



Hong Kong Teachers to Undergo 30-Hour Digital Training Amid AI Push in Schools: Policy Design, Implementation Evidence, and a Research Agenda

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Abstract

In June 2026, the Hong Kong Curriculum Development Council issued the Blueprint for Digital Education Development in Primary and Secondary Schools, which mandated all in-service teachers to undergo at least 30 hours of digital education training within each three-year cycle of 150 hours of continuing professional development. This article reviews the policy context, evidence of implementation, and ongoing tensions associated with this mandate. The analysis draws on government circulars, legislative papers, teacher surveys and international comparative frameworks to show a significant gap between the policy intent and the reality of implementation. More than 90% of teachers in Hong Kong are already using AI tools, but they rate their own proficiency at only 5 out of 10, and nearly 60% say AI adoption is driven by individual exploration in isolation, rather than systemic support at the school level. The training content still concentrates on the basic use of tools, with over 70 percent of teachers reporting that they do not use advanced artificial intelligence tools like AI agents or Retrieval-Augmented Generation. However, the article proposes that the 30-hour requirement will work only if three conditions are met: if training content shifts from generic tool operation to discipline-embedded pedagogical application; if assessment frameworks shift from time-based compliance to competency-based certification; and if support structures shift from fragmented individual effort to coordinated institutional ecosystems. A research agenda is proposed to investigate these conditions using longitudinal, comparative and mixed methods designs.

Keywords: AI literacy, digital education, continuing professional development, Hong Kong education policy, teacher professional development

I. Introduction

The integration of artificial intelligence in education has been accelerated worldwide but how to prepare teachers for this transformation remains a question. The question became more urgent in Hong Kong, when the Curriculum Development Council (2026) published the Blueprint for Digital Education Development in Primary and Secondary Schools (hereafter the Blueprint). All primary and secondary school teachers are required to undergo at least 30 hours of digital education training in each three-year cycle of continuing professional development (CPD), according to this policy document (Education Bureau, 2026). This requirement will become effective in the 2026/27 academic year and will make up 20% of the current 150-hour CPD cycle.

The policy came as students took it up fast. Between July and December 2025, surveys found 95% of students and 91% of teachers were already using AI tools in teaching and learning. But teachers only rated their own skills at AI a 5 out of 10, compared to 6.5 for students. This is not just a technical skill issue, but a reflection of deeper structural issues in the way training is designed, delivered and evaluated.

This article discusses the 30-hour training requirement as policy intervention. There are 4 questions to answer. First, what was the institutional and policy context for the implementation of the requirement? Secondly, what is the design of the training framework and what evidence is there for its implementation? Third, what structural issues constrain the effectiveness of the requirement? 4. What research is necessary to determine the extent to which the policy meets its stated goals? The analysis is based on government circulars, Legislative Council papers, teacher surveys by education bodies and international competency frameworks. A major limitation is the relative dearth of peer-reviewed



empirical studies on the implementation of this policy. Much of the evidence available has been collected through organisational surveys and government documentation, which although informative has not been subject to independent methodological scrutiny.

II. Policy Context and Institutional Framework

A. National Alignment and Local Strategy

Clearly, the Blueprint is consistent with the national strategic directions. The EDB actively corresponds to the overall direction of the National 15th Five-Year Plan and continues to promote the integrated development of education, technology and talent in Hong Kong, the bureau said. This alignment frames digital education not only as pedagogical reform but as contributing to national innovation capacity (Novillo-Villegas et al., 2025) and talent development.

To this end, the EDB set up the Steering Committee on Strategic Development of Digital Education (SCSDDE) in 2025 at the institutional level to identify four key directions, namely, enhancing students' digital literacy skills, strengthening professional training for teachers, optimising digital education infrastructure, and deepening collaboration locally, with the Chinese Mainland and internationally. The Curriculum Development Council then commissioned Blueprint which was published on 17 June 2026.

