



SUMMARY REPORT

Assessing ICT and AI Teacher Competencies and Training Needs in General Education in Cambodia

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INTRODUCTION AND BACKGROUND

Guided by the Pentagonal Strategy, which identifies digital transformation as one of five critical pillars for national development, education is positioned as a key driver of economic and social progress. The Ministry of Education, Youth and Sport (MoEYS) has articulated this vision through strategic documents such as the Education Strategic Plan (ESP) 2024-2028, the Digital Education Strategy for Schools (2024), the Teacher Policy Action Plan (TPAP) 2024-2028, and the Strategic Plan for Teacher Education Reform 2024-2030. These policies underscore the government's commitment to elevating ICT- and AI-enabled teaching, learning, school governance, and teacher professionalisation while promoting equity and inclusion.

The ESP recognises digital technology as a cross-cutting priority and sets clear targets for enhancing digital literacy, embedding ICT in teaching and learning, and ensuring equitable access to technology across all levels of education. Complementing this, the Digital Education Strategy envisions classrooms where digital tools are seamlessly integrated into pedagogy and assessment, ensuring every learner acquires essential digital skills. Similarly, the Strategic Plan for Teacher Education Reform emphasises strengthening teacher education through digital specialisations and advancing Continuous Professional Development (CPD), signalling a systemic shift towards higher professional standards and future-ready teaching. These education-focused strategies align closely with broader national frameworks such as the Science, Technology and Innovation Roadmap 2030 and the Digital Economy and Social Policy Framework 2021-2035, reinforcing the role of education in building a digitally skilled workforce.

Although evidence supports substantial progress in the ICT development in education systems, they reveal systemic gaps in equitable access, localised resources, and teacher capacity, for example in foundational digital skills, AI literacy, TPACK integration. The rapid assessment was designed to generate granular evidence across roles (teachers, teacher educators, administrators), school types, and geographical locations to inform the national Framework and the EdTech incubation space that can translate policy ambition into actionable competencies, CPD pathways, and school/TEI strategy supports.

MoEYS, with support from UNESCO through the STEPCam programme financed by the Global Partnership for Education (GPE), conducted this rapid assessment study between July and early August 2025. Grounded in UNESCO's ICT Competency Framework for Teachers (2018) and the AI Competency Framework for Teachers (2024), the MoEYS is developing Cambodia's ICT-AI Competency Framework for Teachers (ICT-AI CFT) that is directly informed by findings from this rapid assessment. This study provides the system-wide evidence on current competencies, readiness, training needs, and institutional conditions across schools and TEIs. The ICT-AI CFT anchors standards in local realities while maintaining global alignment. It operationalises competency expectations across proficiency levels and roles (primary/secondary; teacher/teacher educator), and ensures human-centred, ethical, and inclusive use of technology through Khmer-language accessibility and responsible AI guidance.

Why does this study matter?

To date, no comprehensive study has assessed ICT and AI competencies among teachers and teacher educators at scale in Cambodia. This report fills that gap. Its findings directly inform the design of Cambodia's first-ever ICT and AI Competency Framework for Teachers, ensuring it reflects national, regional, and local realities and is built to be relevant and inclusive.

The assessment was guided by four core questions:

- 1. **Competency and Readiness:** What are the current levels of ICT and AI competency and readiness among teachers, teacher educators, and administrators?
- 2. **Training Needs and Gaps:** What specific ICT and AI skills do educators require, and what formats and frequencies of training are preferred?
- 3. **Institutional Strategy and Leadership:** How prepared are schools and TEIs to support digital transformation, and what leadership practices predict readiness?
- 4. **Perceptions and Attitudes:** How do educators perceive ICT and AI in education, and what ethical or pedagogical concerns do they raise?

METHODOLOGY

The study employed a convergent mixed-methods design, combining a **large-scale national survey** with **Focus Group Discussions (FGDs)** and **Key Informant Interviews (KIIs)**. Quantitative and qualitative data were collected simultaneously, analysed independently, and integrated during interpretation. Survey instruments were adapted from the UNESCO ICT Competency Framework for Teachers (2018) and the UNESCO AI Competency Framework for Teachers (2024), and contextualised for Cambodia through Khmer translation, back-translation, and review by national specialists in teacher training.

2,665 respondents surveyed across 7 provinces	1,694 survey respondents are female	30 FGDs + 12 KIIs qualitative sessions across 4 provinces
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Sampling strategy: To ensure representativeness across Cambodia's diverse educational contexts, the study adopted a multistage random and cluster sampling approach. Seven provinces were selected to reflect the country's major geographic and socio-economic zones, coastal, Tonle Sap, plains, and plateau/mountainous regions, covering both urban and rural settings: Phnom Penh, Battambang, Siem

Reap, Svay Rieng, Preah Sihanouk, Kratie, and Ratanak Kiri. Within each province, districts were selected to capture variation in location (urban vs. rural), institution type (public, resource-rich public, and private), school level (primary vs. secondary), and teacher experience. Schools and TEIs were then sampled as cluster units, intentionally balancing urban and rural settings across all three school types. Quantitative survey data were collected across all seven provinces. FGDs and KIIs were conducted in four provinces chosen to represent the most distinct contextual contrasts: urban/coastal (Preah Sihanouk), tourism/peri-urban (Siem Reap), remote/indigenous (Ratanak Kiri), and border/economic corridor (Svay Rieng).

