دائـرة الـتـعـلـيـم والـمـعـرفـة
DEPARTMENT OF EDUCATION
AND KNOWLEDGE

K-12 AI Literacy Framework Implementation Guide for Schools



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1. Purpose

This guide serves as the operational manual for implementing the AI Literacy Framework across K–12 schools. Unlike an elective program, AI literacy is a mandatory cross-curricular entitlement for all schools, regardless of curriculum (British, American, IB, etc.). The goal is to move students from passive users to designers, evaluators, and responsible decision-makers of AI-powered solutions.

The AI Literacy Framework defines the competencies and learning outcomes students are expected to develop in artificial intelligence throughout their schooling.

This Implementation Guide explains:

- The minimum expectations for AI learning in schools
- How schools may integrate AI learning into their curriculum
- The training requirements for teachers
- The support and monitoring mechanisms provided by ADEK

The guide should be read alongside the AI Literacy Framework, which outlines the detailed learning outcomes and competencies expected at each grade level.

Given the evolving nature of artificial intelligence, this guide and the associated framework will be periodically updated to reflect emerging developments and system priorities.

2. Scope

This guide applies to:

- All private schools licensed by Abu Dhabi Department of Education and Knowledge
- School leaders responsible for curriculum implementation
- Teachers delivering AI-related learning experiences
- Students from Kindergarten to Grade 12

The guide supports schools in implementing AI learning while ensuring alignment with ADEK's Policy on the Use of Artificial Intelligence in Private Schools.

3. Implementation Principles

The implementation of AI literacy learning in schools is guided by several core principles.

3.1 Educational Purpose

- AI learning aims to develop students' understanding of artificial intelligence, its applications, and its broader impact on society.
- Students should develop the ability to use AI tools responsibly while also understanding their limitations.

3.2 Human-Led Learning

- AI tools should support teaching and learning but should not replace the role of teachers or the cognitive effort required from students.
- Learning activities should continue to prioritize critical thinking, problem solving, and independent reasoning.

3.3 Age-Appropriate Exposure

- AI use should reflect students' developmental stage. Younger students require structured and supervised exposure, while older students may progressively explore more advanced AI concepts and applications.

3.4 Responsible Innovation

- Schools are encouraged to explore creative ways of integrating AI learning into the curriculum while remaining aligned with ADEK policy requirements and safeguarding student wellbeing.

4. System Expectations for Schools

To ensure consistent implementation of the AI Literacy Framework across the Abu Dhabi private school system, ADEK has established a set of minimum system expectations for all schools.

These expectations define the essential requirements that schools must meet when introducing AI learning. While schools retain flexibility in how AI learning is delivered within their curriculum, the following elements are mandatory across all schools.

School Responsibilities

All schools are expected to:

- Appoint an AI Lead Coordinator responsible for overseeing AI implementation within the school
- Develop and submit an AI Implementation Plan outlining how AI learning will be delivered across grade levels
- Ensure teachers complete the required AI training modules, including AI Safety and Ethics and Level 1 AI Foundations

- Integrate AI learning opportunities within the curriculum in alignment with the ADEK AI Literacy Framework
- Ensure students experience progressive AI learning exposure across the four framework phases
- Participate in ADEK monitoring and support processes, including readiness assessments and implementation reviews

Flexibility for Schools

Schools retain flexibility in the following areas:

- The curriculum delivery model (embedded, hybrid, or standalone)
- The subjects through which AI learning is integrated
- The types of student learning activities and projects
- The structure of AI learning experiences within the timetable

This flexibility enables schools to adapt implementation to their curriculum framework while ensuring that students achieve the required AI literacy outcomes.

System Oversight

ADEK will support and monitor the implementation of the AI Literacy Framework through:

- Teacher training programs
- Readiness self-assessment tools
- Implementation guidance and monitoring visits
- Resource repositories and best practice sharing
- Evaluation of student progression against AI learning outcomes

The goal of system oversight is to ensure that all students in Abu Dhabi schools benefit from meaningful, responsible, and progressive AI learning experiences.

5. AI Curriculum Delivery Models

Schools are given flexibility in how they deliver the AI Literacy Framework, provided that all students develop the required competencies and learning outcomes defined by ADEK.

Recognizing the diversity of school curricula across Abu Dhabi (British, American, IB, and others), the framework does not mandate a single instructional model. Instead, schools may adopt one of three curriculum delivery models that best aligns with their existing curriculum structure, teacher expertise, and student needs.

Regardless of the model selected, schools must ensure that AI learning opportunities are available across the relevant grade bands and that students progressively develop AI literacy from early exposure through advanced application.

5.1 Embedded Model

In the embedded model, AI concepts and learning activities are integrated within existing subjects rather than taught as a standalone course.

This model is particularly suitable for younger students and allows AI learning to be introduced naturally through subject contexts where relevant concepts already exist.

For example:

Subject	Possible AI Integration
Mathematics	Pattern recognition, data representation, probability concepts related to machine learning
Science	AI applications in scientific discovery, simulations, and predictive models
English / Language	Critical evaluation of AI-generated content and digital literacy
Social Studies	Ethical implications of AI and societal impact
Digital Literacy / ICT	Basic understanding of algorithms, automation, and AI tools

In this model, classroom teachers introduce AI concepts through structured lessons, projects, and discussions aligned with existing curriculum objectives.

