Education Forum Tarrafal

Bridging Science and Practice

April 9-11, 2025

„Education is a cultural act – it gives us the freedom to shape our own future."

José Maria Neves, President of the Republic of Cabo Verde,
in his opening speech

CONTENT

Belinda Viana, moderator of the Education Forum, holds a Master's degree in Psychology and is a lecturer at the University of Cape Verde.

FOREWORD

The **Tarrafal Education Forum – Bridge Between Science and Practice** was organized by **Delta Cultura**, the **Municipality of Tarrafal**, the **University of Cape Verde (Uni-CV)**, and the **University of Santiago (US)**. It took place from **April 9 to 11, 2025**, at the Mercado Municipal de Artesanato e Cultura in Tarrafal. The aim of the Education Forum was to promote exchange between scientific insights and the educational and social practice in Cape Verde, and to set concrete impulses for change.

The initiative for the forum came from **Delta Cultura**, driven by the desire to spark a profound discussion about the Cape Verdean education system – with the goal of encouraging new approaches and fostering innovation grounded in both scientific research and practical experience.

The program consisted of **six lectures** addressing key topics such as learning from a neuroscientific perspective, psychological foundations, learning environments, and evaluation methods, followed by a **final debate** focused on the transfer of these insights into Cape Verde's educational reality. On the third day, a **World Café** took place – a participatory dialogue format in which participants engage in rotating small group conversations to share ideas and develop them further.

This report is **not an academic conference volume**. Such a volume is currently being prepared by the participating universities. The present report is intended as an invitation to continue reflecting on the ideas introduced during the Education Forum – and as a motivation to work towards change at all levels of the education system.

The students responsible for protocol duties

OPENING CEREMONY

Representatives of the organizing institutions addressed the participants with brief speeches. Their contributions provided insight into the background, goals, and aspirations associated with the forum – setting the tone for three days of meaningful exchange.

OPENING SPEECH BY FLORIAN WEGENSTEIN CO-FOUNDER OF DELTA CULTURA

Florian begins his speech by asking how we can prepare children for a future that no one can yet imagine. He reflects on his own journey — how he began moving away from traditional notions of schooling years ago and developed an interest in neuroscience. For him, the forum is a space where this exploration of science and education enters into dialogue with others.

He emphasizes that it is not the education system itself that matters most to him, but the human beings who shape it. His wish for the three days of the forum is that something meaningful happens for each participant — a powerful moment, an inspiring conversation — something that stays with them and is deeply cherished. He closes by expressing heartfelt thanks for the opportunity to be part of the event.

OPENING SPEECH BY THE MAYOR OF TARRAFAL, JOSÉ DOS REIS LOPES VARELA

The Mayor opened his speech with formal greetings to the dignitaries present, emphasizing the significance of the Education Forum for the municipality of Tarrafal. He expressed his great honor in hosting the event and extended his gratitude to Delta Cultura for initiating and organizing the forum.

He stressed that education is a safe and essential investment in the future and reaffirmed the municipality's commitment to supporting projects aimed at the education and development of children and young people. He described the forum as a vital space for reflecting on the challenges and future directions of education.

In conclusion, he reiterated the full willingness of the municipality to continue cooperating on similar initiatives and highlighted that education is a top priority for both the local community and its development. He wished everyone a productive and successful forum.

SPEECH BY THE PRESIDENT OF THE REPUBLIC OF CABO VERDE, – FÓRUM DE EDUCAÇÃO TARRAFAL JOSÉ MARIA NEVES

The President of the Republic of Cabo Verde, José Maria Neves, opened the Fórum de Educação Tarrafal with a speech in which he emphasized the importance of education for the country's development.

The President gave a retrospective view of the past 50 years since independence and praised the major advances in the education sector: universal access, the expansion of primary and secondary education, and the creation of universities.

He underlined that education has been a central driver of social mobility, equality, and especially the empowerment of Cape Verdean women.

At the same time, he called for profound reforms in the education system in order to better respond to the challenges of the 21st century.

According to the President, the education of the future must focus on adaptability, curiosity, teamwork, emotional intelligence, and problem-solving capacity.

He referred to international examples (such as Japan), where children's personal development is placed at the center of educational efforts.

The President warned against the persistence of a colonial mindset of dependency and called for strengthening autonomy and self-confidence.

„Education is a cultural act – it gives us the freedom to shape our own future."

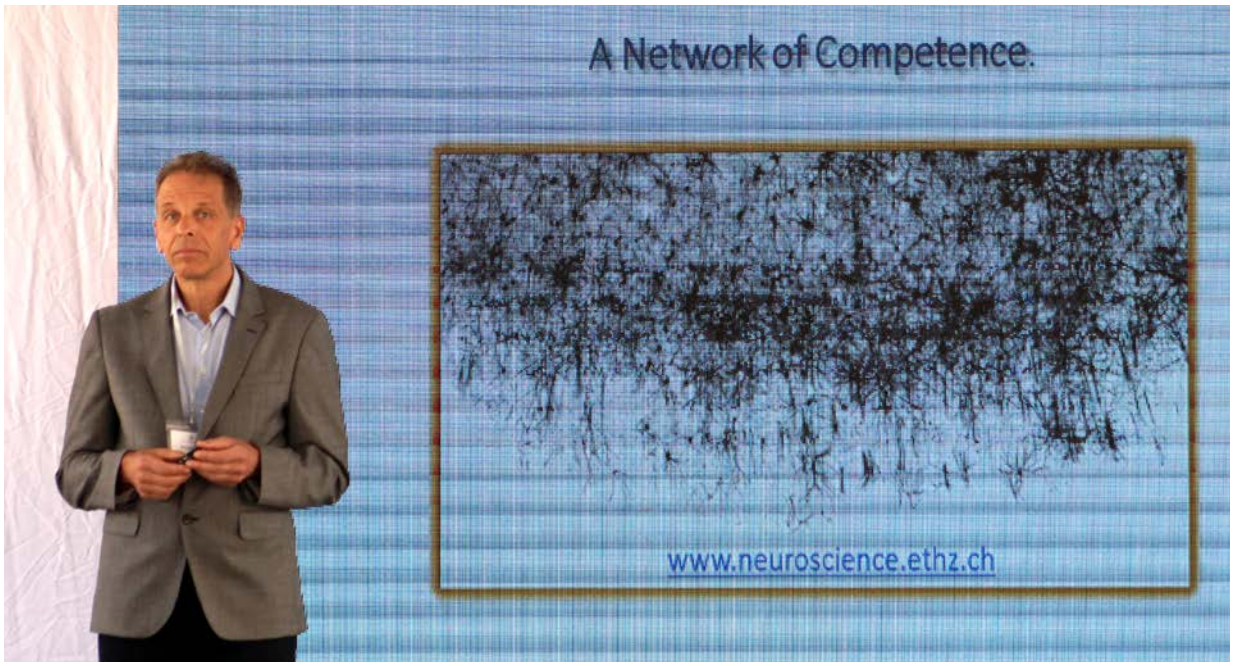
He stated that schools should not only transmit knowledge, but also discover talents and develop each individual's potential.

