Developing Students' Self-directed Learning Capabilities: Exploring the Use of Artificial Intelligence in the Primary English Classroom

- Event 4

Holistic Planning for AI Integration in L&T Components

To integrate AI tools across different learning and teaching components to promote Self-Directed Learning (SDL).

Key Steps

- **Identify learning goals**
  - Vocabulary: Expand word knowledge through context-based AI activities
  - Grammar: Reinforce structures with adaptive AI exercises
- **Select AI Tools and task design**
  - *SchoolAI*: Provide personalised grammar and vocabulary support with instant feedback
  - *Wayground*: Offer multimodal learning experiences with adaptive feedback, diverse task types, and data-driven insights to support both teaching and self-directed learning
- **Embed SDL Strategies**
  - Students set goals, track progress, and create content
  - Encourage reflection (e.g. self-assessment, learning log, 'glow' & 'grow')
- **Assess and Reflect**
  - Formative assessment (teacher observation, questioning)
  - Self-assessment and self-editing supported by AI tools

Resource materials

- Theme: Taking care of our Earth
- Level: KS2

- Objectives

1. To introduce key vocabulary related to taking care of our Earth and expand students' environmental awareness;
2. To enhance understanding of the textual features of informational fact sheets and blog entries;
3. To strengthen literacy skills, including using modal verbs to express obligation, advice, and possibility, and applying elaboration strategies in writing;
4. To develop students' creative writing skills, particularly by writing from the perspective of an animal, allowing them to explain, describe, elaborate, and suggest actions to protect the Earth;
5. To support the development of self-directed learning capabilities and nurture AI literacy through the integrated use of multiple AI tools.

Demonstration

Wayground

- Refer to your handout.
- Designing interactive tasks on Wayground.

You will now try out this AI tool as a KS2 student. You will be instructed to scan a QR code to join the lesson.

Using Wayground to promote self-directed learning

- **Multimodal output for richer learning:** Students can respond through text, audio, images, or interactive elements, helping different learners engage with content in ways that suit their strengths.

- **AI-supported evaluation for teachers:** Wayground's built-in assessment tools automatically analyse students' responses and highlight key areas of strength and difficulty, reducing marking time while improving accuracy.

- **Instructional insights through statistics:** The platform generates clear data visualisations and performance summaries, allowing teachers to track class-wide trends and make evidence-based instructional decisions.

- **Collaboration through slide sharing:** Teachers can share decks with colleagues, supporting co-planning, resource exchange, and consistent teaching across classes.

- **Support for self-directedness:** Sharing slides with students enables them to revisit explanations, review examples, and practise independently, strengthening their capacity for self-directed learning.

Issues of concerns - IMPACT

I – Information literacy
Are students encouraged to produce something original?
How can teachers help students distinguish between copying and being inspired when using AI-generated content?

M – Mindful use
How can teachers remind students to verify sources of information provided by AI tools?
How can teachers guide students to identify bias in AI-generated responses?

P - Privacy protection
How can teachers ensure that students do not share their personal data in the chatbots?
How can schools monitor and regulate the use of AI tools to prevent exposure to harmful or inappropriate content?

A – Access for all
Will any student be left out because they do not have access to an Internet connection or the required devices?
What alternatives can be provided for students who lack access to devices or reliable internet at home?

C- Cognitive growth
How can teachers design lessons that balance technology use with hands-on, collaborative, and inquiry-based learning to nurture deep thinking (instead of solely rely on these AI tools)?
How can teachers integrate AI tools in ways that complement—not replace—student-led exploration and discussion?

T – Tech health awareness
How much screen time do you think is appropriate for students?
How can teachers and parents collaborate to set healthy boundaries for AI and screen use at school and home?