The embedded model is typically most effective in Kindergarten through Grade 5, where AI learning focuses on conceptual understanding and foundational digital literacy rather than advanced technical skills.

5.2 Hybrid Model

The hybrid model combines subject integration with dedicated AI projects or structured learning modules.

In this approach, AI learning is partially embedded within existing subjects while also being delivered through targeted interdisciplinary projects or short units designed specifically to develop AI competencies.

Examples of hybrid implementation include:

- Cross-curricular AI projects combining science, mathematics, and computing concepts

- Short AI learning modules delivered during digital literacy or STEM blocks
- Project-based learning experiences where students design or evaluate AI solutions
- Interdisciplinary innovation weeks or AI design challenges

The hybrid model allows schools to deepen students' engagement with AI while maintaining flexibility within their existing curriculum structures.

This model is particularly appropriate for Grades 6–8, where students begin to explore practical AI applications, guided experimentation, and project-based learning experiences.

5.3 Standalone AI Courses

Schools may also offer dedicated AI courses or elective subjects that focus specifically on artificial intelligence.

In this model, AI is taught as a distinct subject, typically within computer science, digital technologies, or specialized innovation programs.

Standalone AI courses focus on designing, evaluating, and refining AI-powered solutions, applying systems thinking, and analysing real-world impact.

Standalone AI courses are most appropriate for Grades 9–12, where students have developed the foundational knowledge required to explore more advanced technical concepts and systems-level thinking.
These courses may be offered as:

- Advanced stream electives
- Computer science specialization modules
- Innovation or technology pathway courses

While standalone courses provide the most depth in AI learning, they should complement, not replace, foundational AI exposure provided earlier in the curriculum.

5.4 Selecting a Delivery Model

Schools may adopt a single delivery model or a combination of models depending on their AI starting points, curriculum structure, and grade-level delivery.

Below is a suggested delivery model; however, schools have the autonomy to select the most suitable model for them in each cycle:

Phase Name	Grade Levels	Cognitive Milestone & Technical Focus	Suggested Delivery Approach
Discovery Phase	**KG**	**Unplugged Sensory Observation:** Focuses on hardware sensors vs. biological senses	**Conceptual Integration (Embedded):** Naturally woven into homeroom play and sensory activities.
Computational Phase	**Grades 1–5**	**Logic & Data Literacy:** Recognizing patterns and how inputs drive machine outputs	**Conceptual Integration (Embedded):** Embedded natively into core subjects like Math, Science, and English.
Creation Phase	**Grades 6–8**	**AI Solution Development:** Designing AI-powered solutions and structured workflows	**Structured Integration (Embedded or Hybrid):** Delivered via ICT/STEM subjects through guided projects or short modules.
Systems and Solutions Phase	**Grades 9–12**	**Systems & Solutions Design:** Designing, evaluating, and refining AI-powered solutions using systems thinking	**Standalone or Elective AI:** Taught as a dedicated subject or advanced elective for deep specialization.

The selected approach should be clearly described in the school's AI Implementation Plan and should demonstrate how students will progressively develop AI competencies across grade levels.

Schools should ensure that their chosen model supports the following objectives:

- Consistent exposure to AI learning experiences across grade bands
- Progression from conceptual understanding to applied AI development
- Alignment with the ADEK AI Literacy Framework learning outcomes
- Responsible and age-appropriate use of AI technologies

Schools must declare their selected delivery model in their AI Implementation Plan.

ADEK will review school implementation plans and may provide guidance to support effective curriculum integration.

6. Minimum Curriculum Expectations

These expectations represent the minimum learning exposure required across all schools and should be reflected in school implementation plans and curriculum mapping.

All schools must ensure that students are provided with structured opportunities to develop AI literacy throughout their education.

The AI Literacy Framework establishes a progression of learning from early conceptual awareness to advanced system-level design, evaluation, and governance, ensuring that students gradually develop the knowledge, skills, and ethical understanding required to engage with artificial intelligence technologies.

6.1 Minimum System Requirements

To ensure consistent delivery of AI learning across all schools, the following minimum requirements apply to all schools implementing the AI Literacy Framework.

Core Embedding

Schools are expected to embed AI literacy in at least one core subject per grade level.

Schools may integrate AI learning within subjects such as mathematics, science, language, social studies, digital literacy, or computing, depending on their curriculum structure.

AI learning should be integrated within regular curriculum delivery rather than delivered solely as occasional enrichment activities or standalone events.

Mandatory Student Participation

All students must engage with AI learning experiences aligned with the framework and demonstrate progress toward the expected competencies across the four framework phases.

Graduation Competency

Students completing Grade 12 should demonstrate the AI literacy competencies defined within the framework, including the ability to:

- Understand how AI systems operate
- Critically evaluate AI outputs
- Apply AI concepts within real-world contexts
- Demonstrate responsible and ethical use of AI technologies

Schools are responsible for ensuring that these competencies are progressively developed across the student learning journey.

Schools are not required to adopt a single curriculum structure. However, they must ensure that AI learning opportunities are delivered across the four developmental phases defined by the framework.

These phases reflect increasing levels of cognitive and technical complexity and ensure that students gradually develop the competencies required to understand, evaluate, and create AI systems.

The minimum expectations below define the level of exposure and learning experience students should receive at each phase of schooling.

6.2 Discovery Phase (Kindergarten)

The Discovery Phase introduces students to foundational ideas about machines, decision-making, and human–machine interaction.