In conclusion, he stressed that development is, above all, a cultural act, and that true freedom can only be achieved through education and autonomy.

He praised the initiative of Delta Cultura and encouraged everyone to boldly rethink education by "thinking outside the box" in order to build the future of Cabo Verde.

LECTURE SERIES

Following the opening, six keynote lectures shaped the thematic core of the forum. Researchers from Cape Verde, Europe, and the USA presented key findings from educational science, psychology, and neuroscience – linking them to questions and challenges in Cape Verde's educational context.



LECTURE 1
INTRODUCTION TO THE NEUROSCIENCE OF LEARNING
DR. WOLFGANG KNECHT (University of Zurich and ETH Zurich)

Wolfgang Knecht is the Executive Director of the Neuroscience Center Zurich (University of Zurich and ETH Zurich). A physicist with a PhD in neural networks applied to acoustics, he has worked in industry and led major neuroscience research networks. He represents ETH Zurich in the European consortium EIT Health.

Dr. Wolfgang Knecht, Director of the Neuroscience Center Zurich (University of Zurich and ETH Zurich), presented a lecture on how the brain learns, emphasizing the importance of neuroplasticity, critical developmental phases, and the limitations of popular brain myths.

He began by debunking widespread misconceptions - such as the idea that we only use 10% of our brain or that learning styles (visual, auditory, kinesthetic) are neurologically fixed. Using insights from neuroscience and fMRI imaging, he showed that many brain functions use both hemispheres and that effective learning engages multiple systems at once.

He explained different types of learning (motor, perceptual, associative, observational) and how memory is stored in synaptic connections. Drawing on the work of Nobel laureate Eric Kandel, he showed that learning literally reshapes the brain's synapses, and this reshaping is the biological basis of memory.

Dr. Knecht also emphasized:

- The long brain maturation process—especially of the prefrontal cortex, which is associated with decision-making, emotional regulation, and impulse control. It continues developing until around age 20.
- The importance of sleep and physical activity for memory consolidation and brain health.
- That bilingualism from an early age enhances optimal brain connectivity for this task, especially if introduced during "critical windows" in childhood.
- That training one brain skill (e.g., working memory) improves only that skill—not general intelligence.
- That training a certain skill does not generally transfer to mastering another skill: if you want to improve a specific ability, you have to train it directly.

He concluded by encouraging evidence-based educational innovation that respects the brain's natural development, emphasizing that sustained, relevant stimulation—paired with rest, movement, and emotional engagement—can powerfully enhance learning outcomes.

The brain develops in phases with sensitive time windows during which certain abilities can be learned and strengthened more effectively.

THE MOST INTERESTING QUESTIONS AND ANSWERS ABOUT LECTURE 1

1. On late language learning and video games

Dr. Knecht confirmed that it is possible to learn a second language later in life, but the connectivity of involved brain areas is less optimized than when bilingualism starts directly after birth. In any case, there is great variability some individuals learn easily, others struggle.

Regarding games, he mentioned research in Switzerland on non-violent games that support cognitive skill development. These are more appropriate for schools than the widely available violent games, but they remain relatively rare.

2. On living with only one brain hemisphere

Such cases are extremely rare. While some limitations exist, individuals can function relatively normally in their environments. However, only about 20% of these individuals reach adulthood. Scientific knowledge in this area is limited due to the rarity of such cases.

3. On sleep, exercise, and teacher education in neuroscience

Dr. Knecht emphasized the importance of sleep and physical activity for learning and brain health. He suggested promoting awareness among youth about the benefits of sleep and exercise. He also supported the idea of including neuroscience as a subject in teacher education programs.

4. On short videos and attention span

There was concern about the effect of short video formats on children's attention. Dr. Knecht noted a personal impression that students today seem to have shorter attention spans than those 20 years ago, though he is not aware of conclusive studies. Current evidence is largely anecdotal. Short videos may encourage shallow engagement, reducing deep focus and learning over time. More controlled research is needed to draw scientific conclusions.

5. On DNA data vs. learned information, and learning styles

Dr. Knecht showed that the human genome contains about 750 MB of information, but the information stored in our synaptic connections is vastly larger.

On learning styles (visual, auditory, kinesthetic), he stated that no scientifically valid studies support this hypothesis. While using varied media might have motivational or placebo effects, there is no empirical proof that tailoring teaching to learning style improves learning outcomes.

6. On synaptic function in individuals with intellectual disabilities

Dr. Knecht explained that this is a highly complex field influenced by both genetic and environmental factors. There is no one-size-fits-all explanation. Even in autism, a condition with high genetic influence, each case differs significantly. Pharmaceutical companies have spent decades and billions researching genetic causes of neurological diseases with limited results. This underlines the complexity and individuality of non-typical brain development. He stressed the importance of understanding each child's unique neurological profile.

LECTURE 2

PSYCHOLOGY OF LEARNING: RECENT CONTRIBUTIONS FROM SCIENTIFIC RESEARCH

JEANNETTE MOREIRA (University of Cabo Verde)

Jeannette Moreira is a neuropsychologist and lecturer at the University of Cabo Verde. With a master's degree in Cognitive Neuroscience, she works in the areas of learning, development, and mental health, focusing on inclusive education and cognitive assessment. She advocates for a holistic approach and promotes projects and research related to psychological and educational well-being.

Neuropsychologist Jeannette Moreira, a professor at the University of Cabo Verde, gave a lecture focused on recent scientific research in the fields of learning psychology, neuroscience, and education, with an emphasis on the last five years. Her aim was to present up-to-date findings that can be translated into concrete teaching practices suited to the Cape Verdean context.

Metacognition – thinking about one's own thinking – is essential for consciously managing the learning process and taking responsibility for it.

She structured her talk around four key thematic pillars:

Metacognition

Metacognition refers to the ability to reflect on one's own thinking. It is a vital skill for developing self-regulated learning, i.e., the ability to plan, monitor, and evaluate one's learning process. Moreira presented an experimental study showing that metacognitive interventions with children significantly improve their self-regulation and executive functions.

Academic emotions

Academic emotions – those generated within the school environment, rather than emotions students bring from home – have a direct impact on learning. Positive emotions enhance motivation, attention, and memory retention, while negative emotions or emotionally unsafe environments hinder learning. Moreira emphasized the importance of emotional intelligence in both students and teachers as a way to foster a healthier and more effective learning environment. She also underlined the link between academic emotions and academic performance.

Cognitive strategies and active methodologies

Moreira presented effective learning strategies such as spacing (spreading out study sessions over time) and active retrieval (consciously recalling previously learned content), both scientifically proven to support long-term retention and avoid rote memorization. She also stressed the importance of active teaching methodologies that place students at the center and encourage them to engage actively in learning, rather than remaining passive recipients.

Neuroscience applied to education

While neuroscience was not addressed as a standalone topic, its principles were woven throughout the lecture. Moreira highlighted the roles of executive functions, brain maturation, and the need for teaching practices that respect children's and adolescents' neuropsychological development.

