



Harnessing Technology to Cater for Learner Diversity in the Secondary English Language Classroom

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Workshop Objectives

Learner Diversity

Explore what <u>learner diversity</u> means in the English Language classroom and how technology can address varied learning styles.

Technology and Materials Development

Use <u>technology</u> to design accessible materials and deliver inclusive instruction that supports diverse functions, such as <u>simplifying texts</u>, <u>visualising scenes</u>, and <u>encouraging speaking</u>.

Foster Student Autonomy

Empower students to take control of their learning through self-directed strategies and technology, building confidence and independence.

Hands-on Activities

What are practical ways to use technology to design materials and teach?



Learner Diversity



4.3 Embracing Learner Diversity

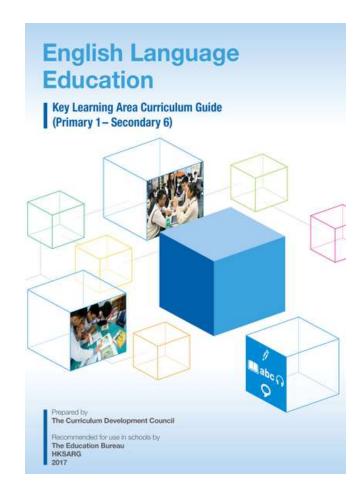


Every class is made up of individuals who are different in terms of motivation, learning styles, preferences, needs, interests and abilities. Teachers can cater for learner diversity through effective curriculum planning and appropriate learning, teaching and assessment strategies.

4.3.2 Learning, Teaching and Assessment Strategies

Learning and teaching strategies which could be adopted by teachers to cater for learner diversity include:

- employing a variety of strategies to enhance interactive learning (e.g. drawing upon students' existing knowledge to construct concept maps with the class, giving timely feedback, using IT);
- making use of graded learning tasks and exercises;







Learner Diversity





- providing students with the same tasks and exercises, but
 - varying the expected output of different students; or
 - varying the amount and style of teacher input and support to provide extra help for the less able students and challenge the more able ones;
- making use of open-ended tasks;
- selecting, adopting and adapting appropriate texts that incorporate different modes of representation, providing multisensory learning experiences to cater for students' diverse learning styles and preferences;
- breaking tasks into small steps to facilitate understanding and sequencing the steps in the tasks;
- providing different support in learning tasks for students with different learning styles
 (e.g. visual cues for visual learners, verbal cues for verbal learners);
- connecting the design of learning materials to students' life experiences to sustain their motivation and attention;
- making use of flexible grouping according to the nature and purpose of the tasks (e.g.
 grouping students of similar abilities together to make it less intimidating to the less
 able students, arranging a more able student to be seated next to a less able one to
 offer help when necessary); and
- engaging students in active and self-directed learning through the use of IT (e.g.
 e-platforms, "Flipped Classroom" strategy) to enhance learner autonomy and allow
 students to learn at their own pace.

Standardised assessment, to a certain extent, may have its limitations if students' abilities are diverse. To ensure that students are appropriately assessed so that they can demonstrate their learning progress and achievements, teachers should adopt different assessment practices giving consideration to the content, modes of assessment and their expectations of students. Teachers are encouraged to:

- promote formative assessment to provide effective and timely feedback, both formal and informal;
- adopt different modes of assessment (e.g. short assignments, assessment tasks, projects, questioning) to address the needs of students, identify the strengths and weaknesses of students and decide on the appropriate content, and learning and teaching strategies;
- help students develop the necessary skills to assess and monitor their own learning through self-assessment so as to enable them to learn better;
- promote peer assessment through which students can develop a better understanding of the learning objectives and assessment criteria, and what is expected of them; and
- use e-assessment such as the Student Assessment Repository (STAR) platform accessible at https://star.hkedcity.net/en/ to help identify students' strengths and weaknesses and facilitate analysis of their performance.

For further ideas about how to meet the diverse needs of students in the English classroom at the primary and secondary levels, see **Examples 21**, **22** and **23**.



Graham Hall's (2017) Learner Diversity and Development

METACOGNITIVE STRATEGIES

Some learners are better organisers and they are better at noticing and monitoring

LEARNING STYLES

Some learners prefer visual aids, while others learn better through listening or hands-on activities.

Some students are relaxed, while others are more detail-oriented.

