

FEEDBACK BY THE MALTA CHAMBER Digital Education Strategy 2024-2030

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A. Introduction:

The Digital Education Strategy 2024-2030 presents a framework aimed at revolutionising digital education. It is structured to cover key essential aspects for nurturing digital literacy and competencies.

This document is based on four primary pillars: nurturing digital global citizens, empowering educators, fostering community engagement, and enriching digital resources.

The document emphasises digital skills and technology use in learning but neglects essential components like decision-making, interpersonal skills, self-organisation, critical thinking and creativity for the adaptation for the digital world. Another example is rethinking time management to equip students for effective technology integration.

In this context, The Malta Chamber often finds itself sidelined as there has been no feedback following the <u>National Education Strategy feedback provided in February</u>. This creates a barrier to effective participation and contribution to the strategy's review and implementation, in substance.

Analysing the measures within the four pillars, it is unclear why such were not integrated within the national education strategy in the first place.

For instance, 'Raising Global Digital Citizens' is not merely about familiarising students with digital tools but about cultivating a deep, critical understanding of digital technologies and their societal impacts. This requires an educational framework that not only introduces technology but integrates it seamlessly into all learning areas to foster ethical digital citizens, a fundamental requisite within the National Education Strategy.

The second pillar, 'Strengthening Educators for the 21st Century', highlights the need for teachers to be well-equipped to guide students through these digital landscapes. A substantial element of the National Education Strategy deals with upskilling of teachers and continuous learning with new pedagogies under a renewed curriculum. With such initiatives being hived off from the overarching strategy, may risk inconsistency and lack of coherent direction in eventual implementation.

'Community Commitment and Collaboration', which is the third pillar, underlines the role of community involvement in education, whose integration is referred to into the National Educational strategy. Again, even here, elements of interaction with key stakeholders like parents and industry was mentioned in the National Education Strategy. Efforts outlined here can easily become disjointed, leading to diluted impacts on educational outcomes.

The point being made here is the apparent isolation of these pillars from the broader strategy. It is only the fourth pillar, 'Improving Digital Resources' which seems to act as a binding agent for the digital transformation without a clear linkage to the holistic development of learners and educators referred to in the National Education Strategy.

It needs to be affirmed that the strength of the strategy is the widespread stakeholder involvement, with a strong focus on inclusivity and a commitment to continuous professional development for educators. However, there are areas that require further elaboration to ensure successful implementation. These areas include the need for detailed action plans, comprehensive assessment



and evaluation plans, strategies to enhance technological infrastructure, effective risk management, and enhanced engagement and communication with all stakeholders.

To enhance the strategy's effectiveness, recommendations are provided, aiming to develop actionable plans, establish regular reporting mechanisms, support technological infrastructure, identify and mitigate potential risks and foster continuous stakeholder engagement.

By addressing these areas, the strategy can be refined to better achieve its goals and ensure all learners benefit from high-quality digital education.

B. Analyses		

1. A decisive change in Governance within the Education sector

Governance in education has been grappling with a perplexing issue for years. Despite significantly increasing budgets, the returns in terms of educational outcomes are diminishing in their relevance to today's realities.

As spending on education increased substantially over the past couple of decades, there has not been a corresponding improvement in the quality or effectiveness of education, leading to questions about the efficiency of resource allocation.

A decisive change in central Governance direction is therefore needed. One potential starting point could be linking recurrent investment in education to performance reviews, gaining a deeper understanding of teachers' motivation, aptitude and drive.

2. Computing as key core subject in primary education

Computing, which comprises subjects such as logic and computational thinking, should be listed as key core subject in primary education. It is crucial for children to understand the fundamentals of critical thinking as early as possible. Reasoning, structuring thoughts, problem-solving skills and communications lay the foundations applicable across various disciplines and real-world situations. A more thorough discussion and integration of such skills into the curriculum is required to ensure students are well-equipped for complex problem-solving and innovative thinking.

As education progresses, we believe that this base should be incrementally expanded with ageappropriate concepts like learning algorithms, coding and eventually data analysis to deepen digital proficiency.