Psychological research highlights that emotions, relationships, and participatory methods enhance effective and lasting learning.

In her closing remarks, Jeannette Moreira emphasized the need to build a real bridge between scientific knowledge and pedagogical practice. This requires teacher education that is continuous, critical, and based on current research. She also called for education policies that support such transformation and encourage collaboration between universities, schools, and projects such as Delta Cultura.

THE MOST INTERESTING QUESTIONS AND ANSWERS ABOUT LECTURE 2

1. How are metacognition, emotional intelligence, and developmental timing connected?

Moreira explained that there is no fixed moment when metacognition must be developed – it can be fostered from early childhood. Early support has a direct impact on emotional intelligence, learning autonomy, and reflective thinking. She emphasized the need to create educational environments that support this kind of awareness from the start.

2. What cultural barriers hinder the development of metacognitive abilities in Cape Verde?

The question pointed out that many children in Cape Verde are not used to expressing their thoughts or emotions, either at home or at school. Moreira stressed the central role of teachers: their emotional influence can either open or block avenues for expression. She advocated for the explicit inclusion of emotional intelligence in teacher training and praised local initiatives like Delta Cultura's program, which already works with socio-emotional skills.

LECTURE 3

TRANSCENDENT THINKING AND BRAIN DEVELOPMENT IN ADOLESCENTS

DR. MARY HELEN IMMORDINO-YANG (University of Southern California)

Mary Helen Immordino-Yang is a professor of education, psychology, and neuroscience at the University of Southern California and founding director of the USC Center for Affective Neuroscience, Development, Learning and Education. Her research explores how emotions and social processes shape deep learning and adolescent development.

Dr. Mary Helen Immordino-Yang, professor of education, psychology, and neuroscience at the University of Southern California, gave a keynote lecture on the relationship between transcendent thinking and adolescent brain development. Speaking via live video from Los Angeles, she shared insights from over 15 years of research using functional neuroimaging and narrative-based methods.

Her central thesis is that deep, reflective, and emotionally meaningful thinking - what she calls "transcendent thinking" - actively shapes the brain's architecture during adolescence, especially in areas related to identity, values, and motivation. Adolescents who engage with complex social and moral ideas - such as injustice, empathy, or purpose - show increased integration across large-scale brain networks such as the Default Mode Network and Salience Network. These brain systems support metacognition, emotional depth, and self-regulation.

Dr. Immordino-Yang emphasized that learning is not just about information acquisition but about transforming one's understanding of the self and the world. She argued that meaningful education requires creating environments that allow students to explore powerful ideas, experience awe, and reflect deeply on their place in society.

Transcendent thinking – reflecting on values, meaning, and social issues – promotes deep learning and personal development.

She also discussed her research methods, which often involve recording and analyzing students' emotional and cognitive responses to real-life stories involving human resilience, ethical dilemmas, and global issues. These studies show that emotionally engaged reasoning activates deeper learning pathways, particularly when students feel a personal connection to the material.

Finally, she urged educators to move away from shallow forms of engagement focused on grades or rewards, and instead cultivate intellectual humility, curiosity, and emotional resonance — especially during the sensitive developmental period of adolescence, when the brain is highly plastic and identity is being formed.

Emotional resonance is not a side effect but a central component of how the brain learns.

THE MOST INTERESTING QUESTIONS AND ANSWERS ABOUT LECTURE 3

On transcendent thinking and long-term brain development

Dr. Immordino-Yang explained that transcendent thinking — the ability to reflect on meaning, purpose, and one's role in the world — contributes to the long-term development of higher-order brain networks. It strengthens pathways associated with identity, emotional regulation, and deep learning. While individual outcomes can't be precisely predicted, sustained engagement in this kind of reflection fosters more integrated, resilient mental functioning over time.

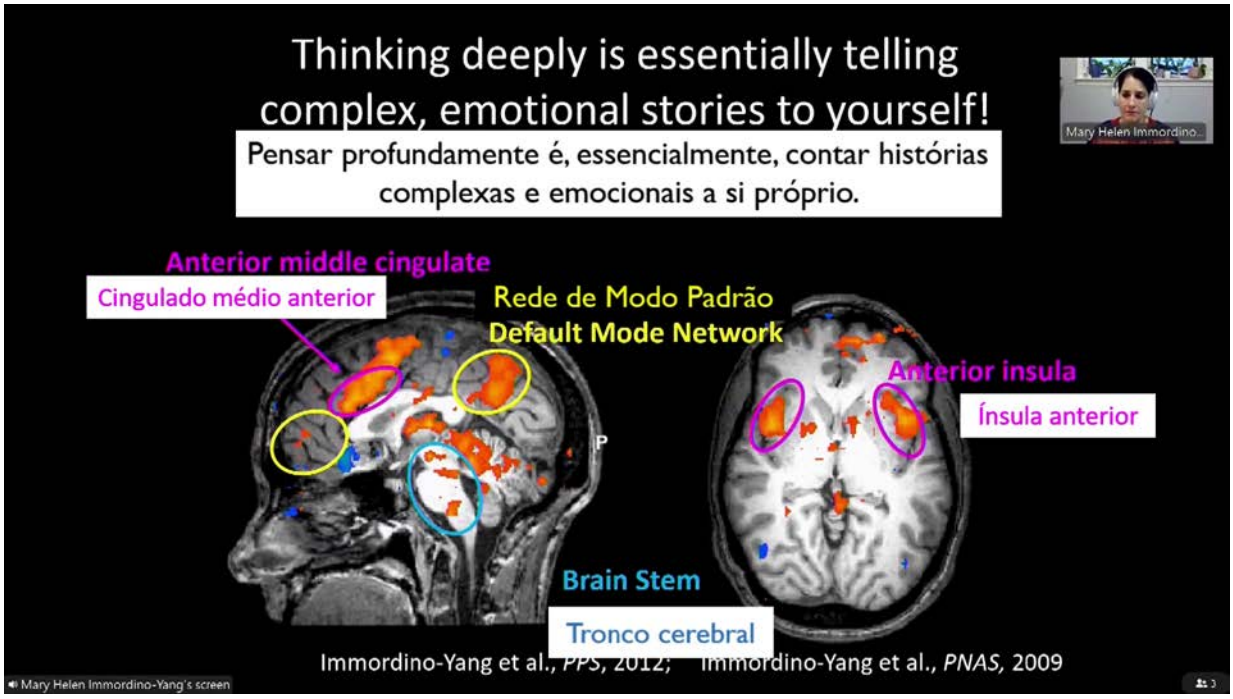
On methodology: using real-life stories to evoke reflection

She described how her research team presents youth with emotionally rich, real-world stories (e.g., a child overcoming adversity) and then interviews them about their reactions. These interviews are analyzed for signs of abstract reasoning, empathy, and moral insight, and are paired with brain imaging data. The goal is not to test for "right answers" but to assess the depth and authenticity of students' emotional and cognitive engagement.