At this stage, learning focuses on conceptual understanding and sensory exploration rather than digital interaction with AI tools.

Activities should be developmentally appropriate and emphasize play-based and inquiry-based learning experiences.

Minimum expectations include:

- Introducing the concept that machines can sense and respond to information
- Helping students distinguish between human decision-making and machine processes
- Exploring sensors and simple technologies through hands-on activities
- Discussing how machines “see,” “hear,” or “recognize” patterns

In alignment with child development principles, AI learning in kindergarten should be entirely unplugged, meaning that activities should not involve direct interaction with AI tools or digital platforms.

The focus should remain on conceptual awareness, observation, and guided exploration.

Schools should provide multiple unplugged AI awareness activities throughout the academic year to ensure early exposure to concepts such as sensing, decision-making, and human–machine interaction.

6.3 Computational Phase (Grades 1–5)

In the Computational Phase, students begin to explore how artificial intelligence systems recognize patterns and process information.

Students develop foundational computational thinking skills and begin to understand how data can be used to train machines to identify patterns and make predictions.

AI learning during this phase may be integrated into subjects such as mathematics, science, digital literacy, and computing.

Minimum expectations include:

- Introducing the concept of data and patterns
- Exploring how machines learn from examples
- Understanding the difference between rules-based systems and learning systems
- Evaluating simple outputs generated by AI tools with teacher guidance
- Discussing responsible and safe use of AI technologies

Students may begin interacting with simplified AI demonstrations or tools under close teacher supervision.

Activities should remain structured and guided to ensure that students develop understanding rather than passive tool usage.

6.4 Creation Phase (Grades 6–8)

In the Creation Phase, students transition from understanding AI concepts to actively building simple AI-enabled solutions.

Students begin designing and testing AI-based systems through project-based learning activities. These experiences should encourage experimentation while emphasizing responsible and ethical AI use.

AI learning may be delivered through STEM subjects, computing courses, or interdisciplinary project-based learning experiences.

Minimum expectations include:

- Designing AI-powered solutions using structured tools and workflows
- Working with structured datasets to explore machine learning concepts
- Evaluating the performance and limitations of AI outputs and solutions
- Identifying bias and ethical considerations in AI systems
- Collaborating on AI-related projects that address real-world problems

Students should participate in at least one guided AI project or interdisciplinary learning experience per academic year within this phase.

Projects should emphasize critical thinking, design processes, and evaluation rather than purely technical implementation.

6.5 Systems & Solutions Phase (Grades 9–12)

The Systems & Solutions Phase represents the most advanced stage of AI literacy, where students engage in designing and evaluating more complex AI systems.

Students develop a deeper understanding of how AI systems are built, deployed, and governed in real-world contexts.

AI learning during this phase may be delivered through standalone courses, advanced computer science pathways, innovation programs, or interdisciplinary research projects.

Minimum expectations include:

- Designing and refining AI-powered solutions for real-world problems
- Combining tools, data, and workflows to create effective solutions
- Evaluating solutions using criteria such as accuracy, bias, and usefulness
- Applying systems thinking to analyse interactions and trade-offs
- Analyzing ethical, societal, and governance implications
- Presenting and defending solution design decisions

6.6 Progression Across Phases

Schools must ensure that AI learning experiences are structured to support a clear progression across the four phases of the framework.

Learning should gradually move from:

- Conceptual understanding → computational thinking → AI solution building → systems thinking, optimisation, and governance

This progression ensures that students develop not only familiarity with AI technologies but also the critical thinking, ethical awareness, and design capabilities required to engage with AI responsibly and effectively.

Schools should document how their curriculum supports this progression within their AI Implementation Plan and demonstrate how learning activities align with the expected outcomes for each phase.

Schools may choose to introduce milestone or capstone AI projects at key transition stages (e.g., Grades 5, 8, or 12) to allow students to demonstrate accumulated competencies.

Phase	Conceptual Milestone	Technical Focus
Discovery	Human vs machine awareness	Unplugged
Computational	Data and pattern recognition	Guided digital interaction
Creation	AI solution building	Structured workflows and iteration
Systems & Solutions	Systems thinking and solution design	Evaluation, optimisation, governance

6.7 Examples of AI Learning Activities by Subject

To support schools in integrating AI learning within their curriculum, the examples below illustrate how AI concepts may be introduced across different subject areas.

These examples are not prescriptive but provide guidance on how AI-related learning experiences can be embedded within existing subjects.

Schools are encouraged to adapt and expand these activities based on their curriculum framework, available resources, and student learning needs.

Subject	Example AI Learning Activity
Mathematics	Students explore pattern recognition and classification using datasets to understand how machines identify patterns and make predictions.
Science	Students investigate how artificial intelligence is used in fields such as climate prediction, medical diagnosis, or environmental monitoring.
English / Language	Students evaluate AI-generated text to identify bias, accuracy, and reliability while developing critical digital literacy skills.
Arabic	Students analyze machine translation tools and evaluate linguistic accuracy and cultural context in translated text.
Social Studies	Students debate the ethical and societal implications of artificial intelligence technologies and their impact on communities and economies.

Digital Literacy / ICT	Students explore how algorithms and data influence AI systems and experiment with simple AI tools under teacher guidance.
Computer Science	Students design simple AI-powered solutions or automation workflows using beginner machine learning platforms.

These examples demonstrate how AI learning can be integrated within existing subjects while maintaining alignment with the learning progression defined in the AI Literacy Framework.