Quantitative Methods	Qualitative Methods
Survey of 1,987 school teachers (primary: 1,101 ; secondary: 797 ; mixed: 89) across public, resource-rich public, and private schools in 7 provinces	30 FGDs (5-8 participants each) with teachers, teacher educators, school administrators, and community representatives
Survey of 133 teacher educators across PTTCs, RTTCs, and NTTI	12 KIIs with rural and urban teachers, school leaders, TEI representatives, and parents/community leaders
Survey of 470 school administrators and 74 TEI administrators	4 provinces selected to represent key contextual contrasts
Multi-stage stratified cluster sampling across 7 provinces, balanced urban-rural	Purposive sampling to ensure diverse perspectives across roles, school levels, locations, and community contexts
Survey constructs measured on a 1-5 Likert scale: higher = stronger confidence, more frequent use, or greater agreement. ICT-AI competencies examined across three developmental levels: • Basic familiarity • Practical application • Creative use	Statistical patterns triangulated with qualitative evidence to assess: • Competencies • Training needs • Institutional readiness • Leadership practices • Contextual barriers • Stakeholder perceptions

Limitation: This rapid assessment drew on responses from 6 TEIs, 27 high schools, and 34 primary schools across 7 provinces, providing a broad picture but not a full national census, and results should be read as indicative rather than exhaustive of all contexts in Cambodia. The survey relied on self-report, so some measures of competency, attitudes, and practice may reflect perceptions more than day-to-day behaviour; and whilst instruments and discussion guides were used in Khmer and, where needed, translated with back-translation and review, subtle wording differences, particularly for newer AI concepts, may have influenced how questions were understood. The findings capture a snapshot in time: conditions such as connectivity, device availability, and school routines can change quickly and may shift as resources or policies evolve. Finally, as a cross-sectional study, analyses show associations but do not establish cause and effect.

KEY FINDINGS

The findings are organised across four interconnected themes: **(1) Competency and Readiness, (2) Training Access, (3) Institutional Strategy and Leadership, and (4) Perceptions and Attitudes**. Each theme draws on both survey data and qualitative evidence from focus group discussions and key informant interviews, with statistical findings presented alongside the voices of teachers, school leaders, and TEI staff who help explain what the numbers show. Where differences between groups are reported, effect sizes indicate their practical significance alongside statistical significance.

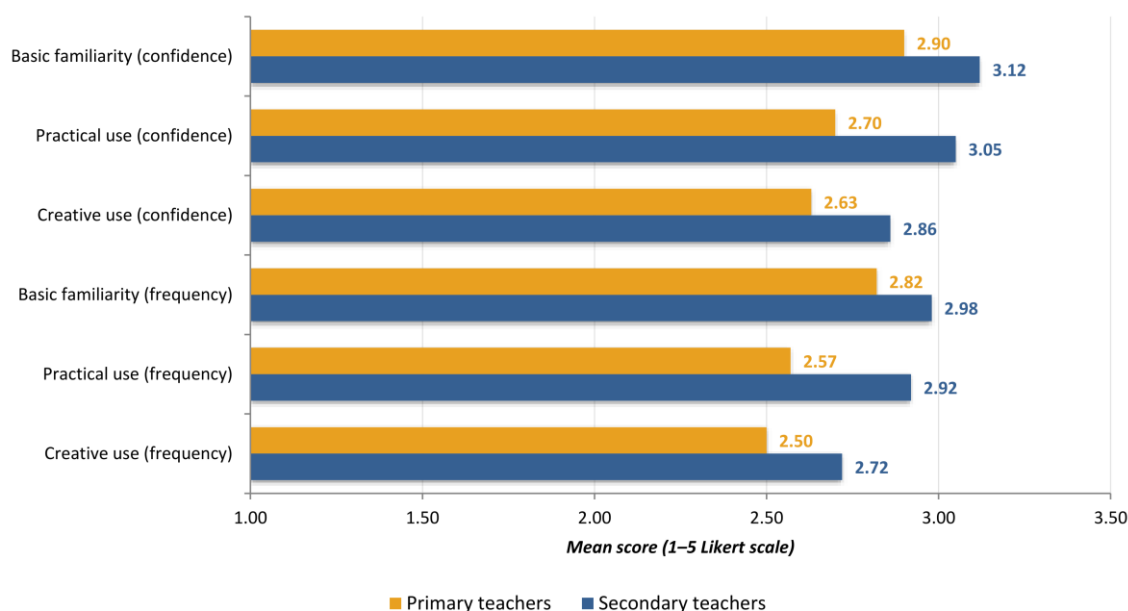
Table 1. Education Roles Across 8 Demographic Categories [Source: Table 3.1a, Section 3.1]

TEACHING ROLE	GENDER		AGE	LOCATION		QUALIFICATION	EXPERIENCE	ICT EXPERTISE
Role / Group	Male %	Female %	Age 35–44 %	Urban %	Rural %	Bachelor's & Above %	>10 yrs Experience %	ICT Subject Expertise %
Primary Teachers	34.3	65.7	33.9	32.4	67.6	53.6	64.9	0.1
Secondary Teachers	60	40	22.7	41.5	58.5	80.4	78.8	4.1
School Administrators	62.3	37.7	36.2	36.6	63.4	65.3	55.1	—
Teacher Educators	66.2	33.8	59	94	6	94	75.2	7.5
TEI Administrators	71.6	28.4	33.8	100	0	78.3	48.6	—

1. Competency and Readiness – A Clear Proficiency Gradient: Confident with Basics, Struggling with Depth

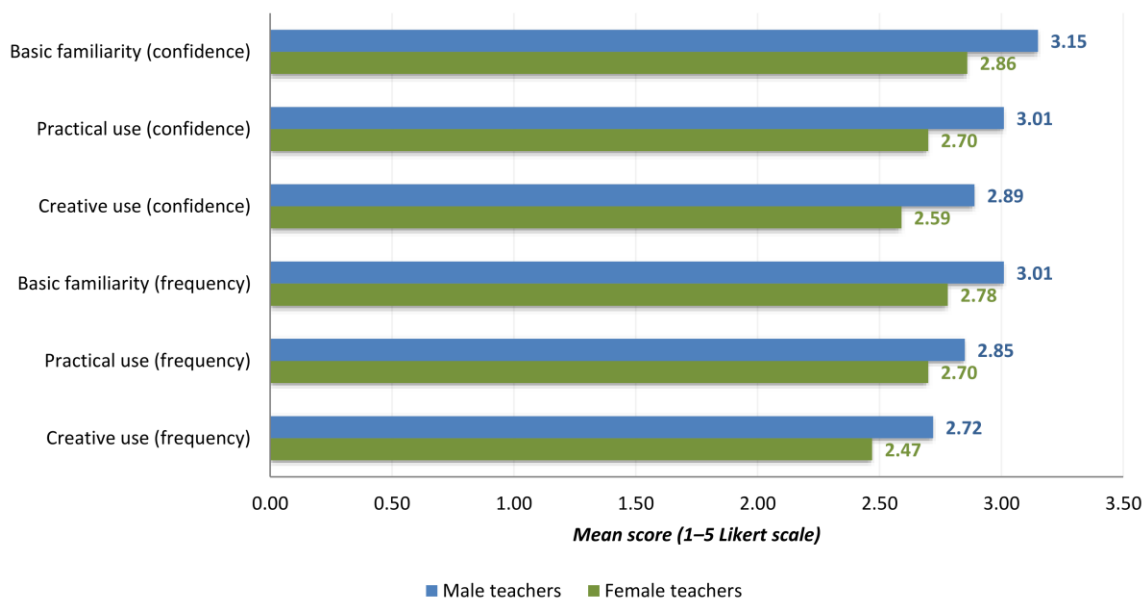
Most teachers are confident with basic digital tools, but confidence drops sharply as tasks become more pedagogically demanding, and creative or AI-supported use lag behind basic or practical use.