On how to apply this in schools

Dr. Immordino-Yang stressed that schools should provide space for students to engage with complex ideas, ask difficult questions, and explore ethical or personal dilemmas — not just memorize facts. She encouraged educators to create learning environments where students and teachers shift emotional investment away from performance outcomes (e.g., grades) and toward meaningful ideas. This might include:

- Project-based learning
- Time for open-ended discussion
- Reflection journals
- Opportunities to connect learning with personal and social identity



LECTURE 4

LEARNING ENVIRONMENTS IN CAPE VERDE – A CRITICAL READING THROUGH THE CLIA MODEL

DR. LUÍS RODRIGUES (University of Santiago, Cabo Verde)

Luís Filipe Martins Rodrigues is a professor at the University of Santiago, where he heads the Department of Educational Sciences and coordinates the Master's in Portuguese as a Second Language. Currently pursuing a PhD in Language Didactics, he also directs the Office for Internationalization and participates in EU-funded international capacity-building projects.

Professor Luís Rodrigues (University of Santiago) presented a critical analysis of Cape Verde's curricula (grades 1 to 8) through the lens of the CLIA model (Context, Language, Interaction, Autonomy). His aim was to identify concrete evidence of pedagogical practices focused on active, self-regulated, collaborative, and meaningful learning.

The analysis covered the subjects of Portuguese Language, Mathematics, and Science, focusing on keywords such as: self-regulation, problem-solving, metacognition, active learning, diagnostic assessment, and self-evaluation.

Key findings:

- Mathematics includes the most references to problem-solving, but concepts like metacognition or positive beliefs are practically absent from all curricula.
- Modern concepts such as self-evaluation or meaningful learning are mentioned only marginally.
- The curricula leave much room for teacher interpretation, which may lead to pedagogical inconsistency.

Rodrigues emphasized that progress should be valued more than final results and that ongoing teacher training is essential for building modern learning environments. He shared examples from master's students who, after 20 years of teaching, began applying new approaches like group work and self-evaluation—with surprising results.

The CLIA model offers a practical framework to improve school quality through leadership, planning, and reflection.

He concluded with clear recommendations:

- Make pedagogical intentions more explicit in the curricula.
- Train teachers in learning environments and neuroscience.
- Promote strategies for differentiation and self-regulation.
- Develop public policies that support inclusive and up-to-date practices.

THE MOST INTERESTING QUESTIONS AND ANSWERS ABOUT LECTURE 4

1. Negative beliefs and group work
Rodrigues emphasized that negative beliefs—like fear of speaking Portuguese in public—should be addressed through intentional pedagogy, not just motivational speech. He advocated teaching group work as a skill, integrated across all subjects. He mentioned his own son, who only experienced collaborative work in grade 5—something he found alarming.

2. Error handling and analyzed levels
He focused on grades 1 to 8 because they are the most consolidated levels. Regarding errors, he criticized the common practice of merely correcting without explaining what was done correctly. He argued that reinforcing correct responses with clear feedback is just as, if not more, important.

Teachers need more autonomy, continuous training, and supportive infrastructure to deliver pedagogical quality.

3. Teacher training and the hidden curriculum
Rodrigues questioned whether teachers even have real opportunities for continuous training. He pointed to the low teacher turnout at the Forum as a symptom of this issue. He emphasized the need for clearer curricula that do not leave everything to individual interpretation.

4. Student autonomy and curriculum development
He noted that many students lack autonomy in how they prefer to learn and that this should be encouraged from an early age. He also expressed uncertainty about whether students and teachers are involved in curriculum development but argued that more transparency is needed in this process.

5. Using Creole in the classroom
According to Rodrigues, Cape Verdean Creole should be present in the classroom as the language of identity and emotion. However, the appropriate moments for using each language must be clearly defined to avoid Creole being used only informally or emotionally.

6. The alleged lack of student interest
He rejected the notion of widespread disinterest. More students than ever are enrolled and staying in school. The real change, he said, is the teacher's role—now competing with social media and new narratives. The real challenge is a lack of vision for the value of education in the future.

7. High grades and poor professional performance:
Rodrigues differentiated between being a good student and a good professional. Many high-achieving students fail as teachers, and vice versa. This shows that curricula must align more closely with professional realities and foster practical - not just theoretical - skills.

LECTURE 5
IMPACTS OF TECHNOLOGY DEPENDENCY
DR. CLÁUDIA GONÇALVES (University of Mindelo)

Cláudia Gonçalves is a clinical psychologist, lecturer at the University of Mindelo, and holds a PhD in Neuroscience. Her work focuses on behavioral addiction, trauma, emotional regulation, and neuroplasticity, bridging scientific research with clinical practice and training.

Psychologist Cláudia Gonçalves gave a comprehensive overview of the impacts of technology dependency, especially among young people, drawing on international studies, Cape Verdean data, and her professional experience. She emphasized that digital dependency affects all age groups and social classes, and is present in both developed and developing countries.

She opened her talk with important disclaimers: criticizing the risks of technology does not mean being technophobic. The issue lies not in technology itself, but in how it is used. Gonçalves drew attention to the digital industry, particularly gaming, which operates with powerful lobbying and intentional strategies to foster addiction—such as instant rewards, elevated dopamine levels, and gamification.

Digital media should be used actively, creatively, and critically – only then do they offer real educational value.

She presented alarming statistics:

- Children as young as 2 years old spend up to 3 hours a day in front of screens.
- Teenagers between 13 and 18 years old spend up to 7 hours daily.
- Cumulatively, screen time over the first 18 years of life equals 30 school years or 15 working years.

Prolonged exposure affects brain structure, reduces focus, impairs sleep, weakens human interaction, and damages both physical and mental health (e.g. eyesight, posture, anxiety, depression). She highlighted that the same brain pathways affected by drugs are also involved in digital dependency.

In the educational context, the impact is devastating:

- Decline in reading, memory, and concentration skills.
- Replacement of deep reading with superficial content consumption.
- Simplified curricula and increased use of audiobooks and videos in place of written texts.

She advocated for measures such as:

- Zero screen time until age 6.
- Strict daily limits.
- No televisions in bedrooms.
- Encouragement of reading, free play, art, and music.

She concluded with the statement:
"Even if the internet is a bridge to the world, it's crucial not to confuse connection with genuine relationship."

Schools must integrate digital tools intentionally, reflectively, and within a pedagogically guided framework.

THE MOST INTERESTING QUESTIONS AND ANSWERS ABOUT LECTURE 5

1. Artificial intelligence: risks and opportunities
Gonçalves acknowledged the potential of AI as a tool, but warned against passive and irresponsible use, such as generating schoolwork with ChatGPT without personal thought. She stressed the importance of maintaining cognitive effort and teaching critical engagement. AI will not replace human intelligence but demands responsibility and regulation.

2. Positive and negative impacts of the internet on child behavior
Some apps may have positive effects (e.g., games teaching household tasks or resource management), but she emphasized that parental control and educational intent are essential. The internet can either educate or corrupt—parents must practice active vigilance.

3. Digital detox at home
Detox should begin with dialogue and parental example. She suggested board games (e.g., "Mission 2050"), banning phones from bedrooms, clear and consistent rules, and offline rituals. Parents should not demand behavior from their children that they themselves do not model.