The challenge lies in making digital education engaging and accessible for students, regardless of age, literacy levels or technological access. Innovations in pedagogy, including a blend of digital and traditional learning, alongside methods like interactive simulations, are vital for dynamic engagement.

It is also important to critically assess digital education's content and structure to avoid disillusionment, focusing instead on problem-solving and critical thinking to enhance its perceived value and utility. Such links to the National Education Strategy published this year, which should complement, not duplicate, the outcomes expected from such Consultation.



Therefore, it should aim towards integrating digital education thoughtfully, supported primarily with sound logical understanding based on the proven ability of the student.

3. Digital as a multichannel component of education

While acknowledging the importance of digital literacy in education, it is essential to recognise that it forms only part of a multifaceted approach to learning. We should not diminish importance of the traditional classroom setting, experiential learning outside the classroom and direct industry engagement. Such a multichannel strategy ensures a fulfilling educational experience, integrating practical and theoretical knowledge.

To effectively drill digital principles from early education, platforms must be developed, focusing on core digital competencies, as explained above.

Enhanced learning methods, such as learning through play at primary and incorporating communication skills within the curriculum thereof, are vital. These approaches help in cultivating a more engaging and comprehensive educational environment that prepares students not just digitally but as well-rounded participants in a modern workforce.

Community programs and international collaborations like eTwinning, are useful for student exposure and mutual cultural learning. We reiterate but that embedding computational thinking into the curriculum should be the primary focus upon sporadic project initiatives. A revised curriculum should start with employing innovative educational strategies, not knowledge, so that students can be better equipped to thrive in a digital world, helping to bridge both educational and digital divides.

Seamless integration of logical / critical thinking in the curriculum over ad hoc projects should therefore be attributed primary importance.

4. Decisions on guidance career pathways

Decisions about career pathways should ideally be deferred until, at least, sixth form.

Throughout mandatory education, it is crucial to provide a broad curriculum that includes science, humanities and business subjects throughout all compulsory education.

This comprehensive approach allows students to gain a basic understanding of various fields without premature specialisation, because we believe that specialisation should occur at the A-level stage when students are mature enough to choose in delving deeper into their areas of interest.

We caution that any policy should not force key specialisation too early because such could dilute the transversality in students, forbidding them from gaining a wider range of skills.

We believe that this approach fosters well-rounded individuals, equipped to make more informed choices about their future careers at the right time.

It is imperative to enhance the career guidance unit by establishing a strong engagement with the Malta Chamber, amongst other stakeholders. This will enable them to gain a comprehensive understanding of the future labour market demands and provide better career guidance services to students.

5. Enhancing Teacher motivation



The World Economic Forum highlighted critical issues such as teacher shortages and the need for more engaging and self-fulfilling educational environments.

Many educators feel discouraged, leading to a pressing need to stimulate and support education officials to address these challenges.

The diversity of student abilities and cultural backgrounds necessitates a well-planned supply of teachers.

Educational pathways for teachers typically involve extensive academic years compared to relatively less responsible roles in industry with better salaries. To improve this situation, it is essential to recognise this and financially reward teachers who are not only committed to their roles but also actively contribute to extracurricular activities and the broader educational community. Educational pathways at the University of Malta should be improved to increase the number of available educators.

Current frameworks, unfortunately, do not mandate continuous professional development (CPD) in digital skills, often leaving the initiative to the discretion of school heads. This lack of structured guidance and support undermines the recovery and retention of quality teachers.

Let us also keep in mind that competition from industries like gaming, which often offer more attractive career opportunities, exacerbates the challenge of maintaining high-quality teaching standards.

6. Practical Implementation and Industry Relevance

Practical implementation issues arise, particularly in the context of current digital tools, like the MySchool portal, which stakeholders deem generally not up to scratch. The move to enhance this portal rather than opting for proven off-the-shelf solutions raises concerns about financial efficiency and effectiveness.

Moreover, the focus on certifications such as C3, which is not an industry-recognised certification, can be perceived as lacking in quality with misalignment to professional standards. The push for certifications from recognised entities like Microsoft, Cisco and Adobe suggests a preference for available tools having integrated industry-functions, which is essential for ensuring that students are gaining relevant and valuable digital skills for their future.