Figure 1a. ICT&AI Competency Mean Score: Primary vs. Secondary Teachers [Source: Table 3.2a, Section 3.2]



Across all groups, competency follows a consistent three-level gradient: basic ICT familiarity scores highest (overall $M = 2.99$ confidence; 2.88 frequency), practical classroom use sits in the middle ($M = 2.84$; 2.71), and creative or AI-supported use is the lowest ($M = 2.72$; 2.59)¹. Secondary teachers consistently outperform primary teachers at every level, most markedly in practical use, where the gap is moderate in size ($d = 0.39$ - 0.41) and directly relevant to classroom impact².

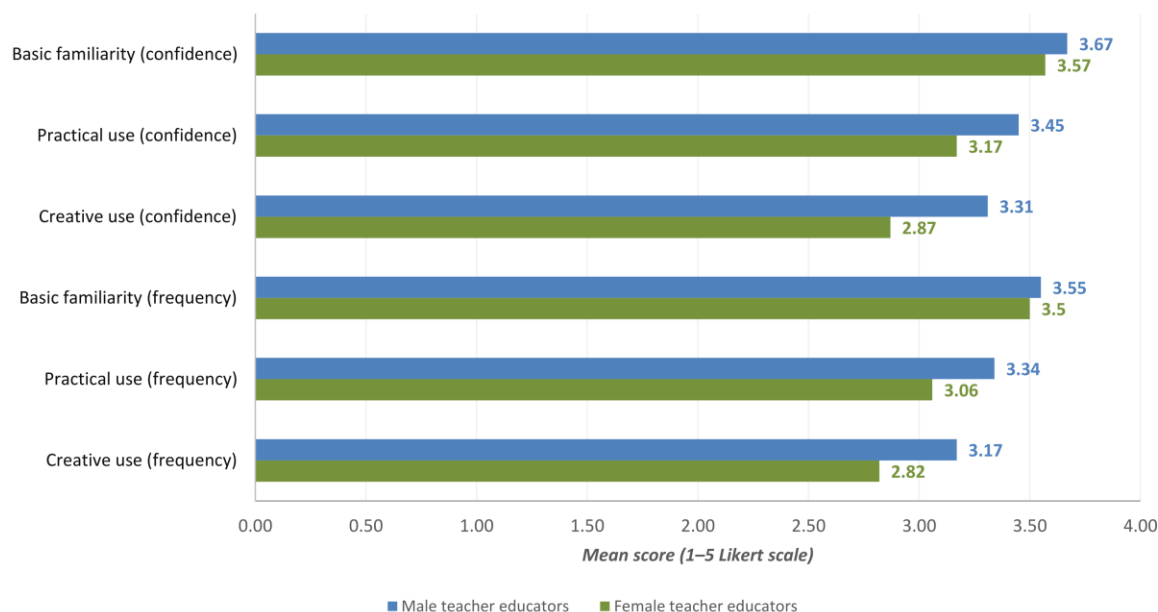
Figure 1b. Gender Differences in ICT and AI Competency: Male vs Female School Teachers [Source: Table 3.2b, Section 3.2]



¹ M (Mean) is the average score across all respondents for that item, measured on a scale of 1 to 5.

² d (Cohen's d) measures the size of a difference between two groups. A value around 0.2 is considered small, 0.5 medium, and 0.8 large.

Figure 1c. Gender Differences in ICT and AI Competency: Male vs Female Teacher Educators [Source: Table 3.2c, Section 3.2]



The gender gap follows the same pattern: male teachers report higher confidence and frequency than female teachers across all six sub-scales ($d = 0.28-0.35$), with the disparity widening among secondary teachers and at higher task complexity.

These two dimensions, role and gender, are not independent: a female primary school teacher sits at the intersection of the two lowest-scoring groups simultaneously. Teacher educators score higher overall but share the same creative-use ceiling, and amongst them the gender gap is largest precisely at the advanced level (Creative Use-Confidence: $d \approx 0.50$, $p = .008$)³. Qualitative evidence reinforces that ICT confidence tends to emerge where leadership actively supports technology use, and peer learning is structured, not simply where hardware is available.