4. Parents who give phones to "take a break" from their children
Gonçalves recognized that many low-income families use screens as an escape valve. However, she cautioned:
"It's the easiest choice in the moment, but the cost comes later."

She advocated for collective awareness of the risks and for practical alternatives.

LECTURE 6
ASSESSMENT FOR LEARNING
DR. ARLINDO MENDES VIEIRA (University of Cabo Verde)

Arlindo Mendes Vieira holds a PhD in Educational Sciences and is a professor at the University of Cabo Verde, where he serves as Vice Dean of the Faculty of Education and Sports and Director of the Education and Sports Center. He specializes in educational assessment and curriculum development and coordinates graduate programs while contributing to international research networks on inclusion and innovation.

Professor and researcher Dr. Arlindo Mendes Vieira (University of Cape Verde) presented a critical reflection on assessment practices in the Cape Verdean education system, focusing on the concept of "assessment for learning." From the start, he emphasized that assessment should no longer be understood merely as verification of results but as a key pedagogical tool to promote real and meaningful learning.

Alternative forms of assessment strengthen motivation, selfreflection, and learning outcomes.

Distinction between assessing and gradin

He clearly differentiated between:

- **Assessment for grading** (still dominant in schools): focused on standardized tests and final marks;
- **Assessment for learning**: a continuous process that tracks student progress and helps adjust teaching to individual needs.

He stressed that assessment must be integrated into the teaching process, not treated as a separate moment. It should help teachers understand what students already know, what they still need to learn, and how to help them move forward.

Principles of formative assessment

Dr. Arlindo highlighted the pillars of effective formative assessment:

- Ongoing and systematic observation of learning;
- Use of diverse instruments (e.g., portfolios, group work, projects, self-evaluations);
- Constructive and personalized feedback;
- Documentation of real learning progress;
- Recognition of errors as a natural part of learning.

Reference to Cape Verdean education law

He referenced recent national legislation that recommends formative and inclusive assessment practices. However, he pointed out the large gap between what the law states and what happens in practice—due to lack of teacher training, an exam-focused school culture, and a results-driven mindset.

CHALLENGES AND PROPOSALS

- **Ongoing teacher training**: Without serious investment in teacher development, legal reforms remain symbolic.
- **Changing mindsets**: The idea that assessment equals grading must be overcome.
- **Contextualization**: Assessments must consider students' social and linguistic realities (e.g., use of Creole and family cultural capital).
- **Justice and equity**: Applying the same test to all students may be unfair; equity requires adapting assessments to individual backgrounds and needs.

Formative assessment means guiding, observing, and supporting – instead of comparing, punishing, or selecting.

He concluded by stating that assessment is a pedagogical, political, and cultural act, and must serve the holistic development of the student and the construction of a more just and conscious society.

THE MOST INTERESTING QUESTIONS AND ANSWERS ABOUT LECTURE 6

1. How to implement formative assessment in today's school context?

Participants pointed out the difficulty of applying continuous assessment in large classes with dense curricula and limited time. Dr. Arlindo acknowledged the challenge but insisted that even small steps—like self-assessment or feedback-based corrections—already make a difference. He stressed the need for institutional time for teachers to observe, reflect, and document student progress.

2. Is legislation disconnected from classroom reality?

There was criticism that official documents do not reflect everyday school life. One teacher said, "The law sounds good, but no one trains us to apply it." Dr. Arlindo agreed: legal change matters, but without training, resources, and dialogue, it remains ineffective. He called for greater involvement of universities in implementing education policy.

3. The role of summative testing

Some participants defended tests as objective tools to measure knowledge. Dr. Arlindo replied that tests should not be eliminated but must be part of a broader assessment process. The problem lies in the excessive weight placed on tests and their use to label students rather than help them grow.

4. Fair assessment in diverse realities

Participants debated the fairness of applying the same criteria across diverse socioeconomic and linguistic contexts. Dr. Arlindo emphasized that equality is not giving the same test to everyone, but ensuring every student has a real chance to demonstrate learning. He defended adapting tools and including Creole as a mediator when necessary.

5. Assessment and student motivation

Students expressed frustration about not understanding test logic. One remarked: "I memorize for the test, then forget everything." Dr. Arlindo said this illustrates why assessment must give meaning to learning. He encouraged involving students in the assessment process and promoting a culture of reflection and co-creation of success criteria.

6. Teacher voice and autonomy

One participant asked if teachers still have autonomy amid so many legal and bureaucratic demands. Dr. Arlindo responded that they do—but it must be qualified autonomy. Legislation should provide clear guidelines while leaving room for informed and contextualized pedagogical decisions.

7. Paths forward

The session ended with a call to build a culture of trust-based, reflective, and shared responsibility in assessment. Dr. Arlindo concluded by stating that changing how we assess is essential to changing how we teach and learn.

PANEL DISCUSSION:
EDUCATION BETWEEN SCIENCE AND REALITY

The moderated panel, led by Elisabete Cosmo, brought together professionals from various sectors of education to reflect on how to bridge the gap between academic knowledge and real-world practices in schools and communities. Participants included:

- Miliana Soares Moreno (Educator at Delta Cultura)
- Prof. Arlindo Tavares Semedo (Professor at UNICV)
- Dr. Teresa Ramos Correia (Municipal Councillor for Education – Tarrafal)
- Dr. Joanita Rodrigues (Rector of the University Jean Piaget)
- Lenilda Duarte (Pedagogical Coordinator – University of Santiago)
- Prof. Adelino Gomes da Silva (Mathematics Teacher)

Non-formal education and emotional intelligence

Miliana shared her perspective from the non-formal education space at Delta Cultura. A former participant turned educator, she described how her work involves listening to children and youth in their emotional dimension—a factor often ignored in formal schooling. She criticized the rigidity of traditional education and advocated for more open, emotionally responsive learning spaces that go beyond textbooks.

Assessment as a pedagogical and social practice

Prof. Arlindo emphasized that assessment should serve learning, not just test results. Quoting Paulo Freire, he underlined the importance of developing not only conceptual knowledge and practical skills, but also ethical awareness. Real learning, he argued, means knowing how to learn throughout life, not just memorizing content.

The role of family and informal education

Dr. Teresa Ramos reminded the audience that education starts at home. Parents and families, she said, are often left out of educational discourse, even though they form the foundation. She called for a revaluation of the knowledge students bring from home and advocated for closer cooperation between schools and families.

Theory and practice in higher education

Dr. Joanita Rodrigues, with nearly 40 years of experience in education, addressed the responsibilities of universities. She warned against simply "filling heads" and argued for forming critical and ethical professionals. She strongly criticized the overuse of written tests and defended more practical, competency-based evaluations. For her, scientific research only gains real value when it is applied to communities.

Digital education as a tool for inclusion

Lenilda Duarte highlighted the University of Santiago's advances in digital education. She explained how distance learning can reduce regional inequalities and enable working adults to continue their studies. She emphasized the importance of preparing students and teachers to use digital tools meaningfully, and even engaging families in this process when needed.