The financial commitment is huge. The Quality Education Fund has allocated HK\$2 billion to support digital education in primary and secondary schools, with each public sector school receiving a one-off grant of HK\$500,000 to purchase AI-assisted instructional materials and resources. In addition, the EDB provides at least 50,000 training places per year for digital education professional development activities.

B. The Training Requirement in Context

The 30-hour requirement is not an additional burden but falls within the existing 150-hour CPD framework. The Education Bureau (2026) circular said that "teachers are required to receive a minimum of 30 hours training in digital education in each three-year CPD cycle of 150 hours". For teachers whose three-year cycle does not start in 2026/27, the requirement can be met through transitional arrangements by "arranging no less than 10 hours of digital education training" in that academic year.

The training in architecture is layer by layer. The courses are grouped into three categories: "AI Literacy" at the basic and advanced levels; "AI + Subjects" training to develop teachers' discipline-specific and interdisciplinary teaching capabilities; and "AI Leadership" training for school leaders to strengthen strategic planning and technology-enabled education. The Education Bureau (2026a) has also put in place a "Principal's Memo" and a digital education "Teacher Information Pack" to help school leadership teams communicate policy requirements.

III. Implementation Evidence and Teacher Experiences

A. Patterns of AI Use Among Teachers

To understand the context of implementation, we need to look at how teachers are currently using AI. In June 2026, three Legislative Councillors with educational backgrounds conducted a survey which received 185 valid responses from teachers in primary, secondary and special schools, with more than half of the respondents having over 16 years of teaching experience. The survey showed a pattern of highly motivated but fragmented implementation.

The key drivers for use of AI were around preparation efficiency, with 73.5% citing "improving the quality of teaching materials" and 64.9% citing "saving preparation time". However, in terms of institutional support, about 60% of respondents said their schools were at the stage of "individual teachers exploring on their own", only 12.4% said their schools had "school-wide policies and training support" and just 2.2% reported systematic promotion across all subject panels.



This is also supported by a larger survey by the Our Hong Kong Foundation with 1,200 valid responses from July to December 2025. It found that while 83% of teachers reported their schools provided AI-related training, their self-assessed proficiency was only 5 out of 10. The authors of that study concluded that “current teacher training may not be adequate to build effective AI skills among teachers and students”.

B. Training Content and Depth

A key question is the depth of the training material. The Legislative Councillor survey showed that teachers’ AI applications were mainly for preparation and output tasks, such as creating teaching slides and designing learning activities. The average scores ranged from 3.5 to 4.0 on a 5-point scale. Conversely, assessment and analytical tasks such as “analysing common student errors”, “learning analytics” and “producing student progress reports” were rated relatively low, with many respondents giving these domains only 1 or 2 out of 5. Senior teachers said it was not practical for high-stakes assessment as AI marking quality was inconsistent and required a lot of verification.

More fundamentally, advanced technical applications are still largely missing. More than 70% of respondents said they had no use or knowledge of AI agents or Retrieval-Augmented Generation (RAG) (Zhao et al., 2026) technologies. Without RAG capabilities connected to school-based curriculum materials, content produced by AI tends to diverge from Hong Kong curriculum standards, leading to teachers shying away from using AI for core assessment purposes. Almost 87 per cent of respondents agreed that Hong Kong should develop an AI teaching platform better suited to local curricula, school contexts and data privacy requirements.

The Hong Kong Education University sent out 1,892 questionnaires to 82 secondary schools, 65 primary schools and 16 special schools in May-June 2026 and found that more than 20% of schools were actively exploring the use of AI in teaching, learning and administration. But some 40% of teachers were still observant or hesitant because of staff shortages and limited understanding of AI.

C. Structural Barriers

The Hong Kong Federation of Education Workers (HKFEW) (2025) said the main problem is not quantitative but systemic. The Federation said in its policy submission that “resource fragmentation, data silos, high computing costs and the requirement for teachers to spend time ‘training’ models rather than ‘using’ models” are among several barriers. School-based models are often simply adopted, which requires teachers to act as data annotators and model trainers at the same time and adds to existing workloads.