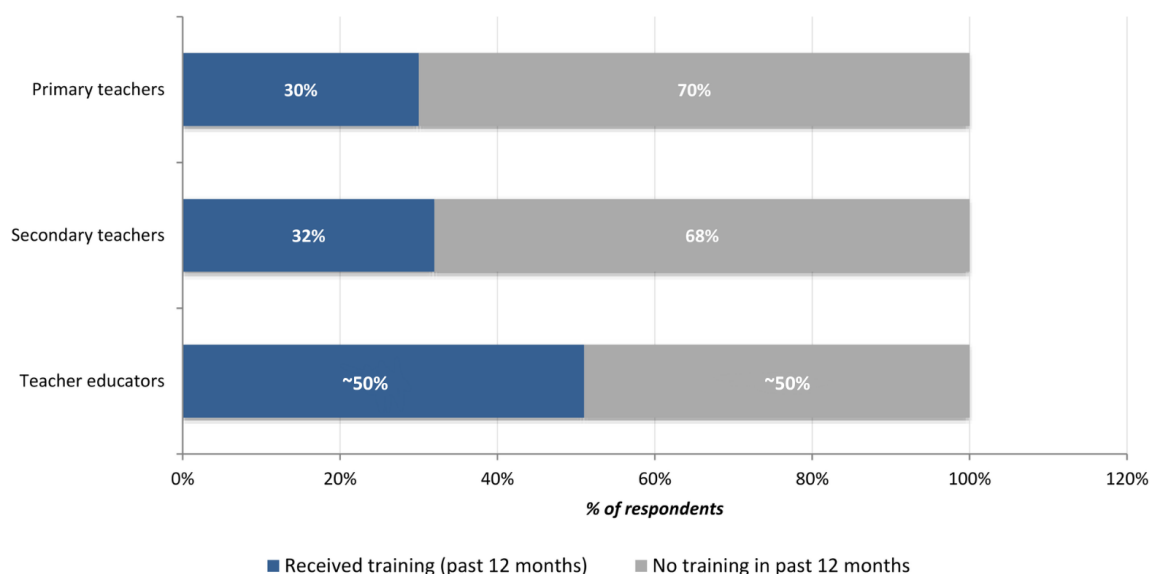
Most teachers in Cambodia have crossed the threshold of basic digital familiarity: they own smartphones, use Telegram, show PowerPoint presentations. The challenge is the next step: moving from using devices to using them pedagogically. This is precisely what the National ICT-AI Competency Framework is designed to achieve – guide a coherent and progressive upskilling of teachers' ICT and AI competencies: not just for teachers to be able to operate technology, but for them to design with technology, adapt it to their students' needs, and use it to improve learning.

³ A result is considered statistically significant when $p < .05$, meaning the pattern observed is unlikely to be due to chance.

2. Training Access – Training Is the Strongest Driver of ICT and AI Integration: Yet Access Remains Limited and Uneven

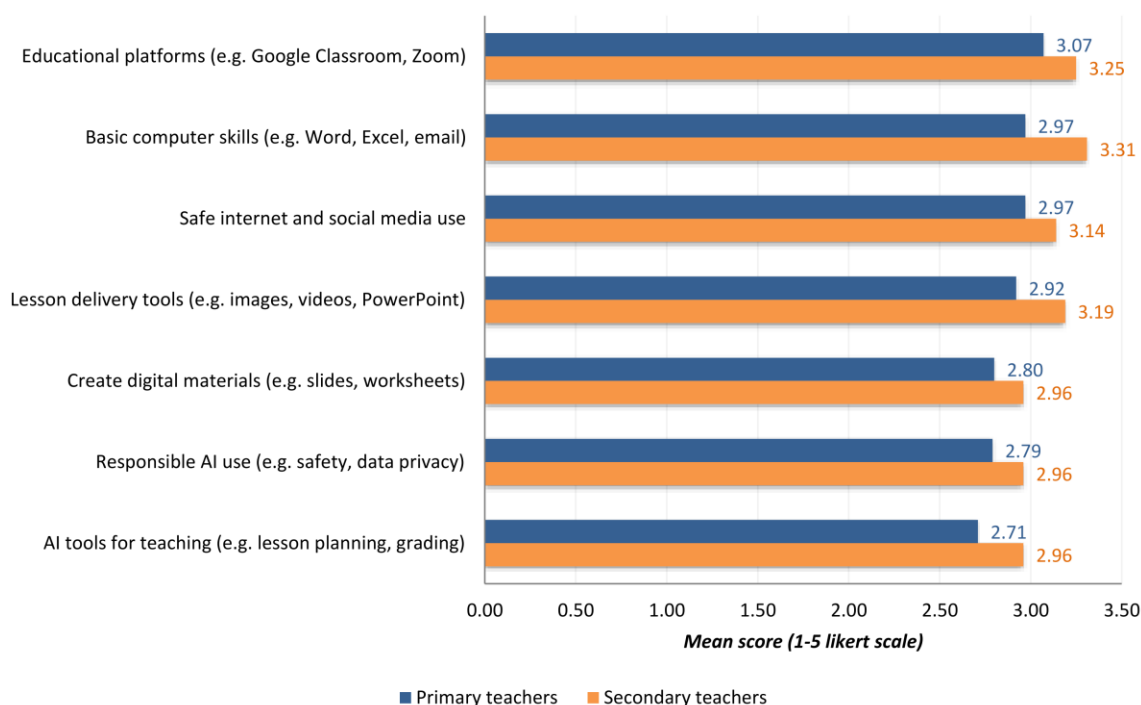
Training is not only the most widely cited professional development need in this study; it is also, statistically, the strongest predictor of classroom ICT and AI integration. Yet access to it remains deeply unequal.

Figure 2a. Training Access by Role: % of Trained vs. Untrained (Past 12 Months) [Source: Figure 3.3a, Section 3.3]



The access gap is pronounced and uneven across roles. Primary teachers report the lowest training participation (30% trained), followed closely by secondary teachers (32%), whilst teacher educators fare somewhat better (though still nearly half untrained in the past year). Teaching role and gender gaps mirror those seen in competency: secondary teachers report significantly higher training participation than primary teachers across all content areas ($p < .05$), and male teachers report higher participation than female teachers across most areas, particularly in ICT fundamentals, platform use, and AI-related tasks (overall $M = 3.12$ vs 2.91 , $p = .015$, $d = 0.198$). These disparities are consistent rather than incidental — they reinforce the competency gaps documented in Finding 1. Qualitative evidence explains why: in rural schools, formal workshops are infrequent and peer-to-peer learning at school emerges as the most practical alternative, whilst limited English proficiency acts as a further structural barrier for many primary teachers engaging with training materials and online resources.

