CFTE

CFTE WHITE PAPER

CFTE AI Proficiency Framework

A reference framework for defining, assessing, and developing AI proficiency

Version	Version 1.0
Date	April 2026
Author	Huy Nguyen Trieu
Collaborators	Tram Anh Nguyen; Bareera Zakir
Institutional steward	Centre for Finance, Technology and Entrepreneurship (CFTE)

Suggested citation

Nguyen Trieu, H. (2026). CFTE AI Proficiency Framework. Centre for Finance, Technology and Entrepreneurship (CFTE). Version 1.0.

Reference and access

Official website: https://cfte.education

Contact page: https://cfte.education/contact

General enquiries: aipf@cfte.education

Partnerships and profile proposals: partners@cfte.education

This white paper defines the CFTE AI Proficiency Framework. It explains what AI proficiency means, how it progresses, what domains it covers, how it can be interpreted and assessed, and how others may use and build on it with attribution to CFTE.

Abstract

Artificial intelligence is becoming embedded across the professional workforce, yet the language used to describe capability remains inconsistent. Terms such as AI readiness, AI literacy, and tool proficiency are often used interchangeably, making it difficult for organisations, policymakers, educators, and professionals to define expectations clearly or compare capability across contexts.

This paper introduces the CFTE AI Proficiency Framework, a reference model for defining, assessing, and developing AI proficiency across the professional workforce. The framework is built around **three public proficiency levels, ten capability domains, and three assessment dimensions: knowledge, skills, and behaviours.**

It is supported by **a six-band internal developmental model** designed for more granular interpretation and diagnostics. The framework distinguishes durable proficiency from time-sensitive tool fluency and situates readiness as a broader judgement that also depends on applied capability and context. Designed to be platform-agnostic, portable, and adaptable, the framework provides a common core that can support workforce development, assessment design, sector interpretation, benchmarking, and broader capability dialogue in an AI-enabled economy.

1. Executive Summary

Artificial intelligence is becoming embedded across the full spectrum of knowledge work. It now shapes how professionals research, draft, analyse, decide, coordinate, and govern. Yet while adoption has accelerated rapidly, the language used to describe capability remains fragmented. Employers ask whether people are AI-ready, individuals try to signal that they are, and sectors are beginning to define their own expectations. What is still missing is a common framework that explains what AI proficiency actually means.

The CFTE AI Proficiency Framework addresses that gap. It provides a shared reference model for defining, assessing, and developing AI proficiency across the professional workforce. It is designed to answer a market-facing question - am I, or is this person, AI-ready? - through a more rigorous and structured concept: proficiency. It therefore bridges the language of readiness used by employers and professionals with a deeper model of progression, judgement, and applied capability.

The framework is built around three public proficiency levels, ten capability domains, and three assessment dimensions: knowledge, skills, and behaviours. The public three-level structure is supported by a more granular six-band developmental model used in diagnostics and interpretation. This enables the framework to remain simple enough to communicate and rich enough to measure. It also separates durable proficiency from time-sensitive tool fluency, making the framework relevant even as tools and interfaces evolve.

The CFTE AI Proficiency Framework is intended to function as a public reference object. It provides the common core on which methodology, diagnostics, sector profiles, and product experiences can be built. It is designed to be platform-agnostic, portable across institutions and sectors, and suitable for adaptation with attribution to CFTE. Over time, it can support diagnostics, benchmarking, procurement standards, ecosystem coordination, and future recognition models.

This paper defines the core architecture of the framework. It explains why it is needed, the principles on which it is built, how proficiency progresses, what domains are covered, how readiness, proficiency, tool fluency, and applied capability relate, and how the framework can be used and adapted. Detailed methodology, product implementation, and sector-specific profiles are treated as downstream layers built on top of this common core.