This was confirmed in the Education University survey, which said, “schools, when using AI tools such as chatbots to handle administrative work, need to bolster the resources, substantive support and training provided to teachers”. The survey suggested that professional development courses should prepare teachers to assist learners in acquiring “metacognitive abilities” about AI — knowing what AI is, how it can make people smarter, and how to develop autonomous learning and creative thinking.

IV. The Tension Between Time and Competence

A. From Quantity to Capability

The 30-hour requirement reflects the key analytical tension inherent in the non-necessary relationship between training hours and capability development. The policy has limited specification as to what competency outcomes should be achieved but does provide a quantitative floor of 30 hours within 150. The Blueprint aims to enhance the digital teaching abilities of teachers (Gao, Li & Zheng, 2024) and foster individualised learning. But the mechanisms to determine whether this objective has been achieved are still underdeveloped. The Legislative Council paper notes that the EDB will collect information through various modes of school visits, focus group meetings with teachers and teacher-student activities to review the implementation, but does not say what competency benchmarks or assessment tools will be used.



A comparison with national frameworks is instructive. The Chinese Mainland has set up a Teacher Technology Literacy (Nguyen & Habók, 2024) standard, which has indicators in five domains: digital awareness, digital technology knowledge and skills, digital application, digital social responsibility and professional development. The framework incorporates assessment tools to track the level of teacher capability. The HKFEW has recommended that Hong Kong should develop a similarly graduated “Hong Kong Teacher Technology Literacy Framework” to regulate requirements in the areas of digital awareness, application and social responsibility. At the time of writing, no such framework was formally adopted -- a significant gap in the policy architecture.

B. The "Floor Without Ceiling" Principle and Equity Risks

The Blueprint is based on a “floor without ceiling” principle, intended to provide a baseline of guarantees to all schools, but also to allow better-resourced schools to go further. Critics, however, have said the Blueprint could widen the digital divide if resources are not distributed equitably. Schools with good infrastructure and technical support may be able to organise school-based training, establish “digital education teacher groups” and invite external experts, while schools with limited resources may depend entirely on centralised EDB training.

This risk is particularly acute considering the finding that only 12.4% of schools have school-wide policies and training support in place. Without targeted intervention, the 30-hour mandate could create a two-tier system: schools with existing capacity will use the mandate to become engines of deeper transformation, while schools without it will view the mandate as a compliance exercise. The Blueprint's recommendation that principals encourage the formation of “digital education teacher groups” within or across schools is a step in the right direction, but the feasibility and sustainability of cross-school collaboration need to be empirically investigated.

C. The Role of Localised AI Platforms

In surveys, teachers often point out that generic large language models are not well suited to the Hong Kong education context. The survey of Legislative Councillor found that the most used tools among teachers were Gemini, DeepSeek and Doubao, but they often produced content that did not match Hong Kong curriculum standards. There was no RAG technology attached to the school materials, so the AI could not reliably provide curriculum-aligned assessment or feedback.

The Blueprint recognises this gap and proposes to “establish a digital education learning resource platform” with a large language model that is aligned to the local curriculum. The EDB has also said it will work with partners to “establish a digital education learning resource platform for primary and secondary schools that is aligned with Hong Kong curricula”. However, the timeline for development, governance arrangements and mechanisms for curriculum alignment are not clear from the available documentation. This is a key dependency. In the absence of a localised platform, teachers may acquire generic skills from the 30-hour training, which cannot be practically applied to pedagogical contexts specific to Hong Kong.

V. Comparative Perspectives and International Frameworks

The UNESCO AI Competency Framework for Teachers (2024) is a useful point of comparison. The framework identifies 15 competencies in five dimensions: human centred mindset, ethics of AI, AI foundations and applications, AI pedagogy, and AI for professional development. Importantly, UNESCO has framed technical competences within the framework of human rights, teacher professional autonomy, sustainability and social responsibility.