Figure 2b. Training Content Areas: Mean Participation Scores, School Teachers [Source: Table 3.3a, Section 3.3]



Where training does occur, it skews towards foundational ICT skills and platform use. AI-related content — using AI tools for teaching (overall $M = 2.81$) and responsible AI use ($M = 2.86$) — consistently ranks lowest across both primary and secondary teachers. This is not simply an access problem: even among those who have received training, AI-related competencies are the least covered. Despite this, training demand is high across all groups (overall need score $M = 4.02$ out of 5), with the three most urgently requested areas being: training in using technology in education ($M = 4.06$), creating digital learning materials ($M = 4.08$), and responsible AI use ($M = 4.08$). The gap between the training teachers received and what they need is widest precisely in AI — an area that is an integral part of the National ICT-AI Competency Framework.

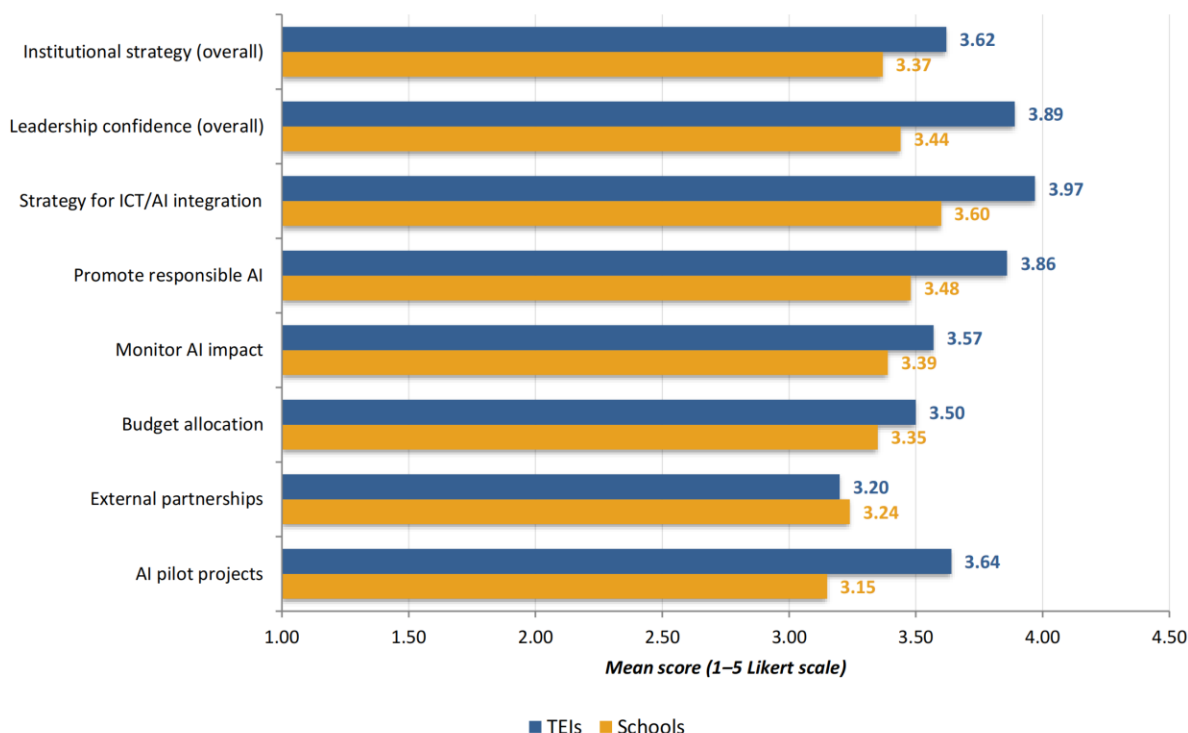
Training is a stronger predictor of classroom technology integration than ICT and AI confidence alone. A teacher who has been trained is more likely to integrate technology meaningfully and effectively than a teacher who simply feels confident — which means investing in confidence-building alone is insufficient. The effect is even stronger for teacher educators (0.693 points of confidence gained per unit of training vs 0.396 for school teachers), reinforcing their potential as system multipliers when CPD is well targeted.

The findings show that teachers want training, and the constraint is access: most teachers, especially at the primary level and in rural areas, simply do not have consistent, quality access to professional development in ICT and AI. Fragmented, one-off workshops, where they do occur, rarely embed into daily practice. The evidence points toward school-embedded, sustained professional development models as the highest-leverage intervention: cluster-based mentoring, Professional Learning Communities (PLCs), and blended modalities that combine face-to-face coaching with ongoing online support.

3. Institutional Strategy and Leadership – Ready Minds, Not Yet Ready Systems: The Planning-Implementation Gap

Schools and TEIs report moderate institutional readiness for ICT and AI integration — but implementation consistently lags behind intent, with AI pilot projects and external partnerships the lowest-rated items in both contexts, and the urban-rural divide running through every dimension of the data.

Figure 3a. Institutional Strategy and Leadership Confidence: Schools vs TEIs [Source: Tables 3.4b & 3.4c, Section 3.4]



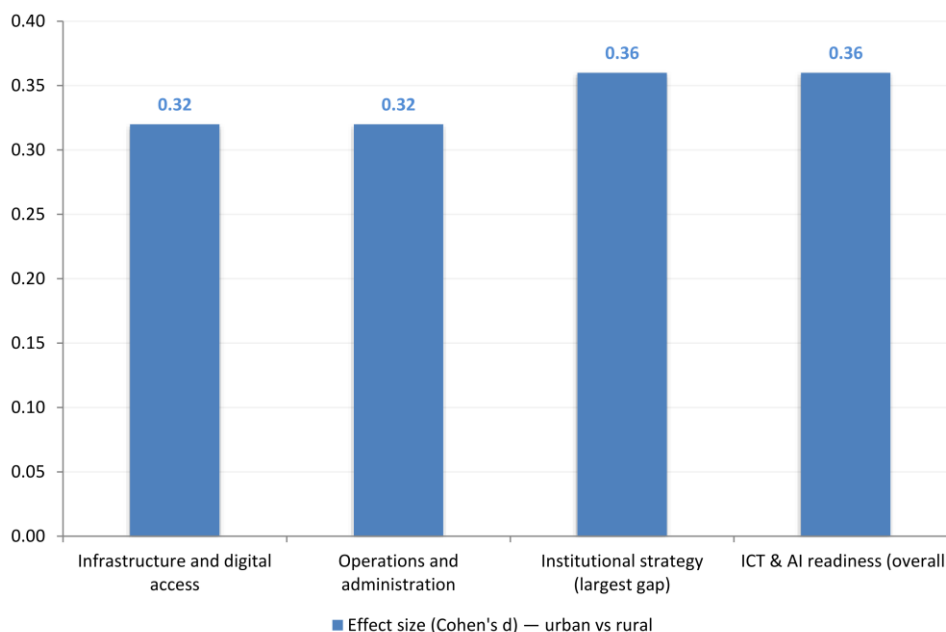
Both schools and TEIs report broadly similar levels of institutional strategy ($M = 3.37$ and 3.62 respectively) and leadership confidence ($M = 3.44$ and 3.89). However, item-level data reveals a recurring gap between what institutions plan and what they enact. In schools, the highest-rated strategy item is having a strategy for ICT and AI integration ($M = 3.60$), yet the lowest-rated is running AI pilot projects ($M = 3.15$), the point at which strategy becomes action.