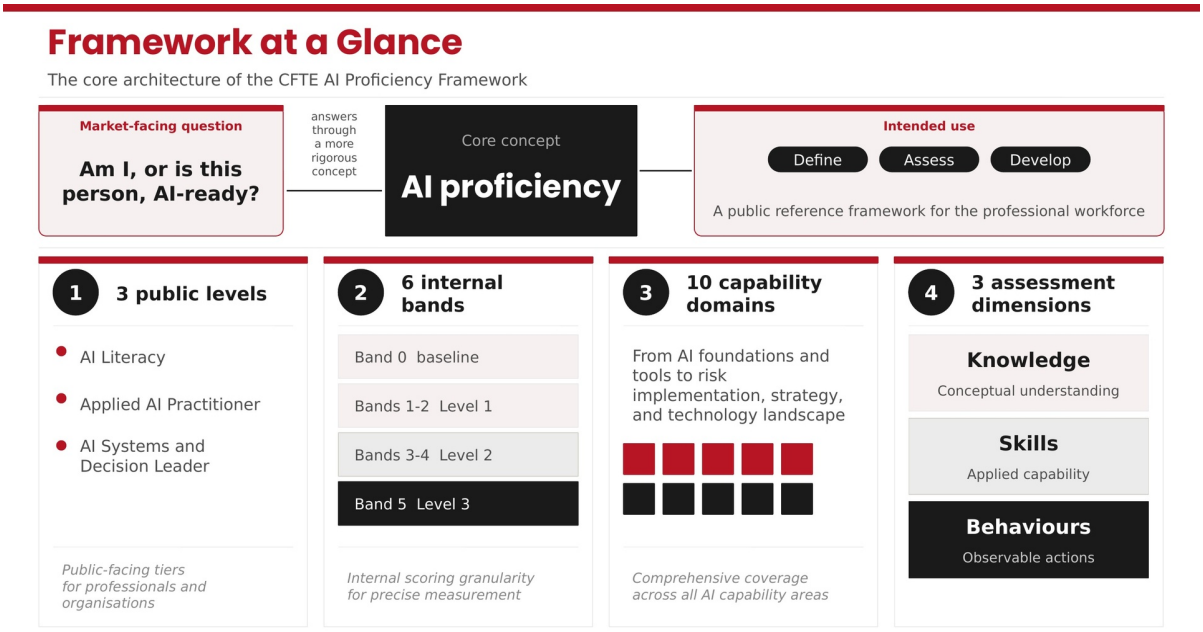

Figure 1. The CFTE AI Proficiency Framework at a glance

2. Why a Common AI Proficiency Framework Is Needed

AI is no longer confined to specialist teams. Across functions such as operations, compliance, marketing, strategy, HR, product, finance, legal, and management, professionals are using AI tools for drafting, summarisation, research, analysis, workflow support, and decision preparation. This creates a new workforce reality: AI capability is becoming relevant to a very broad population of professionals, not only to those who build models or write code.

The problem is that adoption is moving faster than capability frameworks. Many organisations are investing in tools and training without a clear way to define what acceptable proficiency looks like. Informal use is widespread, but expectations are often vague. One team may interpret AI readiness as basic safe usage; another may expect workflow design, output verification, and independent judgement. Without a shared benchmark, internal definitions quickly become fragmented.

This fragmentation creates multiple risks. It makes workforce development inconsistent, weakens the comparability of capability across teams and institutions, and encourages organisations to confuse tool familiarity with real professional competence. It also leaves employers and professionals without a common language for signalling capability in hiring, promotion, learning, or transformation contexts.

There is therefore a need for a common reference framework that defines proficiency in durable terms. Such a framework must be broad enough to apply across sectors, practical enough to guide diagnostics and development, and structured enough to support adaptation to role- and sector-specific contexts. It must also remain relevant as tools evolve, which means that it cannot be reduced to the features of any single platform.

3. The Philosophy Behind the Framework

CFTE has been training professionals, institutions, and public-sector stakeholders in AI since 2018. Over that period, one lesson has become very clear: some of the most visible developments in AI are difficult to predict, while some of the underlying capability requirements remain surprisingly stable.

Few people could have predicted with precision the timing and impact of ChatGPT, the rapid rise of multimodal systems, the spread of enterprise copilots, or the move towards agentic workflows. Product cycles have accelerated, interfaces have changed, and new tools have repeatedly altered what appears to matter in the short term. Any framework tied too closely to the features of a particular moment will quickly become obsolete.