Hong Kong's approach outlined in the Blueprint shares some commonalities with the UNESCO framework, particularly the focus on “human-centred” values and the integration of AI into pedagogy. The Blueprint states that AI is “a tool to assist teaching, aimed at achieving ‘reducing burdens and enhancing capabilities’ and promoting a paradigm shift in teaching, without replacing teachers’ nurturing role”. However, the Hong Kong framework's reliance on quantitative training hours rather



than levels of competency progression contrasts with the UNESCO progression-based approach that delineates stages of acquisition, deepening, and creation.

This comparison indicates that the policy of Hong Kong can be improved by a more explicit model of competency progression. Instead of a blanket 30-hour requirement, a tiered approach could set different expectations for basic, intermediate and advanced levels, along with appropriate assessment mechanisms. This progression model could be mapped to the existing tiered course offerings from the EDB in AI Literacy, AI + Subjects, and AI Leadership.

VI. A Research Agenda

The analysis above reveals several important gaps in the evidence base. A systematic research agenda is needed to test whether the 30 hours of training required is achieving its stated purposes. There are five priorities.

First, longitudinal studies are needed to track changes in teacher AI competency prior to, during, and post completion of training. The current evidence base is cross-sectional and therefore only captures perceptions at one point in time. The evidence on the effectiveness of training and on skill retention would be more robust if the panel design tracked cohorts of teachers through their three-year CPD cycles.

Second, comparative research on different modes of delivery of training -- centralised EDB courses, school-based training, cross-school collaboration, and blended approaches -- would help determine which models work best for different teacher profiles and school contexts. The finding that 60% of schools work through individual exploration suggests that organisational factors at the school level may moderate the effects of training.

Third, research on the link between training intensity and classroom practice is required. The survey of Legislative Councillors found that AI use is focused on preparation rather than assessment and analytical tasks. Research needs to explore if training content, especially assessment and learning analytics, is transformed into pedagogical practice.

Fourth, equity-focused research should examine whether the 30-hour requirement exacerbates or mitigates existing disparities among schools. Variables of interest are school funding levels, school leadership support, teacher turnover, and geographic location. The idea of a ‘floor without ceiling’ needs to be tested empirically to make sure that it does not bring about undesirable consequences.

Fifth, there is a need for research on human-AI collaboration in educational environments (Chiu & Rospigliosi, 2025). As AI tools are increasingly integrated into teaching workflows, it is critical to understand how teachers interpret, trust, and act on AI recommendations. The Education University’s emphasis on enhancing teachers’ metacognitive capabilities within the framework of AI points to a promising direction, but the processes need to be systematically explored.

VII. Conclusion

This 30-hour digital training requirement represents a major policy commitment to building teacher capacity in Hong Kong. The design reflects the understanding that integrating AI is not only about providing technological tools but also about systematic professional development. The tiered training architecture, the huge financial outlay and the alignment with national strategies all signal serious institutional intent.

But the evidence reviewed in this article suggests a persistent gap between policy design and implementation reality. Despite the widespread use of AI, teachers’ self-assessed proficiency remains moderate. Training content is geared toward basic tool operation, not deep pedagogical integration. Support structures are disjointed and there are few schools with a coordinated AI strategy. Most teachers do not have access to sophisticated applications.

The effectiveness of the 30-hour requirement will be contingent on three conditions. Firstly, training content needs to move from generic tool operation to discipline-embedded pedagogical application, with specific attention to assessment, learning analytics and curriculum-aligned AI use.



Secondly, assessment frameworks need to move from time-based compliance to competency-based certification, drawing on existing frameworks, such as UNESCO's AI Competency Framework for Teachers. Third, support structures need to transition from ad hoc individual effort to coordinated institutional ecosystems, with targeted resources for schools with capacity constraints.

The 30-hour mandate alone does not guarantee these conditions. They require continuous policy attention, empirical evaluation and iterative refinement. What is needed is a robust research agenda (longitudinal, comparative, focused on equity, and attentive to human-AI collaboration) to ensure that the training requirement is realised as an opportunity for meaningful educational transformation and not simply as a compliance exercise.

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