External partnership operationalisation is also low ($M = 3.24$), despite leaders rating their confidence to collaborate at $M = 3.39$. TEIs show the same contradiction in sharper relief: leadership confidence to collaborate with external partners is notably high ($M = 3.91$), yet actually implementing collaborative strategy is the lowest-rated item across all TEI measures ($M = 3.20$). This pattern of high confidence, low follow-through suggests the barrier lies in governance mechanisms and implementation structures rather than leadership willingness.

Qualitative data makes the institutional gap concrete. In schools with available infrastructure such as WiFi, projectors, smart TVs, teachers consistently described the absence of clear policy guidance as the binding

constraint: ‘There’s no clear guideline on how to integrate AI in teaching’ (Urban Secondary School, Siem Reap). School administrators similarly noted the absence of institutional training plans: ‘The school has no plan in place to provide training on basic computer use for teachers’ (Urban Secondary School, Siem Reap). These accounts reinforce the survey finding that institutional readiness is multidimensional, encompassing leadership, policy, coordination capacity, and implementation support, not hardware alone.

Figure 3b. Urban vs Rural School Readiness: Effect Sizes Across All Dimensions [Source: Section 3.4. All differences statistically significant ($p < .001$). Effect sizes (Cohen's d) indicate small-to-moderate gaps favouring urban schools. Institutional strategy shows the largest gap between urban and rural schools.]



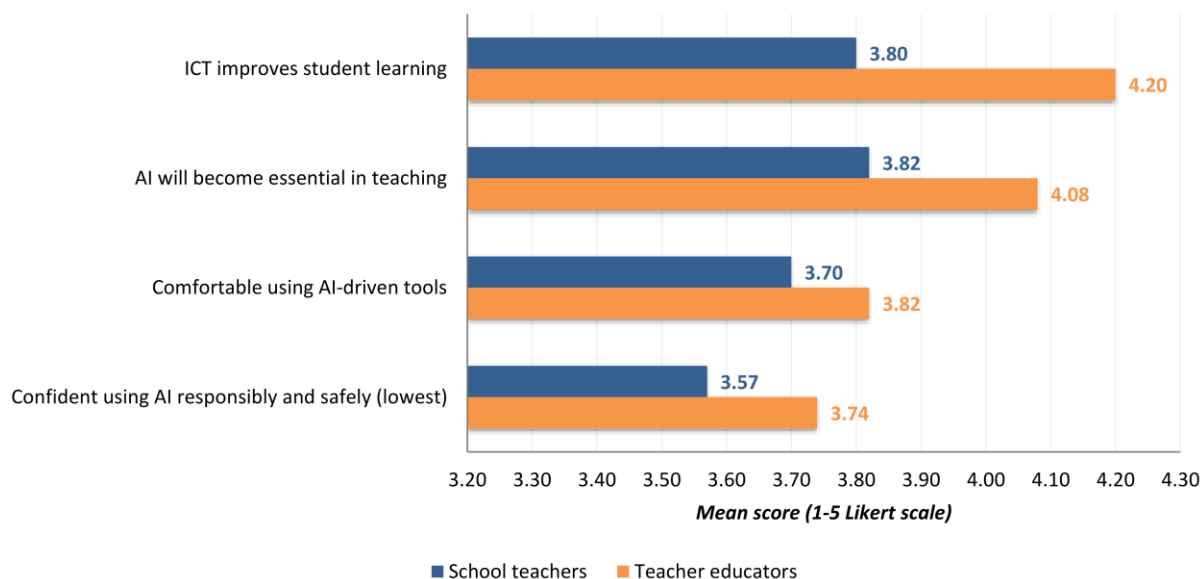
Geographic location exerts a stronger influence on institutional readiness than school type. Urban schools outperform rural schools across every dimension, with small-to-moderate effect sizes confirmed across all four areas: infrastructure and digital access ($d = 0.32$), operations and administration ($d = 0.32$), and institutional strategy ($d = 0.36$), with an overall readiness gap of $d = 0.36$ (all $p < .001$). The largest gap is in institutional strategy, not in hardware provision, which is a counterintuitive and important finding: targeted support for rural schools must focus on leadership development, ICT integration planning tools, and curriculum guidance, not simply connectivity or device distribution. The infrastructure gap is real but narrower than the planning gap and addressing one without the other will not close the readiness divide.

Schools and TEIs report moderate planning confidence, but planning does not reliably translate into action. AI pilot projects, external partnerships, and operational follow-through are consistently the weakest dimensions in both schools and TEIs, and more severely in rural contexts. Closing the planning-implementation gap requires governance capacity, practical implementation tools, and coordination mechanisms, not simply more devices or stronger Wi-Fi. For rural schools specifically, the evidence calls for targeted leadership and planning support, not hardware-first interventions.

4. Perceptions and Attitudes – Conditional Optimism: High Enthusiasm for AI, Real Concerns About Responsible Use

A majority of teachers (93.7%) want to learn more about AI, yet confidence in using AI responsibly and safely is the lowest-scoring perception item in both schools and TEIs, signalling that enthusiasm and readiness are not yet aligned.

