# Scaling AI Skills Across Institutions: A Practical Guide from Global TVET Leaders

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## Moving from Isolated Pilots to System-Wide Digital Literacy in Workforce Development

Across the global Technical and Vocational Education and Training (TVET) landscape, small-scale experimentation with artificial intelligence is already underway. Forward-thinking faculty members are exploring standalone tools, students are experimenting with digital study aids, and administrators are assessing how automation might streamline workflows.

However, transitioning from these isolated, fragmented pilots to wide-scaling AI upskilling across teachers, staff, and students remains a monumental challenge.

Insights emerging from leading institutions across Africa, Latin America, and Asia —gathered through the **Microsoft Global AI for TVET Community of Practice**, an initiative co-delivered by the **International Youth Foundation (IYF)** and **Microsoft Elevate**— reveal that scaling AI skills is fundamentally a human and systemic challenge, rather than a technical one. Institutions that have successfully accelerated AI literacy across thousands of educators and learners share an intentional philosophy: they treat AI not as an abstract computer science subject, but as an immediate, practical capability directly tied to teaching efficiency and career readiness.

### Four Best Practices for AI Upskilling at Scale

1. **Prioritize Utility**
   Focus on immediate, day-to-day administrative relief before pedagogy.
2. **Normalize Classroom Practice**
   Embed AI directly into existing curricula rather than standalone courses.
3. **Design Inclusive Architectures**
   Provide diverse, multilingual learning tracks for all readiness levels.
4. **Deploy Cascade Engines**
   Train and empower regional "Master Trainers" to own the rollout.

By analyzing the real-world rollout models deployed by TVETs as part of their participation within the Microsoft Global AI for TVET Community of Practice, this case study outlines four core operational lessons for institutional leaders seeking to build sustainable AI capabilities at scale.

### Lesson 1: Reframe AI as an "Instructor Superpower"

Institutions that succeed in widespread adoption rarely begin their training programs with data architectures or prompt theories. Instead, they position AI as an immediate solution to growing teacher workloads.

By demonstrating how tools like Microsoft 365 Copilot support instructors in their day-to-day work, leaders turn technological anxiety into enthusiastic adoption. At **SENATI** in Peru, for example, instructors used AI to automatically convert virtual class recordings into localized study guides, glossaries, and tailored learning pathways. On a daily basis, this means an instructor who previously spent hours after class manually drafting review notes can now generate tailored study packs in minutes, redirecting that saved time toward direct student mentoring and hands-on lab supervision When trainers see AI as a practical ally that reclaims hours for direct student engagement, institutional enthusiasm and widespread adoption increase significantly across the TVET sector.

**Grassroots in Action: False Bay College** At **False Bay College** in South Africa, the transition occurred organically

through utility. Staff began utilizing integrated Microsoft tools to optimize complex administrative report generation, structure institutional communication, and automate routine data management. Mark Selby, Assistant Director of eLearning at False Bay TVET College, shared that Copilot usage was initially challenging before they expanded their training, but that "at [our] College, staff are now using Copilot to query and summarise large datasets, produce accurate reports, and scaffold large-scale documentation—capabilities that have proven invaluable in improving day-to-day operations." This proof of success drives widespread behavioral change well before formal rules are even finalized.

### Lesson 2: Enforce a Culture of "Learning by Doing"

Theory-heavy professional development fails to stick. Widespread AI literacy requires a hands-on approach where instructors apply tools directly to their active course loads.

**System Spotlight: The Kenya School of TVET** In a prominent example, the Kenya School of TVET completely bypassed abstract tech theory in its institutional strategy. Instead, the school embedded practical AI tools directly into its existing teacher training. In their day-to-day preparation, faculty members immediately used AI to customize lessons—turning dense technical guides into multi-level materials, generating complex trade-specific grading rubrics in minutes, and adapting exercises to match different student learning speeds.

This practical orientation extends directly to the student body. Rather than evaluating learners on theoretical AI definitions, coursework is anchored in industry-aligned applications — such as at SENATI, where students use AI-driven simulators to troubleshoot actual industrial equipment errors. This approach ensures graduates enter the labor market fully equipped with the precise digital competencies requested by modern corporate employers.