Demystifying mathematics

Prof. Adelino Gomes shared his personal story to illustrate how the stigma around math can be overcome. He argued that math is present in everyday life—from cooking to clothing coordination—and must be made more accessible and engaging. He stressed the need to confront limiting beliefs and make math education more human, practical, and relevant.

Rethinking assessment in the 21st century

Several participants converged on a shared concern: assessment must move beyond content reproduction. Innovative practices such as open-book tests, real-world problem solving, and collaborative projects were discussed. Artificial intelligence was also debated—both as a support tool and as a way to detect plagiarism. The consensus was clear: meaningful assessment must reflect real-life skills, critical thinking, and personal reflection.

WORLD CAFÉ

On the third day of the Education Forum, a World Café was held with ten moderated topic tables. Each table addressed a central question about the future of education in Cape Verde - ranging from learning environments and teacher training to early childhood development. Participants could join the tables of their choice and engage in multiple rounds of discussion. Each session was summarized by the respective table moderators. The ten guiding questions were:

1. **How can we integrate insights from neuroscience into our educational practices?**
2. **Can teachers in schools truly build close relationships with their students?**
3. **How can we stimulate curiosity, imagination, and reflection in early childhood?**
4. **How can we improve education with support from learning psychology?**
5. **How can learning environments in Cape Verde become more inspiring and effective?**
6. **Is prohibition enough – or what more must we do to address digital dependency in schools?**
7. **How can we train educators who drive change and meet the challenges of the 21st century?**
8. **How can we teach mathematics meaningfully in a system that demands constant testing?**
9. **How can we turn assessment into a tool that truly supports student learning?**
10. **How can we build an education system that values well-being, creativity, and critical thinking for all students?**

Below are the key insights and impulses – presented in the order of the ten tables:

TABLE 1
INTEGRATING INSIGHTS FROM NEUROSCIENCE (WOLFGANG KNECHT)

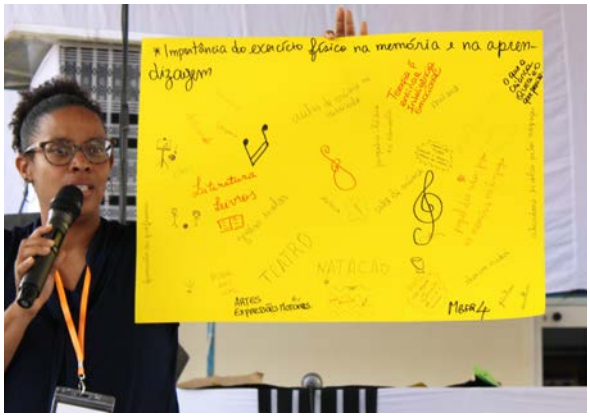
This table focused on how current findings from neuroscience can be practically applied in schools. The discussion highlighted that early experiences — especially movement, language stimulation, and social interaction — are critical for children's brain development. Teachers should therefore create conditions that integrate such stimuli into everyday learning. The group discussed play-based and movement-based learning strategies, purposeful use of music, and the potential of digital games to enhance focus and responsiveness.

- Integrate movement breaks and motor activities into the daily routine
- Create music spaces for non-verbal expression
- Use game-based training programs to improve concentration
- Build emotionally safe relationships to activate positive learning states
- Early childhood stimulation as a foundation for future academic success

TABLE 2
TEACHER-STUDENT RELATIONSHIPS (MILIANA SOARES MORENO)

The discussion at this table centered on how teachers can form meaningful connections with students. Participants stressed that trust is built through empathy, respect, and communication. Many students suffer under authoritarian methods that leave little room for mistakes or personal growth. The group emphasized the importance of seeing teachers as guides and supporters, not just instructors. Practices from non-formal education, such as those used at Delta Cultura, were highlighted.

- Establish relationships through home visits and family engagement
- Promote a positive school climate through respectful dialogue
- Reject psychological and physical punishment
- Teachers as role models and emotional supporters



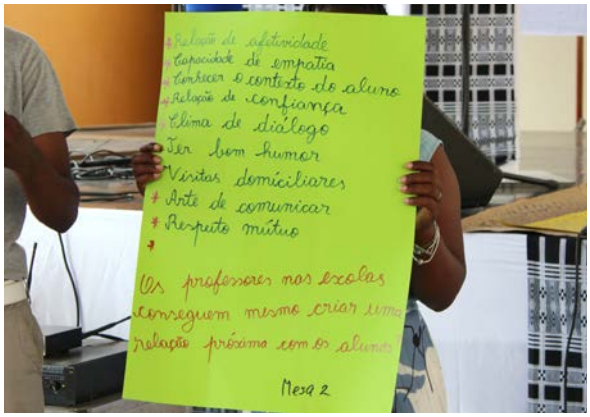


TABLE 3
FOSTERING CURIOSITY AND IMAGINATION IN EARLY CHILDHOOD (MARGARIDA VICENTE)

This round focused on how adults — especially in early childhood — can encourage curiosity, imagination, and reflective thinking. Respectful interaction with children, recognizing and allowing emotions, and the importance of empathy, calm, and presence were key themes. Participants emphasized the benefits of listening carefully, observing children, and avoiding premature interventions.

- Take children seriously and accompany them with care
- Observe non-verbal signals and provide space for self-expression
- Encourage rather than control: use praise, motivation, and trust
- Emotional security as a basis for cognitive development
- Importance of storytelling, movement, and role play

TABLE 4
PSYCHOLOGY OF LEARNING (JEANNETTE MOREIRA)

The main topic here was how emotional factors influence learning. Participants agreed that learning cannot be separated from the learner's emotional state. Motivation, appreciation, and relationship-building were named as decisive factors. Creative methods are needed to engage students actively. The teacher's role as an emotional anchor was especially emphasized.

- Icebreaker activities and creative transitions to build trust
- The "Cantinho do Nós" (a space for us): a place for collective reflection
- Effective learning is tied to positive emotional activation
- Use of repetition, humor, and movement as didactic tools

TABLE 5
INSPIRING LEARNING ENVIRONMENTS (LUÍS RODRIGUES)

What makes a learning space inspiring? This table explored the interplay between spatial design, pedagogical attitudes, and content structure. Students expressed a desire for more participation and experiential learning. Participants emphasized that an environment should not only allow learning but actively encourage it — through accessibility, diversity, and welcoming spaces.