7. Underutilisation of resources and strategic ambiguities

Ambiguities also extend with regards to the utilisation of EU funds, the strategic focus between vocational and traditional education and the employment of digital tools in practical educational settings.

In the realm of vocational education, particularly at institutions like MCAST, whose infrastructural status remained far from completed, renders the potential for a digital-centric vocational educational underexploited.



C. Recommendations

The following are areas for improvement within the Strategy.

Pillar 1: Nurturing Digital Global Citizens

- 1. Introducing Computational Learning (Digital Literacy & ICT) in Primary Schools (Measure 1.1)
 - **Clarity in Time Allocation**: Specify the exact number of hours per week dedicated to digital literacy across all primary schools to ensure consistency.
 - Age-Appropriate Tools: Detail specific software and tools that will be introduced at different primary school levels for fostering digital creativity, such as Scratch for basic coding or Tinkercad for simple 3D design (page 30).
 - **Assessment Criteria**: Develop clear, age-specific assessment criteria for digital competencies to track progress from early childhood education to year six (page 32).

2. Digital Citizenship Empowerment and eSafety Awareness (Measure 1.4)

- The University of Malta is acknowledged as a key stakeholder but is only briefly mentioned on pages 37 (in connection with AI) and 48 (in connection with teacher training). The document should have expanded on UM's potential contributions, such as offering CPD related to critical and creative thinking and the responsible use of digital platforms. Highlighting UM's role in ongoing research and development in digital education can further strengthen the strategy.
- Comprehensive eSafety Curriculum: Implement a detailed eSafety curriculum that covers topics like cyberbullying, data privacy, and digital footprints. Ensure this curriculum is integrated across subjects and age groups (page 38).
- Regular Workshops and Seminars: Schedule regular eSafety workshops and seminars for students and parents, incorporating real-life scenarios and interactive activities to enhance understanding and engagement (page 39).

Pillar 2: Empowering Educators for the 21st Century

- 1. Professional Development (Measure 2.2)
 - Mandatory Training: Introduce mandatory professional development modules focused on the latest educational technologies and digital pedagogy methods. Ensure these are updated regularly to reflect technological advancements (page 46).
 - Practical Workshops: Provide hands-on workshops where educators can practice using new technologies in a classroom setting, ensuring they feel confident and competent (page 47).
 - Introduce foundational learning about AI: In the current educational landscape, discussions about AI among teachers often focus on choosing the best or latest AI tools from a vast array of options, likened to selecting a car without first learning how to drive. This approach can be misguided, as understanding foundational AI principles



is crucial before diving into specific AI tools. Ultimately, while the allure of sophisticated AI tools is strong, the process of learning AI fundamentals equips educators with the discernment needed to choose and use these tools effectively. Just like learning to drive before operating a car, understanding AI thoroughly ensures educators are well-prepared for the increasing integration of AI in education.

- i. **Comprehensive Understanding**: Learning the fundamentals of generative AI (gen-AI) provides a deep understanding of its benefits, limitations, risks, and challenges. This knowledge enables educators to leverage AI effectively, recognising its nuances and optimizing its use.
- ii. Versatile Application: A solid grasp of AI principles offers flexibility beyond stereotypical teacher tasks. Often, AI tools are developed by individuals with little classroom experience, which can limit their applicability. Understanding AI allows educators to tailor its use to a broader range of classroom scenarios.
- iii. **Transferable Skills**: As AI technology evolves, the skills acquired from understanding basic AI principles will remain valuable. This adaptability is crucial as AI integrates more deeply into various educational products and tools.
- iv. Cost-Effectiveness: Many AI tools come with 'freemium' pricing models that can accumulate costs over time. By understanding and utilising foundational AI, educators can minimise reliance on multiple specific tools, thus saving costs and avoiding dependency on potentially short-lived companies in a competitive market.
- v. **Early Adoption and Experimentation**: Educators familiar with foundational AI can experiment with new capabilities firsthand, without waiting for third-party developers to integrate them into commercial products.
- vi. **Encouragement of Innovation**: A strong foundational understanding promotes innovative uses of AI. Educators can explore unconventional ideas and applications rather than being confined to rigid, predefined use cases.
- vii. **Transparency and Ethics**: Deep knowledge of AI promotes transparency in its interactions. This is crucial for addressing ethical considerations and teaching students about AI literacy, fostering a more informed and ethical use of AI.
- viii. **Critical Evaluation of AI Tools**: Understanding how AI works enables educators to critically assess the design, value, ethics, and costs of various AI applications, leading to more informed decisions about their use in the classroom.
- ix. **Teacher Autonomy and Critical Thinking**: Mastering AI basics enhances teacher autonomy and critical thinking. As AI tools improve and become more reliable, teachers will be better equipped to maintain control over their use and outcomes, rather than blindly trusting these tools.
- x. **Detection of AI Usage**: Familiarity with AI's 'language' helps educators identify when students use AI, aiding in maintaining academic integrity.