At the same time, some foundations continue to reappear across tools, sectors, and professional contexts. Effective use of AI still requires an understanding of how such systems work at a high level, what they can and cannot do, how outputs should be verified, where risk and bias can emerge, and how AI should be applied responsibly within workflows, decisions, and organisational systems. These foundations do not eliminate the need for tool-specific learning, but they provide the more durable base that allows people to adapt as the landscape changes.

The CFTE AI Proficiency Framework is therefore an attempt to identify what is likely to endure. It is designed to capture the capability elements that matter most in professional settings and are less likely to be invalidated by the next product release. It distinguishes the durable from the transient, so that organisations and individuals can build on something more stable than tool recency alone.

The framework should not be seen as the final truth about AI capability. AI will continue to evolve, and different organisations, sectors, and roles will continue to have specific needs. The framework should instead be understood as a foundational model, informed by significant practical experience, intended to accelerate structured thinking and provide a shared base on which others can build.

4. Purpose and Objectives

The purpose of the CFTE AI Proficiency Framework is to establish a common reference model for defining, assessing, and developing AI proficiency across the professional workforce.

Table 1. Objectives of the CFTE AI Proficiency Framework

No.	Objective
1	Define a clear progression model for AI proficiency.
2	Provide organisations and professionals with a shared language for capability.
3	Support diagnostics, benchmarking, and development pathways.
4	Enable portability across sectors, institutions, and roles.
5	Provide a common parent framework on which sector profiles can be built.

The framework is intended as a public reference framework rather than a proprietary training syllabus. It is designed to support employers, professionals, training and assessment providers, sector bodies, and policymakers who need a coherent way to define and interpret AI proficiency.

5. Scope and Target Audience

The framework is designed for the broad professional workforce that now uses AI tools and AI-enabled workflows in day-to-day work. It is relevant to knowledge workers, managers, leaders, functional specialists, and sector professionals who increasingly need to use AI safely, effectively, and with sound judgement.

It is not primarily designed for specialist machine-learning engineers, model researchers, or technical developers whose work is centred on building core AI systems. It may complement technical certifications and specialist qualifications, but its central purpose is to define the applied, operational, decision, and governance capabilities required across the wider workforce.

6. Design Principles

Platform-agnostic

The framework is not tied to any single model, vendor, or interface. It must remain useful even as tools and platforms change.

Portable

The core model should be applicable across institutions and sectors, while still allowing interpretation by role, context, and profile.

Outcome-oriented

The framework should define proficiency through what people can understand, do, and judge, not through topic coverage alone.

Competency-based

Progression should reflect demonstrated capability, not merely exposure to tools or attendance on training.

Durable but adaptable

The core should remain stable enough to cite and build on, while profiles and repository examples allow the surrounding ecosystem to evolve.

Role-relevant

The framework must support interpretation through actual professional contexts so that proficiency is meaningful for work.

Public but governed

The framework is intended for broad use and adaptation, but attribution to CFTE and rules for official profiles must remain clear.

7. Academic and Standards-Based Foundations

The framework draws on recognised approaches to qualification design and professional certification. A purely content-based approach is insufficient because AI evolves too quickly and because real capability depends on more than exposure to topics. A purely role-based approach is also insufficient because it can lead to fragmentation and inconsistent benchmarking. The CFTE AI Proficiency Framework therefore adopts a hybrid model that combines outcome-based progression with competency-based assessment logic.

The design is informed by a number of widely recognised reference points. These include qualification level frameworks that describe progression through increasing autonomy and complexity; Bloom-aligned models that describe movement from understanding to application, evaluation, and creation; skill acquisition models that emphasise contextual judgement; and principles from personnel certification systems that stress the separation of training from independent assessment.

These references are used as design anchors rather than strict compliance templates. The objective is not to mimic any one system, but to ensure that the framework reflects recognised principles of credible qualification design while remaining practical for AI capability in a rapidly changing environment.