- Design spaces that foster creativity and collaboration
- Allow for movement and flexible furniture arrangements
- Involve students in shaping both spaces and routines
- Provide areas for rest and retreat within learning spaces
- Support differentiation and autonomy in learning

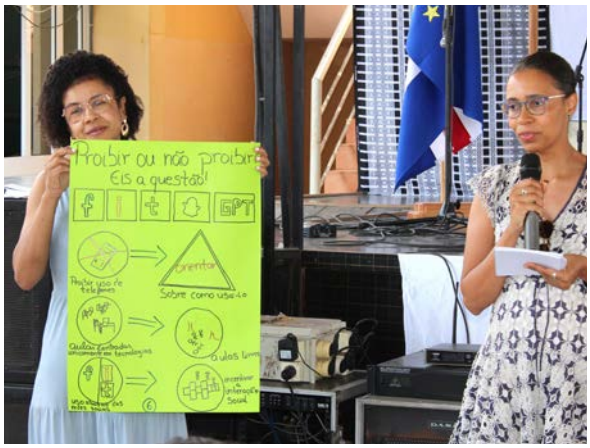


TABLE 6
DIGITAL DEPENDENCY AND SELF-REGULATION (CLÁUDIA GONÇALVES)

This table examined the growing screen time among children and adolescents. Participants agreed that bans alone are not enough — lasting change requires educational support, role models, and alternative leisure activities. It is crucial to teach students digital self-regulation while promoting physical activity, play, and social interaction.

- Develop reflective digital habits among students and parents
- Introduce clear rules and limits instead of blanket bans
- Encourage analog games and movement
- Emotional education as a foundation for self-control
- Teachers and parents as digital role models

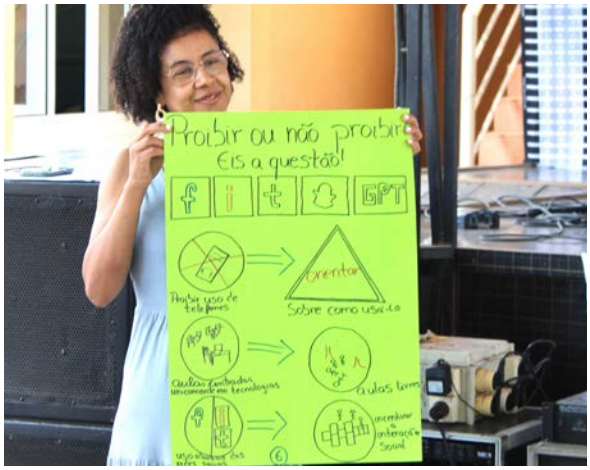


TABLE 7
TEACHER EDUCATION (ALEIDA FURTADO)

What kind of teacher training is needed for the 21st century? The discussion made clear that subject knowledge alone is insufficient. Emotional intelligence, creative didactics, and practical experience are essential. Participants also stressed the need for environmental education, social responsibility, and adaptability in diverse classrooms.

- Include more hands-on experience during teacher training
- Develop empathy, communication, and relationship skills
- Integrate environmental and sustainability education into curricula
- Foster reflection and self-awareness in future teachers
- Promote creative and student-centered teaching methods

TABLE 8
MAKING MATHEMATICS MEANINGFUL (ADELINO GOMES)

This table explored how to teach mathematics in a way that is relevant, motivating, and practical. Many students lose interest in secondary school due to overly abstract content. Ideas included using games, real-life scenarios, and community-based projects. Involving parents and fostering logical thinking were also emphasized.

- Use games, real-life contexts, and hands-on materials
- Implement practical projects such as market calculations
- Focus on mathematical thinking rather than rote computation
- Create special support formats for students with learning needs
- Build a positive attitude toward math starting in early education

TABLE 9
ASSESSMENT AS A LEARNING PROCESS (ARLINDO MENDES VIEIRA)

Assessment was understood here as a central part of learning — not just a grading tool. Participants emphasized the need for fair, formative, and diverse assessments that support rather than classify students. Alternatives such as peer feedback, self-evaluation, and dialogue-based feedback were discussed alongside the importance of clarity, transparency, and appreciation.

- Promote formative, supportive assessments
- Use clear criteria and transparent communication
- Provide personal, timely, and constructive feedback
- Involve students in peer and self-assessment
- Respect individual learning styles and paces

TABLE 10
WELL-BEING, CREATIVITY, AND CRITICAL THINKING (GILSON BORGES)

This table focused on a holistic vision of education centered on well-being, creativity, and critical thinking. The group agreed that such goals require emotionally safe, flexible, and inspiring school environments. Teacher well-being and family involvement were also discussed as key components of a supportive educational culture.

- Encourage contact with nature and emotional safety at school
- Improve nutrition, hygiene, and school infrastructure
- Provide mental health spaces and relaxation areas
- Promote arts, theater, and teamwork to foster creativity
- Share responsibility among schools, families, and society for student well-being

These contributions reflect a high level of reflection and commitment, offering concrete impulses for a more holistic, equitable, and human-centered educational future in Cape Verde.

CLOSING SESSION OF THE EDUCATION FORUM

The formal conclusion of the Education Forum was marked by a special event with two interwoven elements: first, four students from partner universities shared their personal reflections on the three intense days. These were followed by closing remarks from four invited guests – Florian Wegenstein, Aleida Furtado, Luís Rodrigues, and the Director of National Education.

The student contributions were moving and authentic, expressing their insights, emotions, and inspiration. Their words showed how deeply the forum's content resonated and what strong motivation can be sparked in young people when education appeals not only to the intellect but also to the heart.

FINAL REFLECTIONS – UNIVERSITY STUDENTS

At the closing of the Education Forum four students from partner universities shared their final reflections. Their words summarized personal impressions and key takeaways from the three days of the event. Below are their individual contributions.

Jaceline Varela

Jaceline opened by expressing gratitude for the opportunity to participate in the forum and emphasized how relevant the lectures and discussions were for her future as a Portuguese teacher. For her, the forum was not only a space for acquiring knowledge but also for deeply rethinking the concept of education in Cape Verde.

She criticized the narrow view that simply building schools is enough, advocating instead for an education that forms conscious citizens capable of critical thinking and autonomous decision-making. She emphasized the importance of joyful learning environments that respect individual differences and encourage active student participation.

Jaceline also called for modernizing the curriculum to align with contemporary realities and challenges. She advocated teaching students to learn from their mistakes, reflect on their own processes, and use technology responsibly.

For her, assessment should be continuous and formative, valuing not just content mastery but also students' cognitive and emotional development. She concluded by saying the forum achieved its goal: showing that the current system is not what we want, and that change begins with critical awareness.

José da Luz Fernandes Fortes

José delivered a critical and thought-provoking reflection on the forum's discussions. He began by emphasizing that cultural appreciation must be the starting point for any meaningful progress, noting that a people without a sense of origin or direction can be easily swayed.

He discussed colonization not just as a historical event, but as a lasting mental legacy that still shapes Cape Verdean thinking. He criticized reliance on formal education alone and advocated for recognizing practical knowledge—highlighting that societies need masons as much as engineers.

José also addressed technology, urging for a broader understanding of the term and conscious use of digital tools. He stressed the need to adapt assessments to student diversity and promote equity—different people should be assessed in different ways.

He concluded with a reflection on the ethical and social responsibilities of future educators. For him, forming citizens means teaching boundaries, autonomy, and social awareness. He expressed gratitude for the chance to represent students and his desire to continue contributing to transformative spaces.

Suyla Cindira da Veiga Fernandes Cunha

Suyla began by thanking Delta Cultura for entrusting students with the responsibility of delivering the forum's closing remarks. She acknowledged the weight of this task and spoke deeply about the connection between cognition, emotion, and social context in the learning process.