7. School Implementation Process

All schools are expected to follow the implementation process outlined below to support consistent adoption of the AI Literacy Framework across the Abu Dhabi private school system.

Step 1 – Appoint an AI Lead Coordinator

Each school must designate an AI Lead Coordinator responsible for supporting the implementation of the framework within the school.

The AI Lead Coordinator will:

- Support development of the school's AI Implementation Plan
- Coordinate teacher training participation
- Support teachers in integrating AI learning activities
- Monitor implementation progress
- Act as the primary liaison with ADEK

School operators managing multiple schools may designate an additional coordinator at the operator level to support cross-school coordination.

Schools are encouraged to establish a cross-functional AI implementation team involving curriculum leaders, digital learning specialists, safeguarding leads, and IT staff to support coordinated delivery of AI learning.

Step 2 – Complete the School Readiness Self-Assessment

Schools must complete the readiness self-assessment before implementation begins.

The assessment helps identify:

- Leadership readiness

- Teacher capacity
- Curriculum integration opportunities
- Technology readiness

This information enables ADEK to provide targeted support to schools.

Step 3 – Develop the AI Implementation Plan

Each school must develop and submit an AI Implementation Plan outlining how the framework will be delivered.

The plan should include:

- Selected curriculum delivery model
- Subjects integrating AI learning
- Participating grade levels
- Teacher training schedule
- Appointment of the AI Lead Coordinator
- Proposed student learning activities

Step 4 – Prepare Teachers

Teachers must complete the required AI training modules to ensure safe and effective delivery of AI learning.

Mandatory training includes:

- AI Safety and Ethics
- Level 1 AI Foundations

Additional training levels may support teachers in integrating AI into subject teaching.

Step 5 – Begin Classroom Implementation

Schools begin delivering AI learning experiences according to their implementation plan.

These may include:

- Integrated classroom lessons
- Interdisciplinary projects
- Innovation challenges
- Standalone AI courses where applicable

Step 6 - Communication with Parents and Community

Schools should communicate the purpose and approach of AI learning to parents and the wider school community. This may include explaining how AI concepts are introduced at different ages, how digital tools are used responsibly, and how student data privacy and safeguarding are protected.

Step 7 – Monitor Implementation Progress

Schools should monitor implementation by tracking:

- Teacher training completion
- AI learning activities delivered
- Student engagement with AI learning
- Examples of student projects

Monitoring helps ensure continuous improvement and alignment with the framework.

8. Implementation Roadmap for Schools

Schools should follow the phased rollout timeline established by ADEK to ensure consistent implementation across the system. The roadmap aligns with the system-wide implementation timeline established by ADEK for the rollout of the AI Literacy Framework.

The roadmap below summarizes the key implementation stages for schools.

Phase	Timeline	School Actions
Preparation	May – August 2026	Appoint an AI Lead Coordinator and complete teacher training
Planning	May – August 2026	Complete the readiness self-assessment and submit the implementation plan
Implementation	September 2026 onwards	Begin delivering AI learning activities
Monitoring	Ongoing	Track progress and participate in ADEK monitoring processes

ADEK will support schools through guidance, monitoring visits, and access to resources to strengthen implementation.

9. Implementation Evidence and Documentation

Schools should maintain documentation demonstrating the implementation of the AI Literacy Framework.

Examples of evidence may include:

- The school's AI Implementation Plan
- Records of teacher training completion
- Examples of lesson plans integrating AI concepts
- Student AI projects or portfolios
- Curriculum mapping showing AI integration
- Reflections or evaluation of AI learning activities

Schools should maintain this documentation as part of their internal quality assurance processes and may be requested to provide it during ADEK monitoring visits or inspections.

10. Teacher Training and Competency

Teachers play a central role in introducing students to artificial intelligence concepts and guiding responsible use of AI technologies in learning.

To ensure effective delivery of the AI Literacy Framework, teachers are expected to develop foundational knowledge of artificial intelligence and understand how AI tools can support learning while maintaining cognitive integrity and ethical use.

ADEK will support schools through a structured teacher training pathway designed to progressively build teacher confidence and capability in AI-related learning.

All teachers delivering AI-related learning experiences should complete the required training modules prior to or during the first year of implementation.

10.1 Teacher AI Competency Framework

Teacher training is designed to support the development of the following competencies:

Competency Area	Description
AI Conceptual Understanding	Understanding how AI systems use data, inputs, and patterns to generate outputs
Critical Evaluation	Evaluating AI outputs for accuracy, bias, reliability, and appropriateness

AI Solution Design	Designing and guiding students in developing AI-powered solutions using tools and workflows
Classroom Integration	Embedding AI learning into subject teaching through structured activities and projects
Systems Thinking	Understanding how AI tools, data, and workflows interact and affect outcomes
Responsible AI Use	Applying ethical, safe, and policy-aligned AI practices

These competencies represent the foundational AI literacy expected of teachers delivering AI learning activities and may be progressively developed through the ADEK training pathway.

10.2 Teacher Training Levels

Teacher training is structured across three progressive levels to support increasing teacher capability in AI learning.