8. Core Concepts

Four concepts should be kept distinct in order to use the framework correctly. This paper focuses primarily on proficiency. The framework is intended to define the more durable foundations of AI capability in professional settings. Tool fluency and applied capability both matter, but they should be understood in relation to that broader foundation. Readiness then becomes the more holistic conclusion that emerges when these different elements are considered together.

Table 2. Core concepts used in the framework

Concept	Meaning
Proficiency	The core focus of this framework. Proficiency defines structured levels of capability across domains and through increasing autonomy, judgement, and responsibility. It is intended to capture the more durable foundations of AI capability in professional settings.
Tool fluency	Current practical familiarity with specific tools or tool families, such as Copilot, ChatGPT, or Claude. Tool fluency matters, but it changes quickly and should not be mistaken for the whole of proficiency.
Applied capability	The ability to translate proficiency and tools into meaningful outcomes in real work contexts. This is often strongly role-dependent, because it combines AI capability with domain understanding, problem-solving, workflow judgement, and professional context.
Readiness	The holistic, market-facing conclusion. It captures whether an individual, candidate, team, or workforce appears prepared to work effectively with AI in a given context. Readiness is a judgement formed by looking across the elements above.

The sequence above should not be treated as a simple ladder in which one concept automatically guarantees the next. A person may be broadly proficient, only moderately fluent in a new tool, and still vary significantly in applied capability depending on the role and context. The framework should therefore not be mistaken for a simple tool-skills checklist.

Implications for the framework

- This paper focuses primarily on proficiency, because proficiency is the most durable and transferable layer.
- Tool fluency should be treated as an important but narrower layer that sits on top of proficiency.
- Applied capability should be interpreted much more strongly through the lens of role, domain experience, and professional context.
- Readiness should be treated as the integrated judgement that emerges when proficiency, tool fluency, applied capability, and context are considered together.

9. Framework Structure

The public framework is structured as a three-level progression model. The levels represent increasing autonomy, complexity, and responsibility in working with AI.

Table 3. Public proficiency levels of the CFTE AI Proficiency Framework

Level	Label	Core emphasis
Level 1	AI Literacy	Safe and disciplined use in professional contexts.
Level 2	Applied AI Practitioner	Independent application, output validation, and workflow use.
Level 3	AI Systems and Decision Leader	Systems reasoning, orchestration judgement, and high-level implementation and governance capability.

10. Internal Developmental Bands

The public three-level structure is supported by a more granular six-band developmental model used in diagnostics and interpretation. This allows the framework to remain simple enough to communicate and rich enough to measure.

Table 4. Internal developmental bands and interpretation

Internal band	Interpretation
Band 0	No meaningful response / unmeasured baseline
Band 1	Awareness
Band 2	Basic Proficiency
Band 3	Working Proficiency
Band 4	Advanced Application
Band 5	Strategic Mastery

As a working interpretation, Level 1 broadly corresponds to Bands 1-2, Level 2 to Bands 3-4, and Level 3 to Band 5. Band 0 is analytically useful as a baseline but is not part of the public proficiency ladder.

