AI for Empowering Learning and Teaching Funding Programme (智啟學教撥款計劃)

Implementation Plan

Objectives:

By leveraging the 『智』啟學教津貼, LTFC will pioneer a future-ready smart education ecosystem, creating a self-sustaining, secure, and student-centred culture of learning. This AI-driven transformation is not only compliant with National policies but also ensures that LTFC students and teachers lead in innovation, divergent thinking, and ethical responsibility.

1. LTFC's On-Premise AI Server Ecosystem

Rationale:

Instead of relying on fragmented cloud-based systems, LTFC will establish local on-premise servers as the foundation of its private AI platform. This ensures:

1. Greater ownership of data and security.
2. Elimination of risks like data breaches, deepfakes, or unauthorized use in model training by third-party vendors.

Actions:

1. **Server Deployment**:
    - Purchase and deploy independent servers within the school, with redundancy and scalability for increased future needs (e.g., higher computing power for AI applications).
    - Integrate the server into LTFC's existing IT infrastructure and use edge computing to enable faster local AI operations.
2. **Data Integration**:
    - Consolidate student-related datasets into structured formats, creating a Data Lake (database combining academic records, exam papers & students' performance tracking).
    - Train the AI models using school-specific curricular insights, leveraging fine-tuning or retrieval-augmented generation (RAG) techniques.

3. **Maintenance and Scalability**:
    - Partner with local Hong Kong AI service providers for ongoing server maintenance and software upgrades.

2. Implementation of three AI components based on the National Strategy

Integrate the three AI components mentioned in the National Strategy into AI learning practices at LTFC:

I. Intelligent Student Community (數智學生社群)

- **AI Learning Support Platform**:
    - The platform promotes students to come together for learning and sharing experiences.
    - Leverage students' Knowledge to create AI-enabled social impact solutions.
    - Spread AI awareness in an inclusive way.
    - Uses AI to personalize education and provide real-time guidance for students.

II. Smart Learning Partners (智慧學伴)

- **Deploy Personalized AI Tools for Students**:
    - Introduce cloud-based AI platform tailored to LTFC's curriculum & teachers' specific input, equipped with the following features:
        - Instant Homework Assistance aligned with the school's lesson plans.
        - AI-driven exam preparation tools with customized practice tests.
        - Interactive learning sessions on different subjects supported by digital simulations and AI tutors.
- **Real-Time Learning Feedback**:
    - Create AI chatbots capable of delivering feedback on essays, project work, or oral presentations, fine-tuned to Hong Kong DSE standards.

III. Digital Teaching Assistant (數位導師)

- **Teacher App Support**:
    - Use AI assistants to automate grading of assignments (e.g., essays, multiple-choice papers) and generate detailed performance reports for each class.
- **Teaching Diagnostics**:
    - Deploy tools like AI-powered dashboards for teachers that provide insights into class-wide learning gaps, enabling them to adjust their teaching in real time.
- **Content Generation for Teachers**:
    - AI generates lesson plans, activity ideas, and targeted remedial teaching resources based on real-time analysis of student needs.

Proposed Budget Allocation

Category	**Estimated Cost (HKD)**
LTFC's On-Premise AI Server Ecosystem	$250,000
AI-Driven Platforms with cloud-based AI chatbots for students & Digital Teaching Assistants for teacher	$150,000
Software Licenses and AI Support Tools	$100,000
Total	$500,000

Implementation Timeline

Year	**Action Items**
2026–2027	Deploy On-Premise AI Server Ecosystem.
2027	Launch "Intelligent Learning Partners" for students & "Digital Teaching Assistants" for teacher.
2028	Expand smart teaching functionalities.