Training Level	Focus	Key Competencies Developed	Target Audience
Level 1 – AI Foundations	Introduction to AI concepts, how AI systems generate outputs, and responsible use in classroom contexts	• AI conceptual understanding (inputs, data, outputs) • Basic evaluation of AI outputs (accuracy, bias, reliability) • Responsible and safe use of AI tools • Awareness of limitations of AI systems	All teachers
Level 2 – AI Integration into teaching and learning	Applying AI learning within subject teaching through structured activities and student tasks	• Designing AI-integrated classroom activities • Guiding students in evaluating AI outputs • Embedding AI learning into subject-specific contexts • Facilitating structured use of AI tools in learning	Heads of Department
Level 3 – AI Mastery	Designing and facilitating student AI projects, solution development, and systems thinking	• Designing AI-powered student projects and workflows • Supporting students in developing and refining AI solutions • Applying systems thinking to analyse how tools, data, and workflows interact • Guiding evaluation, iteration, and improvement of solutions • Facilitating discussions on ethical and societal impact	AI Lead Coordinators, digital leads, specialist teachers

10.3 Teacher Capability by Phase

Teacher capability should align with the developmental stages of the AI Literacy Framework to ensure age-appropriate and effective delivery of AI learning.

Phase	Teacher Capability
Discovery Phase (KG)	Facilitate unplugged, play-based exploration of AI concepts such as sensing, decision-making, and human–machine interaction.
Computational Phase (Grades 1–5)	Guide structured student interaction with AI tools, support basic understanding of patterns and data, and develop students' ability to evaluate simple outputs.
Creation Phase (Grades 6–8)	Support students in designing and refining AI-powered solutions using structured tools and workflows, and guide evaluation and iteration.
Systems & Solutions Phase (Grades 9–12)	Facilitate student design, evaluation, and refinement of AI-powered solutions, applying systems thinking, real-world problem solving, and ethical analysis.

10.4 AI Safety and Ethics (Mandatory Module)

In addition to the training levels above, all teachers must complete the AI Safety and Ethics module.
This module focuses on:

- Responsible use of AI in educational settings
- Protection of student data and privacy
- Identifying bias in AI systems
- Maintaining academic integrity when using AI tools

Completion of this module is mandatory to ensure that AI technologies are used safely and responsibly within the school environment.

10.5 Expected Teacher Capability

Following completion of the foundational training modules, teachers should be able to:

- Explain basic AI concepts and applications to students
- Guide students in evaluating AI-generated outputs critically
- Integrate AI-related activities within their subject teaching
- Support responsible and ethical use of AI tools in learning

- Facilitate student inquiry and project-based exploration of AI concepts

More advanced teachers, including AI Lead Coordinators, may support the design of more complex AI learning activities or student innovation projects.

11. Teacher Assignment Guidance

Schools retain flexibility in determining which teachers deliver AI learning. The guide does not mandate a specific teacher role for AI instruction.

However, schools may find it beneficial to involve teachers with relevant expertise.

Teachers who may be particularly well-positioned to introduce AI concepts include:

- Computer Science teachers
- ICT teachers
- STEM subject teachers
- Teachers with experience in coding or digital technologies

These teachers often have familiarity with computational thinking and digital systems, which can support the introduction of AI concepts.

Schools may also consider collaborative approaches where teachers across departments contribute to AI-related learning activities.

12. Alignment with ADEK AI Policy

Implementation of the AI Literacy Framework should align with ADEK's Policy on the Use of Artificial Intelligence in Private Schools.

Schools must ensure compliance with the following requirements:

Cognitive Integrity: AI tools should support learning but should not replace the thinking, reasoning, and writing that students are expected to develop.

- **Teacher Competency:** Teachers using AI tools in instruction should have completed the required training to ensure safe and responsible use.
- **Approved AI Tools:** Schools should ensure that AI tools used in classrooms align with ADEK's approved tools; and/or have applied for approval from ADEK.
- **Transparency:** Students and parents should be informed about the use of AI tools in learning activities.

12.1 Age-Appropriate AI Use

Strict Developmental Mandate for Phase 1 (KG):

Activities in the Discovery Phase are strictly unplugged. Digital engagement with AI tools and screen time is not expected or permitted for AI learning in KG. Focus must remain on sensory play, human vs. machine agency, and identifying physical hardware sensors (e.g., cameras as 'eyes'). Direct digital engagement begins only in Grade 1 (Age 6) through guided tasks.

12.2 ADEK Support to Schools

ADEK will support schools during implementation through several mechanisms.

These include:

- Teacher training programs
- AI learning resources and teaching materials (ChatGPT Education, MIT Day of AI resources, curated AI lesson materials, and approved digital tools)
- Readiness assessment tools
- Monitoring visits and implementation guidance

Schools may also be supported through the AI Lead Coordinator model, which helps coordinate AI learning initiatives within each school.

12.3 Monitoring and Continuous Improvement

ADEK will monitor the implementation of the AI Literacy Framework to understand how AI learning is being introduced across schools.

Monitoring activities may include:

- Reviewing school implementation plans
- Tracking teacher training completion
- Observing classroom practices during school visits
- Reviewing examples of student learning activities

The aim of monitoring is to support continuous improvement and ensure that students across schools benefit from meaningful AI learning experiences.

12.4 AI Lead Coordinator Role

To support effective implementation, schools must designate an AI Lead Coordinator.

The AI Lead Coordinator supports school-wide coordination of AI learning and ensures alignment between curriculum implementation, teacher training, and ADEK monitoring requirements.

Typical responsibilities may include:

- Supporting the development of the school's AI Implementation Plan
- Coordinating teacher training participation
- Supporting teachers in integrating AI activities into lessons
- Sharing best practices and resources across departments
- Serving as the main point of contact with ADEK on AI-related initiatives

The role helps ensure that AI learning is implemented consistently and supported across the school.