She criticized the current Cape Verdean educational model, which she sees as outdated and overly focused on memorization. This disconnect, she argued, fuels the so-called "emigration mindset," where many young people view leaving the country as the only solution.

Suyla firmly defended the value of teachers and the importance of improving their working conditions. As a future psychologist, she emphasized the need for meaningful, active, and emotionally safe learning environments. She argued that subjects like mathematics should foster critical thinking—not just technical skills.

She ended with the belief that education must prepare citizens to transform society and that
this mission depends on valuing educators in concrete terms.

Triana Fernandes Tavares

Triana moved the audience by expressing gratitude for the chance to see, in the same space, her teachers from childhood to university. She highlighted the lasting impact teachers have on students' lives and called for real, human appreciation of the teaching profession.

Reflecting on assessment, she argued that students today are not truly assessed, but merely examined. She explained the difference between evaluation and exams, noting that grades unfairly define students. She shared a personal story of a university professor who challenged her beyond her comfort zone, helping her discover her true potential.

Triana also discussed the importance of context, active listening, and creating safe environments where students can speak freely without fear of judgment. She even proposed an alternative debate model where aggressive disagreement is not allowed, encouraging respectful dialogue. She concluded with a passionate call to action: change the system, the methodology, and the mindset of students themselves. She affirmed that the future belongs not only to those who dream but to those who fight—and that education, despite its challenges, is a tool for transformation and achievement.

FINAL QUESTION FOR THE STUDENTS

Question by Prof. Arlindo Mendes Vieira
(University of Cape Verde):

"WHAT WILL YOU LEAVE BEHIND AFTER THIS FORUM, AND WHAT WILL YOU TAKE OR STRENGTHEN?"

Suyla

Her words gained even more impact in this moment. With emotion and determination, she said:
"I had no hope. I hope people understand the impact of not having hope for a young woman hungry for change. Today, as I said before, I feel stronger, certainly richer, and ready to work for change."

José

He takes with him a renewed sense of responsibility and commitment to education and promises to deepen his solidarity and understanding of the teacher's transformative role.

Triana

She reaffirmed her will to take action. Having already participated in education-related initiatives since high school, she leaves the forum more determined than ever to drive real change.

Jaceline

She strengthened her critical awareness and reaffirmed her commitment to being a change agent—both inside and outside the classroom.

"I had no hope. I hope people understand the impact of not having hope for a young woman hungry for change. Today, as I said before, I feel stronger, certainly richer, and ready to work for change."

Suyla Cindira da Veiga Fernandes Cunha

CLOSING REMARKS

Following the student reflections, four closing speeches offered different perspectives on the forum and sent clear messages for the future..

FLORIAN WEGENSTEIN,

Project Manager of the Delta Cultura Education Center and Organizer of the Education Forum

Florian expressed his gratitude to all participants and highlighted the extraordinary commitment shown by many – often voluntarily – in organizing and executing the event. He emphasized the role of Marisa, co-founder of Delta Cultura, who coordinated the entire process behind the scenes. His message focused on intrinsic motivation as a driving force for societal change and education that empowers individuals and enables transformation. According to him, education must open up so that knowledge can truly be put into practice.

ALEIDA FURTADO,

Head of the Faculty of Education at the University of Cabo Verde

Aleida Furtado spoke of three days of intense exchange, participation, and hope. She thanked Florian and the entire Delta Cultura team for the initiative and exemplary implementation. The forum, she said, proved that connecting theory and practice is possible – something universities must strive for more actively. She reminded everyone that change begins in the classroom and delivered a passionate message to all teachers: Even in difficult conditions, one should carry out the work with dedication – because every student is a future agent of transformation.

LUÍS RODRIGUES,

Head of the Faculty of Education at the University of Santiago

Luís Rodrigues highlighted the emotional significance of the forum – not only for himself but also for the region of Tarrafal. He recalled the historical burden of the area due to the former concentration camp and contrasted this with today's image of an active, engaged community. He paid tribute to the organizers and all volunteers involved. He spoke of a large imbalance between knowledge and practice: we know a lot but apply little. This, he said, is where the forum's true potential lies. He called for giving young people hope and preparing them for professions that do not yet exist – and emphasized both the transformative power and risks of education.

ADRIANO ANDRADE MORENO

National Director of Education, Representative of the Cape Verdean Ministry of Education

The Director of the national Ministry of Education thanked all contributors and underlined the importance of the forum for Cape Verde's educational landscape. The event succeeded in connecting science and practice and creating a space where the voices of students, teachers, and researchers were equally heard. In his summary, he emphasized the importance of evidence-based educational policy and acknowledged teachers as central agents of societal progress. The forum, he stated, served as a bridge between knowledge and application – and as a call to take shared responsibility for inclusive, equitable, and forward-looking education.

OUTLOOK

The Tarrafal Education Forum was a beginning. It created spaces – for dialogue, for new perspectives, and for shared questions. The contributions in this report reflect not only the content but also the openness with which people from science, practice, and policy engaged with one another.

The challenges within Cape Verde's education system are complex. The discussions initiated at the forum showed that ideas are not lacking – what is needed are opportunities to develop and implement them together. This report seeks to contribute to that.

The participating universities are currently preparing an academic conference volume. Beyond that, it is up to all of us to carry forward the impulses of this forum – into classrooms, administrations, research institutions, and public debate.

Delta Cultura, together with its partners, will continue on this path. We hope that many will join us.

IMPRESSIONS


Fórum de Educação Tarrafal
Ponte entre Ciência e Prática Unidas
EDUCAÇÃO QUE
TRANSFORMA
Repensar juntos os
caminhos da educaçã
e inspirar novas
possibilidades.

WITH SINCERE THANKS

We extend our sincere thanks to all partners and supporters who contributed to the realization of the Education Forum. Without their committed collaboration, professional expertise, and organizational or financial support, this forum would not have been possible in its current form.

Organization:

DeltaCultura Cabo Verde

UNIVERSIDADE DE SANTIAGO

UNIVERSIDADE CABO VERDE uni-cv faed FACULDADE DE EDUCAÇÃO E DESPORTO

Cooperation partner:

MINISTÉRIO DA EDUCAÇÃO | GOVERNO DE CABO VERDE A TRABALHAR PARA TODOS.

Supporters:

HARMONIA

VIAJANTE

Casa Strela Bed & Breakfast

eos zeit kind schule

EHTA

CVTelecom

KING FISHER VILLAGE HIDEAWAY BY THE SEA

CABOSOM EMPRESA NACIONAL DE SOM, ILUMINAÇÃO E PRODUÇÕES, S.U.

VISTA MAR

DECOR GONÇALVES

ACC Auditoria Contabilidade e Consultoria

Escola de Condução Santo Amaro Tarrafal

BoNatura

Sol & Luna Pensão & Restaurante Sociedade Unipessoal, Lda.

Sincere thanks to Odair from UNI-CV, responsible for the photos and videos of the Forum.