Figure 4a. Teacher Perceptions of ICT and AI: Primary vs Secondary [Source: Table 3.5a, Section 3.5]



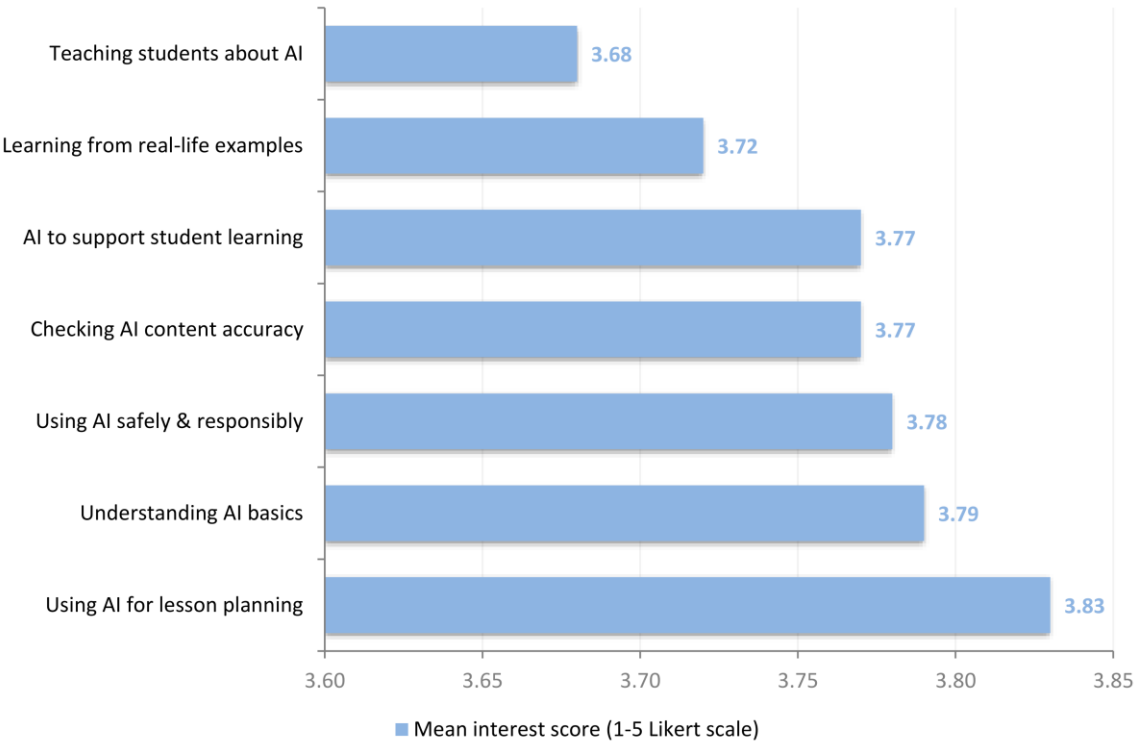
School teachers report moderately positive perceptions of ICT and AI overall ($M = 3.72$), with the belief that ICT improves learning ($M = 3.80$) and that AI will become essential in teaching ($M = 3.82$) scoring the highest. Teacher educators are more positive still ($M = 3.99$), reflecting greater exposure to structured ICT and AI development. In both groups, however, confidence in using AI responsibly and safely is the lowest-rated item. This is not a marginal gap: responsible use confidence trails the highest perception item by 0.23 points for school teachers and 0.46 points for teacher educators. It signals that positive attitudes towards AI are outpacing the guidance and capacity needed to use it safely.

The analytical significance of this finding goes beyond description. There is a strong positive correlation between ICT and AI perceptions and interest in AI training — $r = 0.742$ for school teachers and $r = 0.755$ for teacher educators (both $p < .01$)⁴. Teachers who hold positive views of technology are significantly more likely to seek professional development in it. This means that optimism is not passive: it actively predicts training demand. The implication for policy is direct: building on existing positive perceptions is a more efficient path to CPD uptake than trying to generate motivation from scratch.

⁴ r indicates the strength of association between two variables. The full report characterises $r = 0.74$ as a strong positive relationship.



Figure 4b. Interest in AI Training Topics (School Teachers) [Source: Table 3.5a / Figure 3.5c, Section 3.5]



Training interest is high and broadly distributed. Secondary teachers report slightly higher overall interest than primary teachers ($M = 3.85$ vs 3.70 , $p < .001$, $d = 0.19$), but the most analytically striking finding is that female teachers and primary teachers account for slightly higher proportions of positive interest in AI training than their male and secondary counterparts ($\chi^2 = 4.782$, $p = .029$)⁵. This is counterintuitive given their lower confidence and training access documented in Findings 1 and 2, and it is an important planning signal: the groups most underserved by current training provision are among the most willing to engage with it.

Qualitative data adds what the survey does not capture: the specific, recurring concerns that define the “conditional” in conditional optimism. Teachers, parents, and school leaders describe tangible instructional benefits: greater student engagement, easier lesson preparation, richer resources. But they also articulate clear worries about student over-reliance on AI and reduced critical thinking, the accuracy

⁵ χ^2 (chi-square) is a statistical test assessing whether differences between groups are significant. The full report characterises this association as statistically significant but modest ($\chi^2 = 4.782$, $p = .029$)

of AI-generated content, exposure to inappropriate material, excessive screen time, and the risk of AI replacing teaching roles. These concerns are framed conditionally — ‘if not monitored...’, ‘if used incorrectly...’ — not as opposition. This reflects awareness of risk rather than resistance to innovation, and it points directly to what the ICT-AI Competency Framework for Teachers must address: not just how to use AI, but how to use it safely, critically, and responsibly.

The concerns raised by teachers and parents about AI are expressions of professional and parental responsibility. Embedding responsible ICT and AI use as a foundational component of the ICT-AI Competency Framework, not as an optional module but as a core standard, will ensure that ICT and AI integration is grounded in both pedagogical purpose and ethical responsibility.

Together, the findings describe **a system in transition**: foundational ICT practices are increasingly common, but meaningful, equitable, and responsible ICT and AI integration remains uneven and highly dependent on training, institutional support, and governance conditions.