12.5 Measuring Implementation Success

Successful implementation of the AI Literacy Framework depends on continuous monitoring and improvement.

Schools and ADEK may review several indicators to understand how effectively AI learning is being introduced.

These indicators may include:

Area	indicators
Teacher Readiness	• AI Training Completion: Percentage of teachers completing Level 1 AI Training and AI Safety & Ethics Training by August 2026. • Teacher Confidence: Level of teacher confidence in integrating AI into classroom activities, captured via self-assessment and evidence of classroom use.
Curriculum Integration	• Number of subjects integrating AI-related learning activities • Alignment of classroom activities with the AI Literacy Framework learning outcomes • Examples of lesson plans or projects incorporating AI concepts • Evidence of student ability to evaluate AI outputs, design simple AI-powered solutions, or complete AI-related projects aligned with the framework phases
Student Exposure	• Number of grade levels receiving AI learning experiences • Types of student projects or activities related to AI • Student engagement with AI-related learning tasks
Implementation Monitoring	ADEK may support schools through: • Implementation monitoring visits • Review of school implementation plans • Feedback cycles with school leadership • Sharing of best practices across schools

The goal of monitoring is to support schools in strengthening AI learning while ensuring students benefit from meaningful and responsible exposure to artificial intelligence concepts.

12.6 Continuous Review and Framework Updates

Artificial intelligence is a rapidly evolving field. As such, the AI Literacy Framework, associated learning outcomes, and implementation expectations will be subject to periodic review and refinement to ensure continued alignment with technological advancements, global best practices, and national priorities.

ADEK will adopt a structured approach to updating the framework and implementation guidance. Updates may include:

- Refinement of learning outcomes and competency expectations
- Introduction of new content areas or emerging ai applications
- Updates to approved tools, platforms, and safety requirements
- Enhancements to assessment approaches and monitoring indicators
- Revisions based on implementation feedback and system-wide evaluation

All updates will be formally communicated to schools through official ADEK channels.

To ensure clarity and consistency in implementation:

- Schools will be notified of any updates with clear guidance on expectations
- Implementation timelines will be specified, including whether changes are immediate or phased
- Transition periods will be provided where required to allow schools to adapt curriculum plans, train staff, and update resources
- Updated versions of the framework and implementation guide will be issued with version control for reference

Schools are expected to remain up to date with all official communications and ensure that any required updates are incorporated into their AI Implementation Plans and classroom practice within the specified timelines.

This approach ensures that AI learning across Abu Dhabi schools remains current, relevant, and aligned with the evolving nature of artificial intelligence, while maintaining consistency and quality across the system.

12.7 Definitions

Term	Definition
AI Literacy	The ability to understand, evaluate, and responsibly use artificial intelligence technologies.
AI Implementation Plan	A school-level document outlining how AI learning will be integrated into the curriculum.
AI Lead Coordinator	A designated school staff member is responsible for coordinating AI implementation within the school.

13. School Readiness Assessment

Before AI implementation begins, all schools are required to complete the electronic **School Readiness Self-Assessment template**. The purpose of this template is to help ADEK understand each school's readiness and determine the type of support needed. It enables schools to evaluate their capacity to introduce AI learning and identify areas requiring preparation, including teacher training, curriculum alignment, and technology readiness.

The assessment evaluates school readiness across several key domains, including:

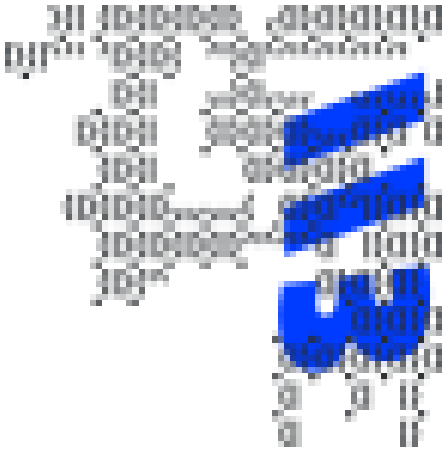
- Leadership & Governance
- Teacher Capacity
- Curriculum Integration
- Technology Readiness
- Student Exposure
- Monitoring & Evaluation

This template is not an evaluation of the school but a tool to guide ADEK in providing effective support and resources.

Schools should complete it accurately to ensure targeted guidance for successful AI integration.

Domain	Key Question	Emerging Readiness	Developing Readiness	Advanced Readiness
Leadership & Governance	Has leadership established a clear plan for AI implementation?	No coordinator or plan	Coordinator appointed, and planning underway	Clear strategy and leadership oversight
Teacher Capacity	Do teachers have foundational AI knowledge?	Few teachers trained	Majority trained and beginning to integrate AI	Teachers are confident and supporting peers

Curriculum Integration	Are AI learning opportunities mapped across subjects?	Limited integration	Several subjects integrating AI	Whole-school curriculum integration
Technology Readiness	Are approved AI tools available to support learning?	Limited access	Tools available for most teachers	Full access and experimentation
Student Exposure	Are students receiving AI learning experiences?	A few grade levels	Multiple grade levels	AI learning across all phases
Monitoring & Evaluation	Does the school monitor AI implementation progress?	No monitoring	Informal tracking	Structured monitoring and evaluation



APPENDIX

14. AI Implementation Plan Template for Schools K–12 AI Literacy Framework

Schools are required to develop an AI Implementation Plan outlining how the AI Literacy Framework will be implemented across grade levels. This plan supports schools in organizing implementation and enables ADEK to monitor how AI learning is delivered across the system.