2. Integration in ITE (Measure 2.3)

• **Curriculum Revision**: Collaborate with Institutes for Technology Education (ITE) institutions to revise curricula, ensuring that digital literacy and competency training



are integral parts of teacher education programmes. Include specific courses on digital tools and resources (page 48).

 Mentorship Programmes: Establish mentorship programmes where experienced educators support new teachers in integrating digital technologies into their teaching practices (page 49).

Pillar 3: Community Engagement and Collaboration

- 1. Parental Involvement (Measure 3.1)
 - Communication Channels: Enhance communication channels between schools and parents through a dedicated and secure online platform that provides regular updates and resources. Ensure accessibility in multiple languages to cater to diverse communities (page 55).
 - **Digital Literacy Courses for Parents**: Offer digital literacy courses for parents to help them understand the tools and platforms their children use. These courses can be held both online and in-person to maximise participation (page 56).
 - Addiction and Isolation: These critical issues are only briefly mentioned on pages 39 and 56. Greater emphasis should be placed on these aspects to address the potential negative impacts of digital technology on social and conversational skills. Referencing works like Sherry Turkle's "Reclaiming Conversation" (2016) can provide valuable insights into these challenges. Strategies to mitigate these downsides should be incorporated, promoting a balanced approach to technology use that maintains the relevance of face-to-face interactions and relationships.

2. Collaboration with Experts (Measure 3.2)

- Industry Partnerships: Formalise partnerships with tech companies and educational experts to co-develop new digital tools and resources tailored to the needs of Maltese students (page 59).
- Role Models and Mentors: Create a programme that connects students with industry role models and mentors, including successful women in technology, to inspire and guide them (page 59).

Pillar 4: Enriching Digital Resources

- 1. Resource Allocation (Measure 4.1)
 - Distribution Plan: Develop a detailed distribution plan for tablets and laptops, including timelines and logistics to ensure all students receive their devices promptly (page 63).
 - Technical Support: Ensure robust technical support is available for both students and educators to troubleshoot any issues with devices. Consider a dedicated helpline or support centre (page 64).



2. Digital Content Development (Measure 4.3)

- Local Content Creation: Invest in the development of high-quality digital content in Maltese. Collaborate with local educators and content creators to ensure relevance and alignment with the curriculum (page 66).
- **Interactive and Multimedia Resources**: Encourage the creation of interactive and multimedia-rich educational materials that cater to various learning needs (page 66).

C. Conclusion	
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The strategy emphasises the importance of digital literacy and competencies as essential skills for personal growth, societal progress, and employability but falls short from clarifying how to align stakeholders towards common goals.

Addressing digital tools in education requires a robust and transparent feedback mechanism. A genuine engagement with all stakeholders and involvement of educational experts. To ensure a future-ready education system, a digital reform in Education not only incorporates digital tools but should also seek to foster an integrated, holistic approach to learning and skills development.

The Malta Chamber therefore calls for a genuine and determined visionary approach, whose governance is pragmatic in its implementation, ensuring that all facets of the educational ecosystem are aligned towards nurturing competent, ethical and digitally literate citizens.



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