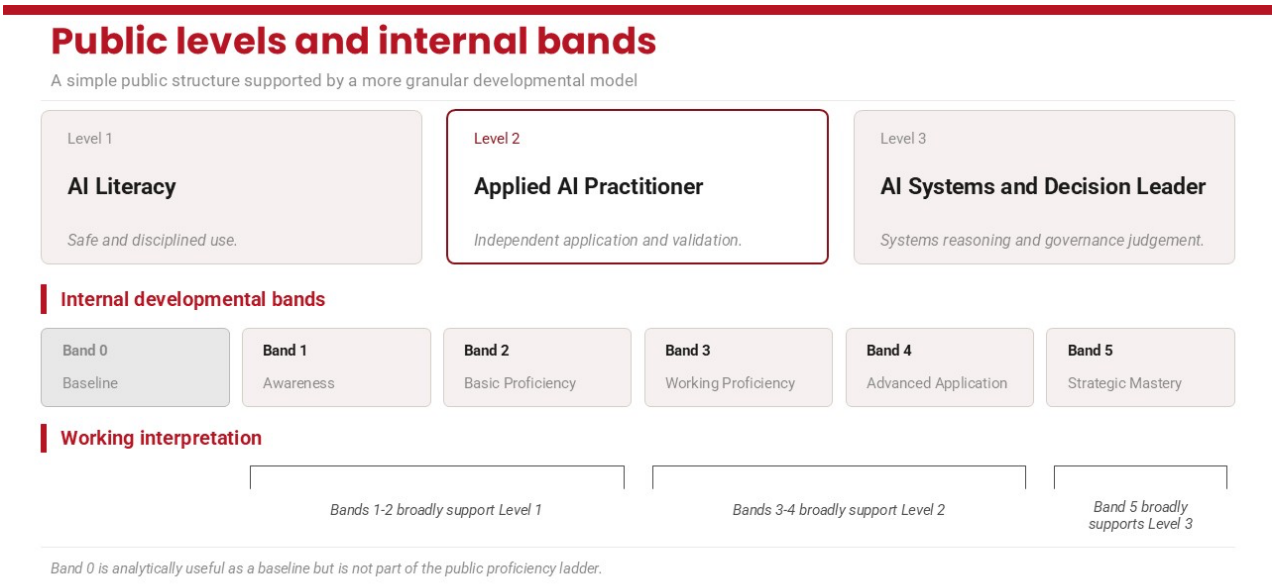

Figure 2. Relationship between public proficiency levels and internal developmental bands

11. Capability Domains

The framework defines AI proficiency through ten capability domains. The same domains apply across all levels, but with increasing depth and expectations of demonstrated competence.