1. School Information

Field	Response
School Name	
School Operator (if applicable)	
Academic Year	
Curriculum Type	British / American / IB / Other
School Phase	KG / Cycle 1 / Cycle 2 / Cycle 3 / All
School Principal	
AI Lead Coordinator Name	
AI Lead Coordinator Role	

2. AI Curriculum Delivery Model

Schools must indicate how AI learning will be delivered across grade bands.

Grade Band	Delivery Model	Subjects Integrating AI
Kindergarten	*Embedded*	
Grades 1–5	*Embedded / Hybrid*	
Grades 6–8	*Hybrid*	
Grades 9–12	*Hybrid / Standalone*	

Delivery Model Definitions

Embedded
AI learning integrated within existing subjects.

Hybrid
A combination of subject integration and dedicated AI projects or learning modules.

Standalone
AI is taught as a dedicated subject or an elective course.

3. Curriculum Integration Map

Schools should identify where AI learning opportunities will be integrated within the curriculum.

Subject	Grade Levels	Example AI Learning Activities
Mathematics		
Science		
English / Language		
Arabic		
Social Studies		
Digital Literacy / ICT		
Computer Science		

4. Alignment with AI Literacy Framework Phases

Schools must demonstrate how student learning aligns with the four phases of the AI Literacy Framework.

Phase	Grade Levels	Example Learning Activities
Discovery	**Kindergarten**	
Computational	**Grades 1–5**	
Creation	**Grades 6–8**	
Systems & Solutions	**Grades 9–12**	

5. Student AI Learning Activities

Schools should outline the types of AI learning experiences students will participate in.

Grade Band	Example Learning Activities	Project-Based Learning
Kindergarten		
Grades 1–5		
Grades 6–8		
Grades 9–12		

Examples may include:

- AI awareness activities
- Pattern recognition exercises
- Evaluation of AI-generated content
- Development of AI-powered solutions or automation tools
- Interdisciplinary AI innovation projects

6. Teacher Training Plan

Schools must ensure teachers complete the required AI training modules.

Training Module	Target Staff	Completion Timeline
AI Safety and Ethics	All teachers	
Level 1 – AI Foundations	All teachers	
Level 2 – Classroom Integration	Subject teachers	
Level 3 – Advanced AI Use	AI Lead/specialist teachers	

Schools should indicate how teacher participation will be monitored.

7. AI Lead Coordinator

Each school must designate an AI Lead Coordinator responsible for supporting the implementation of the AI Literacy Framework within the school.

The AI Lead Coordinator acts as the primary point of contact between the school and ADEK on matters related to AI implementation.

Field	Response
Coordinator Name	
Position / Job Title	
Department	
Email Address	
Years of Teaching Experience	
Relevant Expertise	ICT / Computer Science / STEM / Data / Other
Previous Experience with AI or Digital Technologies	
Additional Certifications or Training (if applicable)	

Role in AI Implementation

The AI Lead Coordinator will:

- Support development of the school's AI Implementation Plan
- Coordinate teacher training participation
- Support teachers in integrating AI learning activities
- Share best practices across departments
- Monitor implementation progress across grade levels
- Act as the primary liaison with ADEK on AI-related initiatives

Estimated Time Allocation

Schools should indicate the approximate time allocated to the AI Lead Coordinator role.

Time Allocation	Response e.g.
Dedicated Time for AI Coordination	Weekly/monthly
Leadership Reporting Structure	Reports to Vice Principal / Curriculum Lead

Does the AI Lead Coordinator require additional support or training?

☐ Yes
☐ No
If yes: _____

Optional: AI Implementation Team

In addition to the school AI coordinator, schools may establish a small AI implementation team to support delivery.

Team Member	Role	Subject

8. Technology and Digital Infrastructure

Schools should identify the tools and infrastructure that will support AI learning.

Area	Description
Approved AI tools used	
Digital learning platforms	
ICT infrastructure available	
Student access to devices	
Additional resources required	

Schools should ensure the use of secure, age-appropriate AI tools that comply with data protection, safeguarding, and approval requirements established by ADEK's AI Policy.

9. Implementation Timeline

Schools should outline key milestones for implementation.

Milestone	Target Date
AI Lead Coordinator appointed	
Teacher training completed	
Curriculum integration finalized	
AI learning activities launched	
First student AI projects completed	

10. Monitoring and Evaluation

Schools should explain how implementation will be monitored internally.

Area	Monitoring Approach
Teacher training completion	
Curriculum integration	
Student participation	
Student project outcomes	
School leadership oversight	

11. Evidence of Implementation

Schools should maintain documentation demonstrating the implementation of the AI Literacy Framework.

