A Holistic Approach to Learning Design

LearnFree AI (LAI) pedagogy is derived from ADDIE (Analysis, Design, Development, Implementation, and Evaluation), a systematic and iterative approach to instructional design, ensuring that learning experiences are well-planned, learner-centered, and continuously improved. It provides a structured framework for instructional designers (traditionally human teachers and publishers) to follow throughout the development process for effective and efficient learning experiences.

(Figure 2) ADDIE x LearnFree Approach

ADDIE	Holistic Learning Design with AI	LearnFree AI (LAI)
1a. Analysis involves gathering information about the learners, their needs, and the goals of the instruction. It includes conducting a "needs" assessment, identifying the learning objectives, and analyzing the existing resources and constraints.	1b. Profiling of learners is preferably achieved by AI. Apart from the empirical information user submits, 1b.1 User Name (encrypted with UserID), 1b.2 School, 1b.3 Grade/Class, 1b.4 Textbook-in-use; 1b.5 Date/Month/Year (use as part of textbook analytics), otherwise the AI is to assume the "know and don't know" of any user, into a comprehensive database within "Selfish AI" we named Knowledge Matrix.	1c. The entire LAI content database comprises of three proprietary, curriculum-based framework, Knowledge Matrix comprising of: 1c.1. Theme Keyword Concept (TKC); 1c.2. Learning Outcome Taxonomy according to Blooms (BLT); 1c.3 Grammar Domain Structure (GDS). Together, they form the learning objectives that guide and prompt AI to determine appropriate level and learning experience of any user. Concurrently, Knowledge Matrix forms the basis for Student Profile.
2a. Design involves a detailed plan for the learning experience, includes determining the instructional strategies, sequencing of content, and selecting appropriate media and technologies. The designer also creates a blueprint or storyboard of the instructional materials.	2b. Learning progression is preferably driven by a combination of curriculum requirement and user's curiosity in learning a particular subject.	2c. Instructional strategies of LAI drives language production from thoughts, hence LAI objectifies "From Concept Understanding To Language Proficiency". As a result, sequence of content generation first based on an empirical understanding of the world around a child, and through the progression of higher learning outcomes, with appropriate grammatical forms being applied when deemed necessary.
3a. Development for instructional materials, including the development of content, multimedia elements, assessments, and any other necessary resources. The content is organized and structured according to the design plan.	3b. Learning resources is produced preferably analysing all input text materials which are compared with the known syllabi. As a result, despite the nature and level of any input text, AI can produce a content and level appropriate exercise for any particular user (student).	3c. LAI produces learning content while making use of Triarch AI Architecture. Following the rigid curriculum requirement with a dynamic page-exercise output or line-exercise prompt, LAI combines the communicative capability of ChatGPT, capable for text2voice in the coming iteration. Detailed development logic is described in subsequent sections. LAI will utilise gamification principles and generate instantaneous content image with relevant prompt for effective and continuous learning according to Knowledge Matrix.
4a. Implementation involves the actual delivery of the instruction to the learners. It may involve classroom instruction, online learning, or a combination of both. The instructor or facilitator follows the plan developed in the design phase to deliver the instruction effectively.	4b. The role for teachers (in class) or AI or tutors (at home) is still yet to be defined. Preferably the AI is capable to remember and consistently remind users concerning outstanding learning content before it is being examined or superseded.	4c. LAI can be deployed via face-to-face human teaching or online via AI or hybrid via AI with tutor. Business cases will be explored for B2B, B2B2C, B2C2C. Assessment will take place as learning occurs, hence LAI confers a learner-centric "Assessment As Learning".
5a. Evaluation measures the effectiveness of the instruction is assessed. This includes gathering feedback from learners, assessing their performance, and evaluating the overall impact of the instruction on the desired learning outcomes. Based on the evaluation results, revisions and improvements can be made to the instructional materials and process.	5b. The actual effectiveness of any instruction cannot be tested without the acknowledgement from the learner. "Assessment As Learning" is the common objective for an eLearning platform. But at the end, the user still has to sit through conventional examination to ascertain the attainment of the relevant knowledge.	5c. LAI can ascertain the level of attainment prior to examination, therefore eliminating the opportunity for "Learning Neglect". Yet the ultimate aim for Chinese Language Learning is to possess the ability to produce according to one's will in written or spoken Chinese, through assessment-based interactivity and process writing.

Note:
The ADDIE instructional design model was not invented by a single individual. It is a systematic approach to instructional design that has been developed and refined over time by various experts in the field. The origins of the ADDIE model can be traced back to the 1970s when it was first introduced by the U.S. Army. However, it has since been adapted and adopted by numerous instructional designers

An Effective Hybrid Learning Experience

In order to create an effective learning experience, LearnFree AI (LAI) follows a framework developed by Robert Gagne, a prominent educational psychologist, that outlines a series of steps when designing and delivering effective instruction (for Phase 2 chat-based learning). These events are based on the idea that learning is an active process and that instructional design should be structured to facilitate this process.

(Figure 3) Gagne x LearnFree Process

1a. Gain attention: The instructor must capture the learners' attention and create a sense of relevance or curiosity about the topic. This could be done through the use of an engaging introduction or an attention-grabbing activity.	1b. LAI will follow the principles on gamification, whereas FlashCard-like prompt will start a chat-based learning.
2a. Inform learners of the objectives: Clearly state the learning objectives or goals for the instruction. This helps learners understand what they are expected to achieve and provides a sense of direction.	2b. LAI will include the learning objectives either on top of the page or along with the FlashCard.
3a. Stimulate recall of prior knowledge: Activate learners' existing knowledge or experiences related to the topic. This helps to establish connections between new and old information and creates a foundation for learning.	3b. Context of the FlashCard will be created by the AI after referring to both curriculum and student profile.
4a. Present the content: Introduce the new information or concepts in a clear and organized manner. This could involve using multimedia, visuals, or demonstrations to enhance understanding.	4b.
5a. Provide guidance: Offer support and guidance to learners as they begin to apply the new information. This could be in the form of step-by-step instructions, examples, or demonstrations.	5b.
6a. Elicit performance: Give learners opportunities to practice or apply the new knowledge or skills. This could involve exercises, simulations, or real-world scenarios.	6b.
7a. Provide feedback: Offer feedback on learners' performance, highlighting areas of improvement and reinforcing correct responses. This helps learners understand their progress and motivates them to continue learning.	7b.
8a. Assess performance: Evaluate learners' understanding or mastery of the content through assessments or tests. This helps to determine if the learning objectives have been met and if further instruction or reinforcement is needed.	8b.
9a. Enhance retention and transfer: Provide opportunities for learners to review and apply the newly acquired knowledge or skills in different contexts. This helps to reinforce learning and promote long-term retention and transfer of knowledge.	9b.

By following these nine events, instructional designers can create more effective and engaging learning experiences for learners.