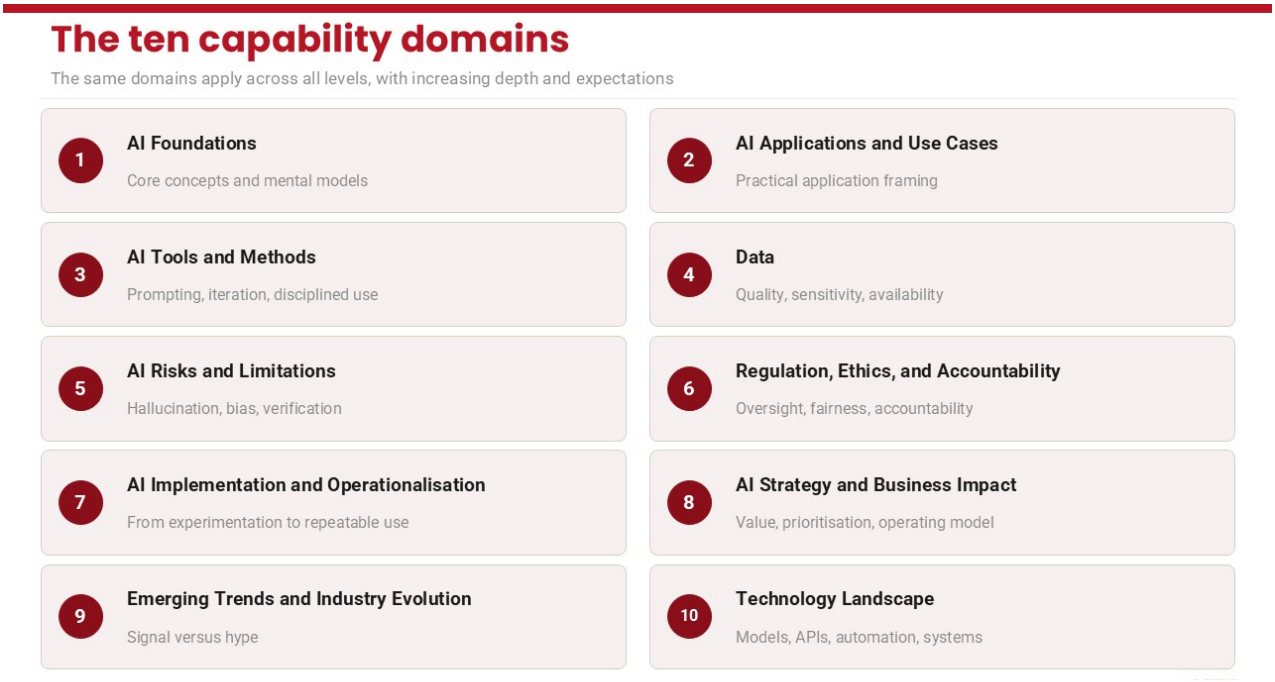

Figure 3. Capability domains of the CFTE AI Proficiency Framework

Table 5. Capability domains of the CFTE AI Proficiency Framework

Domain	What it covers
AI Foundations	Core concepts, vocabulary, mental models, and understanding of what AI is, how it works, and where it fails.
AI Applications and Use Cases	Ability to recognise, evaluate, and frame practical applications of AI across functions and sectors.
AI Tools and Methods	Effective use of AI tools, prompting approaches, iteration, and disciplined interaction practices.
Data	Understanding of data quality, sensitivity, availability, and the relationship between data and AI performance.
AI Risks and Limitations	Awareness of hallucination, bias, over-reliance, and the need for verification and mitigation.
Regulation, Ethics, and Accountability	Fairness, transparency, human oversight, documentation, and responsible use principles.
AI Implementation and Operationalisation	Movement from experimentation to repeatable operational use, including process, adoption, and controls.

AI Strategy and Business Impact	Connection between AI, value creation, prioritisation, operating model change, and organisational capability.
Emerging Trends and Industry Evolution	Ability to track, interpret, and distinguish meaningful developments from hype.
Technology Landscape	Understanding of the wider ecosystem including models, APIs, orchestration, automation, and AI-enabled systems.

12. Proficiency Levels in Detail

Level 1 - AI Literacy

Level 1 certifies that an individual can use AI safely and effectively for routine professional tasks. They understand core concepts, can use AI tools appropriately for common work tasks, can recognise key limitations such as hallucinations and inconsistency, and can verify outputs rather than treating them as authoritative.

At this level, the individual operates within established guidance. The emphasis is on safe use, verification discipline, and responsible professional judgement rather than workflow design or system-level responsibility.

Level 2 - Applied AI Practitioner

Level 2 certifies that an individual can independently apply AI tools and workflows to solve business or professional problems, improve processes, and deliver measurable outcomes while managing risk and ensuring quality. They can select appropriate tools, iterate effectively, justify usage decisions, and document or explain how outputs were validated.

A defining capability at this level is strong human-in-the-loop judgement. The individual can catch errors, identify failure modes, and correct weak outputs before they influence important work, decisions, or stakeholder communication.

Level 3 - AI Systems and Decision Leader

Level 3 certifies that an individual can reason in complex AI-enabled environments. They can look beyond individual tasks and understand how AI reshapes workflows, decision processes, organisational systems, and automation choices. They can reason about orchestration, dependencies, escalation pathways, and where human oversight must remain central.

At this level, the focus is on systems thinking, structured evaluation, orchestration and automation judgement, and the ability to assess the feasibility, sustainability, and control implications of AI-enabled processes. The level does not require deep technical model-development expertise, but it does require advanced judgement.

13. Competency Matrix and Progression Logic

The framework uses a common progression logic across all domains. Expectations rise with each level through increasing autonomy, complexity, and responsibility. The progression is broadly Bloom-aligned:

Table 6. Progression logic across proficiency levels

Level	Typical action verbs
Level 1	recognise, understand, describe, identify
Level 2	apply, compare, evaluate, justify, mitigate
Level 3	design, govern, orchestrate, implement, optimise

This logic ensures that proficiency is expressed through observable outcomes rather than exposure to content alone. It also helps preserve comparability when sector profiles are later created on top of the common core.

14. Assessment Dimensions

Assessment within the framework should capture capability across three complementary dimensions: knowledge, skills, and behaviours.

Table 7. Assessment dimensions of AI proficiency

Dimension	Meaning
Knowledge	Understanding of core concepts, principles, terminology, mechanisms, and limitations related to AI and its use in professional contexts.
Skills	Ability to use AI appropriately, interpret and validate outputs, and apply AI techniques effectively in practical, work-relevant situations.
Behaviours	Patterns of judgement, decision-making, and responsible use when interacting with AI systems, including awareness of limitations, ethical discipline, and appropriate human oversight.

