigado Tânia. Muito carinho e amor.

[Paul Ernest 29 Jun 2025](#)

I did not know Roberto Baldino anything like you did, although I too mourn his loss and celebrate his achievement.

However, what I really want to say is what a hugely powerful indictment you offer here of the education system. Like you I rail against a system that thrives on creating losers, that blanks out their pain and damage, and social derogation and condemnation to live lives of precarity on the edge of want. But your critique, drawing on Baldino, is a much more radical and systemic critique than what I have been able to offer. So, thank you (both or rather, all three) for opening my eyes.

Lastly, a small point, I no longer condemn Capitalism as a whole. There are different degrees of capitalism and 'free market' enterprise. From sole traders who sell their skills, and small businesses that offer something that people want, to medium businesses, to large ones, and then mega multinational corporations, all are different. Scale is not the only factor, but it really matters. Corporations by definition must be psychopathic, always putting profit before good and ethics, and transforming societies often for the worse. So, I may condemn corporatism, but not capitalism. I agree with you that more insidious than trade and business is the neoliberal world view foisted on us all, and which we are complicit in promoting. (Ideological state apparatus). Everything can be represented by a grade (price) and marketed. Worse still, nothing without a market value has any worth. From the market perspective prostitution is better than love, because sex is a commodity to be bought and sold, whereas tending to your soul and those that you love has no market value.

## **REFLECTIONS ON ROBERTO RIBEIRO BALDINO (1938–2025)**

**Tânia C. B. Cabral**

*Roberto Ribeiro Baldino (1938–2025)*

Born in Porto Alegre, he graduated in Civil and Electrical Engineering from the Federal University of Rio Grande do Sul (1961), earned a Master's degree in Mathematics from Stanford University (1965), and a PhD in Mathematics from the National Institute for Pure and Applied Mathematics (IMPA, 1972). His teaching career was marked by tenures at various public higher education institutions, such as UFRGS, UFRJ, UNESP, and UERGS, where he retired as a professor of the Undergraduate Program in Computer Engineering and the Professional Master's in Teaching for Science, Technology, Engineering, and Mathematics at the Guaíba Unit.

This brief curriculum vitae falls far short of expressing the recognition he received for his productivity in the field of Mathematics Education. More than academic titles, his work left an indelible mark on many students, supervisees, and colleagues. His contribution, through studies and research, to the development of critical approaches to the capitalist system and its primary gear—the school—shaped thinkers, not just technicians.

Here I am now, writing about the privilege of having him as an interlocutor for 43 years on the teaching of calculus, non-standard analysis, and Hegelian philosophy. Sharing intense daily experiences, outside of socially dictated standards, was the path we carved. Roberto never wavered regarding the ideas he believed in; the consistency of his sharpness was, at times, misunderstood. Were he alive now, he would understand what I am saying and would laughingly agree with me, for he was generous and, despite "malicious tongues," he knew how to be fun: Roberto existed "with his liver" (viscerally). He was a lucid thinker, maintaining his intellectual productivity to the very limit allowed by the sunset of his life, a fact reported by colleagues with whom he debated philosophy until the eve of his passing. He perceived himself as weary of fighting that inevitable enemy, death, as we learned from Don Juan in Carlos Castaneda's *The Teachings of Don Juan*. With a heavy heart and amidst tears, I drew strength from my core to remain by his side until his final breath in the hospital bed, a life shared until the fading of a soul's brilliance. He left a legacy of questions and, above all, an example of discursive coherence.

This is a glimpse of Roberto forever. What is declared here is a sketch of a tribute to this man who leaves behind an eternal longing (*saudade*); the rest is nothing but rumor.

Guaíba, October 2025.

**ROBERTO RIBEIRO BALDINO C.V.**

For details of his professional life and publications see:

<http://lattes.cnpq.br/9629714113820449>