Examples include:

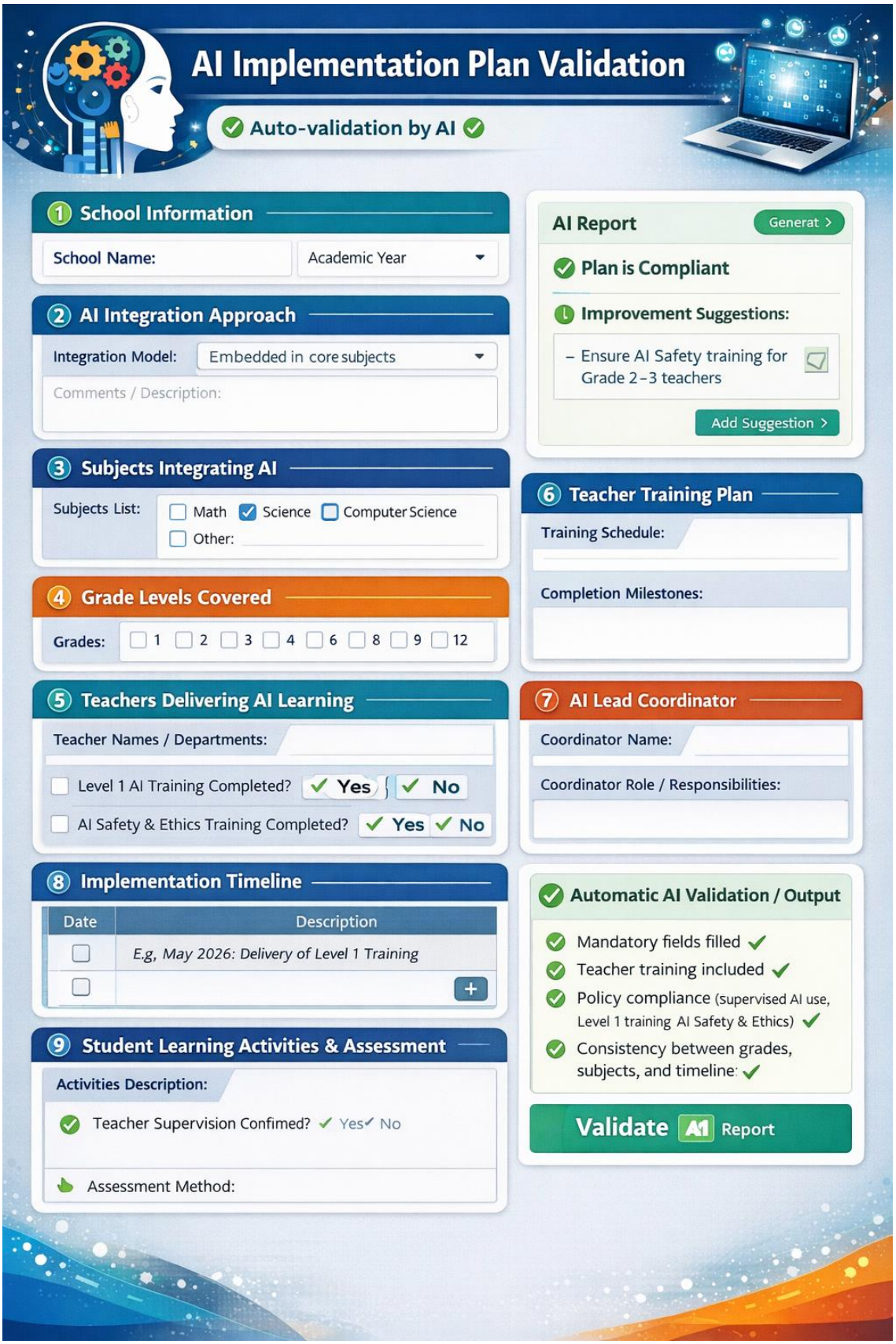
- The school's AI Implementation Plan
- Teacher training completion records
- Curriculum mapping showing AI integration
- Lesson plans integrating AI concepts
- Examples of student AI projects or portfolios
- Reflections or evaluation of AI learning activities
- These materials may be reviewed during ADEK monitoring visits or inspections.

12. School Declaration

The school confirms that the information provided accurately reflects how the AI Literacy Framework will be implemented.

Field	Response
Principal Name	
Principal Signature	
Date	

AI Implementation Plan Validation:



Interactive AI Implementation Plan Validation Form

1) School Information
   - School Name: [Text Field]
   - Academic Year: [Dropdown or Text Field]

2) AI Integration Approach
   - AI Implementation Model by Grade Band
     Example:
     - KG – Embedded
     - Grades 1–5 – Embedded
     - Grades 6–8 – Hybrid
     - Grades 9–12 – Standalone
   - Comments / Description: [Long Text Field]

3) Subjects Integrating AI
   - Subjects List: [Multi-select: Math, Science, Computer Science, Other]
   - Other Subjects: [Text Field]

4) Grade Levels Covered
   - Grades: [Multi-select: 1–12]

5) Teachers Delivering AI Learning
   - Teacher Names / Departments: [Text Field or Table]
   - Level 1 AI Training Completed? [Checkbox: Yes / No]
   - AI Safety & Ethics Training Completed? [Checkbox: Yes / No]

6) Teacher Training Plan
   - Training Schedule: [Date Picker or Text Field]
   - Completion Milestones: [Long Text Field]

7) AI Lead Coordinator
   - Coordinator Name: [Text Field]
   - Coordinator Role / Responsibilities: [Long Text Field]
   - Coordinator Contact Email:

8) Implementation Timeline
   - Milestones (Training, Rollout, Assessment): [Table with Date and Description]

9) Student Learning Activities & Assessment
   - Activities Description: [Long Text Field]
   - Teacher Supervision Confirmed? [Checkbox: Yes / No]
   - Assessment Method: [Text Field]

10) Automatic AI Validation / Output