TEMPLATE FOR THE GOOD PRACTICE

What is a good practice?

> A good practice is not only a practice that is good, but a practice that has been proven to work well and produce good results, and is therefore recommended as a model. It is a successful experience, which has been tested and validated, in the broad sense, which has been repeated and deserves to be shared so that a greater number of people can adopt it.

Please follow the instructions included to fill in the template. You can replace the guiding questions for each element with your description.

Mandatory fields are defined by *

Element	Description
Title*	*Integrated, competency-based digital education model for technical and technological secondary education.*
Name of the VET Provider	*WE Applied Technology School – Cairo- Egypt*
Thematic domain	What is the thematic domain covered by this good practice? More than one domain can be indicated ✔ Innovation ✔ Digital ✔ Career guidance ✔ Lifelong learning ✔ Creating partnerships/skills ecosystems
Introduction*	*There was a gap in traditional technical education in Egypt between teaching methods and labor market demands, alongside the limited use of digital tools and a weak connection between theoretical learning and practical application. While students demonstrated acceptable academic performance, they often lacked employability skills, digital literacy, and sufficient career awareness.* *Applied technology education, in its modern form, has sought to address this challenge since its launch in 2018. At the WE Applied Technology School, established in 2020, the Ministry of Education initiated a transformation of the learning process into a competency-based, technology-enabled model aligned with industry needs.* *The model was implemented between 2020 and 2023, culminating in the graduation of the first cohort. Following an evidence-based review, additional specializations were introduced, accompanied by continuous improvements in teaching methodologies, assessment approaches, technology integration, and digital transformation in line with labor market requirements. The model*

continued to evolve through 2024, and in 2025 two further specializations were added in direct response to emerging market needs.

In parallel, systematic training and capacity-building programs were delivered to staff in all aspects of digital transformation, which became a defining characteristic of the implementation at WE Cairo. Infrastructure development supported this transformation, and continuous improvement remains embedded through ongoing evaluation and responsiveness to both local and global labor market demands.

Stakeholders and Partners	*Beneficiaries:*
	Students in applied technology secondary education, particularly in the fields of network technology, programming technology, web development, communications technology, digital arts technology, artificial intelligence technology, and data analytics.
	Users:
	Teachers, school leadership teams, and industry-based trainers.
	Partners:
	Ministry of Education (Applied Technology Schools Unit), private sector companies, ICT service providers (Telecom Egypt), and local community organizations.
	Nature of Participation:
	Participation in curriculum design, providing on-the-job training opportunities, developing teacher skills, supporting digital platforms, and assessing student competencies.
Impact*	*Students' performance improved significantly in competency-based assessments, with several graduating cohorts achieving a 100% success rate. Graduates benefited from increased employment opportunities through structured exposure to real-world work environments and industry-led training. In addition, final-year students received targeted preparation on developing ATS-compatible CVs and successfully navigating job interviews, addressing professional, behavioral, and cultural competencies.*
	The practice generated measurable social impact by reducing dropout rates and increasing student motivation and engagement. The school also became a preferred option for high-achieving preparatory school graduates as a credible and attractive alternative to general secondary education. Furthermore, the initiative contributed to improving societal perceptions of technical education graduates in Egypt. As a result, academic, skill-based, and ethical excellence have enabled graduates to access higher education pathways. This is evidenced by their consistent top rankings in Egyptian universities, reflecting strong academic and professional performance.
	Moreover, graduates of applied technology schools have contributed to prompting higher education institutions to re-evaluate aspects of university curricula, due to the advanced technical knowledge and applied skills they bring

	to university-level education. Overall, the practice has positioned applied technology education as closely aligned with labor market needs and, in many cases, more directly connected to employment requirements than traditional academic pathways. This alignment has generated positive economic impact by supplying the local labor market with qualified, job-ready graduates.
	Evidence of impact includes competency-based assessment results, employer feedback, student portfolios and profiles, and documented institutional and industry partnerships.
Innovation and Success Factors *	*Integrating digital learning platforms with practical training.*
	Transitioning from content-based teaching to competency-based learning and assessment, and project-based and evidence-based, enterprise-led education.
	Strong partnerships between schools and industry ensure relevance and sustainability.
	Conditions for success include institutional support, qualified leadership, teacher readiness, digital infrastructure, and stakeholder commitment.
Constraints*	*Initial resistance to change from some staff and some leadership levels accustomed to traditional work methods and fear of change.*
	Limited digital skills among teachers and administrators in the early stages.
	Limited infrastructure.
	These challenges were overcome through ongoing professional development, phased implementation, peer mentoring, and gradual infrastructure upgrades.
Lessons learned *	*Managing change with a clear and transparent methodology is just as important as technological innovation.*
	Ongoing training and support are essential for sustainability.
	Interaction with the industry sector must be structured and mutually beneficial.
	Data-driven monitoring improves decision-making and outcomes.
Replicability and/or up-scaling	*This good practice can be replicated and scaled at both regional and national levels, provided that key enabling conditions are in place. These include strong leadership commitment, continuous teacher training, adequate digital infrastructure, and structured partnerships with industry stakeholders. Successful replication also requires adaptation to local and global labor market needs rather than direct duplication. At scale, clear governance frameworks, defined roles and responsibilities, and effective monitoring and evaluation indicators are essential to ensure sustainability and impact, particularly in contexts with similar socio-economic conditions.*
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URL of the practice	*It has not yet been officially published online.*
	Some results from this practice have been published on LinkedIn.
	www.linkedin.com/in/dr-osama-bekheit-178887209
	A large number of students and graduates on LinkedIn are posting their project-based learning results.
	Documents and relevant links are available upon request.
Related resources that have been developed	*Digital lesson plans and strategies for each lesson, prepared by the teacher and reviewed by the assessment office manager and school administration, are based on the competency frameworks provided by the Ministry of Education.*
	Student assessment criteria and portfolios
	Teacher training materials (available through the Ministry of Education's content creator or the private sector)
	Internal reports and assessment tools.
	Sample materials can be shared for review.

Optional Appendix

Appendix: Implementation Timeline and Key Performance Indicators

1. Implementation Timeline (Condensed)

- **2018**
  National launch of applied technology education in Egypt, establishing the policy framework for competency-based and labor market–oriented technical education.
- **2020**
  Establishment of WE Applied Technology School – Cairo and initiation of a competency-based, digitally enabled education model aligned with industry needs.
- **2020–2022**
  Core implementation phase, including digital learning platforms, industry-led practical training, and competency-based assessment across main specializations.
- **2022–2023**
  Expansion phase with the introduction of a new specialization, graduation of the first cohort, and strengthened partnerships with industry and public stakeholders.
- **2023–2025**
  Evidence-based review and scaling phase, resulting in pedagogical improvements, enhanced digital transformation, infrastructure upgrades, and the planned introduction of two additional labor market–driven specializations.

2. Key Performance Indicators (KPIs)

KPIs are based on internal monitoring systems, institutional reports, and stakeholder feedback.

- **Learner Achievement and Completion**
  Up to **100% completion and success rates** in competency-based assessments across multiple graduating cohorts.

- **Employability and Career Readiness**
  Approximately **80–90%** of graduates transitioned successfully into employment, on-the-job training, or higher education pathways.

- **Equity and Retention**
  Technical education dropout rates decreased by an estimated **30–40%**, contributing to improved access, retention, and learner motivation.

- **Institutional Capacity and Digital Transformation**
  Over **85%** of teaching and administrative staff completed structured professional development in digital education and competency-based learning.