CROSS-CUTTING MESSAGES

Two thematic patterns run across all four findings with particular consistency. They should inform the ICT-AI Competency Framework, and how CPD is designed and delivered and institutional support are prioritised.

1. The equity gap compounds at every level and must be addressed by design.

The study confirms a persistent divide across three axes: **geographic** (urban schools report higher readiness than rural ones), **institutional** (secondary teachers and teacher educators consistently outpace primary teachers in confidence and frequency of ICT use), and **gender** (male teachers report significantly higher digital confidence and training participation than their female colleagues). These are not independent findings — they appear consistently across all four dimensions of the study. Primary teachers face lower competency scores and less training access. Rural schools show weaker institutional readiness and strategic planning capacity. Female teachers report lower confidence and participation across most training areas. Yet the same groups, female teachers and primary teachers, are among the most likely to express interest in AI training when asked. These intersecting disadvantages suggest that system-wide digital transformation efforts will need to account for differentiated starting points if they are to reach all teachers equitably.

2. Language is a moderating factor in training effectiveness and technology adoption.

Qualitative evidence across Sections 3.3 and 3.4 consistently identifies **limited English proficiency** as a barrier to training participation and technology adoption, particularly for school-based teachers. Several respondents described difficulty following training delivered in English, and limited access to Khmer-language materials as a constraint on independent learning. Older teachers and primary teachers raised this barrier most frequently; teacher educators did not, reflecting their greater baseline familiarity with ICT environments. Policy planning must explicitly incorporate equity-oriented design principles, including Khmer-first training materials and localised AI tools, to ensure that digital transformation reaches teachers equitably regardless of language background.

POLICY RECOMMENDATIONS

These **six recommendations** translate the study's integrated findings into practical policy actions. The first two address the standard framework and professional development pathways, and the remaining four address the institutional, equity, ethical, and partnership conditions that determine whether those foundations hold across the system.

	Policy Recommendations
1	Formalise ICT-AI Competency Pathways within National Teacher Standards • Update the Professional Standards for Teachers (2016) to include specific indicators for ICT literacy, AI literacy, and digital safety, ensuring these skills are a core requirement for career progression through the Teacher Career Pathways (TCP). • Articulate clear progression levels from foundational digital literacy to AI-enhanced pedagogy, differentiated for primary teachers, secondary teachers, and school leaders, anchored in practical responsibilities such as lesson design and learner assessment rather than generic technical skills.
2	Expand the National CPD System towards School-Embedded ICT Models • Expand CPD offerings to include specialised ICT and AI modules, allowing teachers to earn official credits under their professional profile and receive more structured support and mentoring. • Articulate progression levels from foundational digital literacy to AI-enhanced pedagogy differentiated by role – for primary teachers, secondary teachers, and school leaders. These objectives should be anchored in practical responsibilities such as lesson design and learner assessment rather than generic technical skills.

3	Synchronise Institutional Readiness with Infrastructure Expansion • Integrate ICT and AI readiness indicators in Annual Operating Plans (AOPs) for Direct Provincial and District Education Offices and require schools to address specific ICT integration needs within their School Improvement Plans (SIPs). • Optimise the existing ICT Mentor scheme by utilising the Secondary Resource School (SRS) hub model, enabling secondary ICT coordinators to provide itinerant technical support and coaching to primary schools within their cluster. • Lead a coordinated effort with the Ministry of Post and Telecommunications (MPTC) to stabilise school-level infrastructure, focusing on zero-rated educational data access and electricity stabilisation in rural regions.
4	Address Language and Experience Barriers to Ensure Equitable Training Outcomes • Prioritise the development and procurement of Khmer-language AI interfaces and instructional manuals to ensure that rural and primary teachers are not excluded by English-language barriers. • Strengthen the existing Open Educational Resources (OER) platform to host localised, peer-reviewed lesson plans, reducing the preparation burden for teachers with low digital confidence. • Frame language and age-related barriers as structural challenges requiring systemic responses, rather than individual shortcomings, to maintain teacher confidence and ensure inclusive adoption across all regions.
5	Integrate Responsible and Ethical Use as a Core Component of ICT-AI Policy • Integrate responsible use as a foundational element of the ICT-AI Competency Framework and CPD programmes, covering AI output verification, student data privacy, content appropriateness, and digital well-being • Provide schools with clear administrative guidelines on AI safeguards, empowering school leaders to communicate risks and benefits effectively to parents and communities.
6	Formalise and Stabilise Public-Private-Community Partnerships • Pursue Public-Private Partnerships (PPPs) with telecommunications providers to ensure that digital tools remain accessible in resource-constrained rural areas without incurring prohibitive costs for schools or teachers.

CONCLUSION

This rapid assessment reveals a Cambodian education sector at a critical transitional moment. Foundational ICT practices are now widely embedded across schools and institutions, driven by teacher initiative and peer learning. Stakeholder attitudes are broadly positive, best characterised as conditional optimism: teachers and parents recognise the potential of digital technologies to enhance learning whilst articulating legitimate concerns about misuse and unintended consequences. This balance of enthusiasm and caution is not a constraint on reform; it is a planning opportunity.

What the evidence also makes clear is that readiness for ICT and AI integration is shaped less by hardware than by human, organisational, and leadership capacities. A persistent divide runs across three axes (geographic, institutional, and gender) reflecting disparities in structured learning environments, institutional guidance, and ongoing support rather than simple gaps in technology access. Institutional barriers characterised by limited formal training opportunities, absent school policy guidance, and insufficient coaching consistently lag behind the enthusiasm that teachers themselves bring to digital transformation.

The findings call for a system-strengthening approach: one that aligns competency frameworks, professional development pathways, institutional readiness, ethical guidance, and partnerships within a coherent planning logic. By grounding policy actions in the lived realities documented here across roles, geographies, and contexts, Cambodia can move beyond incremental digitalisation towards a more sustainable, equitable, and pedagogically meaningful integration of ICT and AI in its education system.

FURTHER READING AND SELECTED REFERENCES

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