Together, these dimensions ensure that proficiency captures not only what people know, but how they apply and embody it in real work contexts.

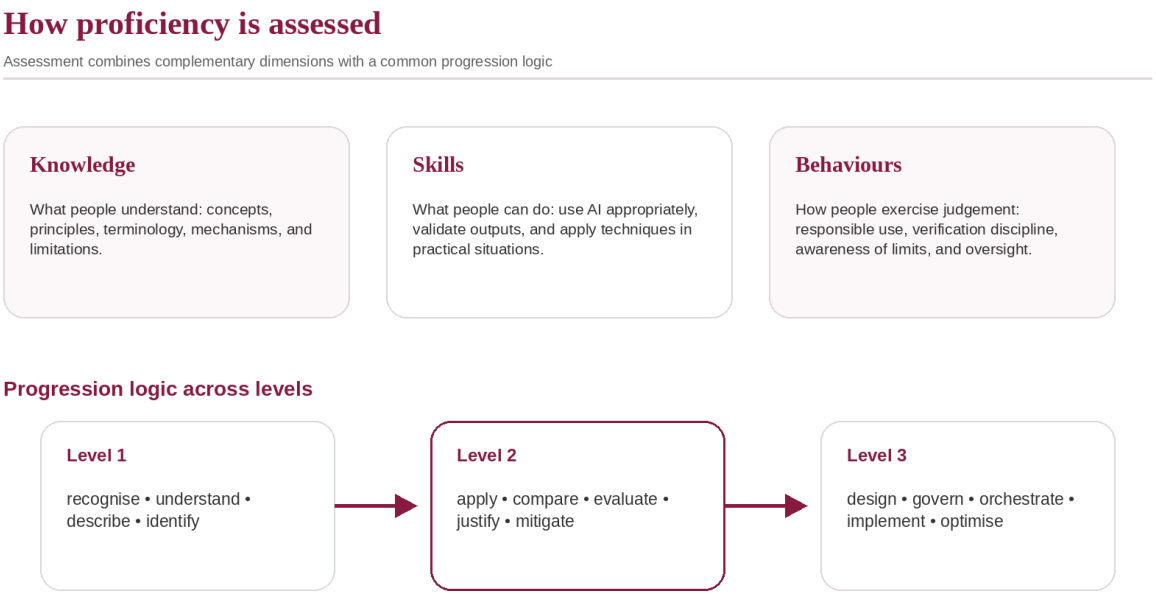

Figure 4. How AI proficiency is assessed across knowledge, skills, and behaviours

15. Assessment and Validation Principles

The parent framework is designed to support credible assessment, but this paper does not specify a full assessment scheme. That more detailed logic belongs in the methodology layer built on top of the framework.

Assessment should be valid and reliable, fair and transparent, grounded in realistic scenarios, and portable across institutions and sectors. It should distinguish exposure from demonstrated capability, and it should separate training completion from independent evidence of proficiency.

This means that the CFTE AI Proficiency Framework can support multiple downstream assessment and interpretation approaches while maintaining a common reference architecture.

16. Currency of Proficiency

The CFTE AI Proficiency Framework is intended to support credible interpretation of AI proficiency over time. Because AI evolves rapidly, proficiency should not be treated as static or permanent. Any recognition or assessment approach built on the framework should consider how current capability is maintained, evidenced, or reassessed.

At this stage, the principle is more important than the policy detail. The framework establishes a reference point for proficiency, while specific approaches to recognition, evidence, and currency may be developed separately.

17. Role and Sector Interpretation

The CFTE AI Proficiency Framework is designed to provide a common reference point across the professional workforce. Its purpose is to define a shared core of AI proficiency that can be understood across institutions, sectors, and roles.

In some contexts, additional interpretation may be useful. Different sectors operate under different regulatory expectations, risk environments, decision structures, and patterns of work. Specific roles may also require different forms of evidence, examples, or emphasis. For this reason, organisations and sector bodies may develop contextual interpretations or profiles based on the framework.