### Lesson 3: Offer multi-modal, multi-language, and tiered training materials

A common pitfall in institutional upskilling is designing training solely for the tech-savvy early adopters and assuming that English-only content is sufficient. To counter this, the IYF and Microsoft Elevate provide global TVET networks with tailored, credentialed skill-building opportunities across four languages at both the beginner and intermediate levels.

Rather than relying on a single training format, this initiative delivers learning via live webinars, recorded video sessions, and self-paced digital courses. Our findings reveal a remarkably high uptake across all of these formats. No single language or modality emerged as a dominant winner, demonstrating that instructors and students find deep value in every variation.

***Thanks to the Microsoft ecosystem, we have class recordings analyzed, transcribed, and instantly converted into tailored student resources: summaries, glossaries, activities, and learning pathways. Artificial intelligence is fundamentally redefining how we teach and learn, without losing the human touch.***

**Dr. Luis Talledo**
SENATI

Furthermore, TVET leaders consistently emphasize the global scarcity of non-English AI training content geared specifically for vocational contexts. Providing these diverse, high-quality offerings empowers institutions to supply critical technical skills to students directly in their native languages. In day-to-day classroom environments, this enables instructors to immediately introduce AI tools into trade-specific lectures—such as automotive mechanics or hospitality management—without requiring students to navigate foreign terminology or complex technical jargon.

### Lesson 4: Architect Cascade Engines for Exponential Growth

While introductory workshops offer a vital starting spark for educators, they can be difficult to scale across multi-campus networks. To achieve reach without losing quality, institutions use a cascade training framework that provides intensive technical instruction to a core group of master educators, thus creating a self-sustaining internal support network.

## Checklist for Scaling AI Upskilling Across Your System

- **Start with Administrative Pain Points**
  Identify top time-wasters (reports, grading, lesson prep) and show how AI solves them first.
- **Empower Local Master Trainers**
  Select and train campus champions to lead peer-learning circles in their native languages.
- **Measure Hours Saved, Not Just Attendance**
  Track impact through practical metrics like faculty prep time saved and student engagement.
- **Provide Multi-Modal Learning**
  Ensure training is available via live workshops, recorded videos, and self-paced digital tracks.

The Kenya School of TVET successfully operationalized this model, developing 28 Master Trainers who returned to their respective campuses to lead localized peer-learning circles. In daily practice, these peer circles serve as practical "help desks" where hesitant teachers can bring their upcoming lesson plans, test AI prompts with a colleague, and receive real-time coaching from a peer who understands their local campus environment.

### Heading: The Forward Horizon

To move past isolated experiments and achieve true system-wide scale, institutional leaders can look to transition from ad-hoc training to the structured strategies outlined in this guide. Leading institutions across Africa, Latin America, and Asia have already proven that prioritizing immediate faculty utility, deploying cascade training models, and building inclusive learning pathways can rapidly increase institutional adoption and accelerate digital literacy.

Through the joint efforts of the IYF and the Microsoft Global AI for TVET Community of Practice, this collaborative rollout model provides a sustainable blueprint for TVET systems globally. When an entire academic community gains this shared capability, the traditional boundaries of vocational education disappear. We move toward a future where training programs adjust rapidly to industry shifts, instructors reclaim hours from administrative tasks to spend more quality time with their students, and every graduate enters the workforce ready to succeed in the digital economy.

## Access Ongoing AI Training & Resources

### Ready to empower your team with certified AI skills?

Microsoft Elevate for Educators provides school leaders and teachers with community access, credentials, and capacity building to confidently integrate AI into teaching. In partnership with IYF, these courses are available in English, Spanish, Portuguese, and French.

**To learn more: Microsoft Elevate for Educators**
**Explore the Global AI for TVET Training: AI Training Courses**

***This case study series was developed by the International Youth Foundation (IYF) in collaboration with the Microsoft Global AI for TVET Community of Practice. Together, they equip workforce development leaders across Africa, Latin America, and Asia with scalable, human-centered frameworks to integrate AI into technical education.***

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