These contextual applications should build on the core framework rather than replace it. Their role is to make the framework more relevant in practice while preserving a common basis for comparability, communication, and progression.

18. Public Use, Attribution, and Adaptation

The CFTE AI Proficiency Framework is intended to function as a public reference framework. It may be cited, shared, and adapted so that organisations, professionals, educators, researchers, and sector bodies can use it as a foundation for further work.

This white paper is made available under the terms of the Creative Commons Attribution-ShareAlike 4.0 International Licence (CC BY-SA 4.0). Under that licence, others may copy, redistribute, adapt, and build upon the framework, including for commercial use, provided that they:

- give appropriate credit to CFTE
- indicate whether changes have been made
- distribute any adapted version under the same licence

Any adaptation should preserve a clear distinction between the original CFTE AI Proficiency Framework and the modified version. Reuse of the framework does not in itself imply endorsement by CFTE.

The CFTE name, visual identity, and any wording that implies official CFTE recognition, certification, or approval remain under CFTE stewardship unless explicitly authorised.

19. Potential Uses of the Framework

The CFTE AI Proficiency Framework is intended to serve as a common reference point for defining, interpreting, and assessing AI proficiency across the professional workforce.

It may support a range of uses, including workforce capability discussions, assessment design, learning pathway development, sector interpretation, benchmarking, and broader dialogue on AI capability across institutions.

The framework does not in itself prescribe a single method of implementation. Its purpose is to provide a stable common architecture that others can interpret and apply in context.

20. A Framework Designed to Evolve

The CFTE AI Proficiency Framework is intended as a foundational reference model rather than a final doctrine. AI will continue to develop, and institutions, sectors, and professions will continue to interpret capability through their own evolving needs and contexts.

The purpose of the framework is not to predict every future development, but to define a durable core that remains useful as the surrounding landscape changes. In that sense, the framework is designed to remain stable in principle while supporting continued interpretation and responsible adaptation over time.

References

Bloom, B. S. (Ed.). (1956). *Taxonomy of educational objectives: The classification of educational goals. Handbook I: Cognitive domain.* New York: David McKay Company.

Council of the European Union. (2017). *Council recommendation of 22 May 2017 on the European Qualifications Framework for lifelong learning.* Official Journal of the European Union.

Dreyfus, S. E., & Dreyfus, H. L. (1980). *A five-stage model of the mental activities involved in directed skill acquisition.* Berkeley, CA: Operations Research Center, University of California, Berkeley.

ISO/IEC. (2012). *ISO/IEC 17024:2012 Conformity assessment - General requirements for bodies operating certification of persons.* Geneva: International Organization for Standardization.

Miao, F., & Cukurova, M. (2024). *AI competency framework for teachers.* Paris: UNESCO.

OECD. (2025). *Bridging the AI skills gap: Is training keeping up?* Paris: OECD Publishing. https://doi.org/10.1787/66d0702e-en

Ofqual. (2015). *Qualification and component levels: Requirements and guidance for all awarding organisations and all qualifications.* Coventry: Office of Qualifications and Examinations Regulation.

UNESCO. (2021). *Recommendation on the ethics of artificial intelligence.* Paris: UNESCO.

Vuorikari, R., Kluzer, S., & Punie, Y. (2022). *DigComp 2.2: The Digital Competence Framework for Citizens - With new examples of knowledge, skills and attitudes* (EUR 31006 EN). Luxembourg: Publications Office of the European Union. https://doi.org/10.2760/115376

Related CFTE Publications

Nguyen Trieu, H. (2024). *The AI-fication of Jobs: Preparing ourselves for the future of work.* CFTE. ISBN 9781068556739.

Joshi, K., & Nguyen Trieu, H. (2025, January 6). *AI literacy: Understanding and implementing AI literacy.* SSRN. https://doi.org/10.2139/ssrn.5287019

Nguyen Trieu, H., Nguyen, T. A., & Costas, A. (2025). *The AI-fication of Talents: Why capability is the new competitive advantage.* CFTE. https://doi.org/10.5281/zenodo.15602737