MOTIVATIONS

Different learners have varying motivations for learning a language

PERSONAL EXPERIENCES

Learners have previous language exposure, travel, or cultural interactions

SOCIAL AND EMOTIONAL FACTORS

Factors such as confidence, anxiety, and peer relationships play a significant role

NEURODIVERSITY: NATURAL VARIATION IN HUMAN BRAIN FUNCTIONING

Examples: ADHD (focus challenges), dyslexia (reading difficulties), autism spectrum disorder (ASD), and more...

In English class: A dyslexic student may struggle with long texts; an ADHD student may need interactive tasks.



Digital Tools Used by HK English Language Schoolteachers

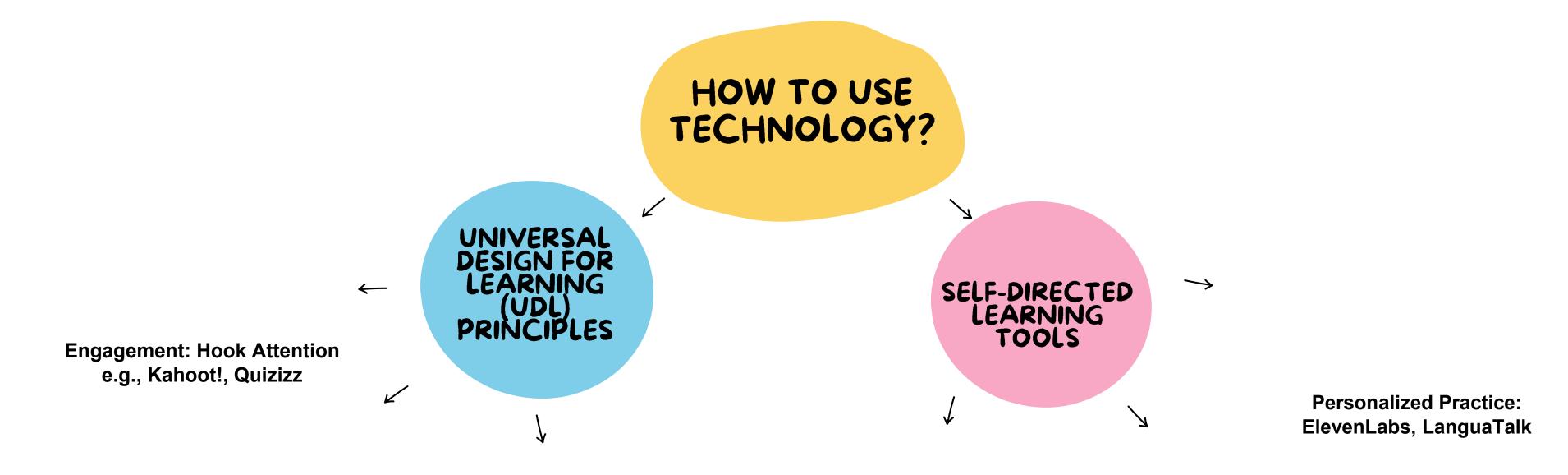
Table 2. Ten most common digital tools mentioned.

Digital Tool	Frequency (n=)
1. Kahoot	52
2. Padlet	32
3. Google classroom	29
4. YouTube	25
5. Nearpod	24
6. Quizizz	23
7. Mentimeter	18
8. Quizlet	18
9. EPIC	13
10. Google Form	13

(Moorhouse & Yan, 2023)



Technology as the Bridge: Supporting Diverse Learners



Representation: Present Content
Accessibly
e.g., NaturalReader: Audio for
dyslexic students

Action and Expression: Flexible
Output
e.g., Lucidspark, Google Docs
Voice Typing

Self-Paced Review:
Quizlet – Adaptive flashcards
for ADHD students

Interactive Reading:
Annotate texts through Evernote or
Notability





Self-Directed Learning (SDL) for Diverse Learners

SDL: A process where learners control their learning by:

- Setting goals (e.g., I'll improve my vocab with Quizlet)
- Selecting resources (e.g., lets students choose what to focus on Padlet or Lucidspark)
- Evaluating progress







Technology for Diverse Learners





Tools for Auditory Learners

- Text-to-Speech Software (e.g., NaturalReader):
 - Key Features: Converts written text to audio, allowing students to listen rather than read
 - Benefits:
 - Helps auditory learners grasp content better
 - Useful for those with reading difficulties
- Audiobook Portals (e.g., <u>Libby reading app</u>):
 Key Features: Provides access to a wide range of audio texts with your local
 - library card
 - Benefits:
 - Encourages engagement with literature
 - Supports comprehension through listening





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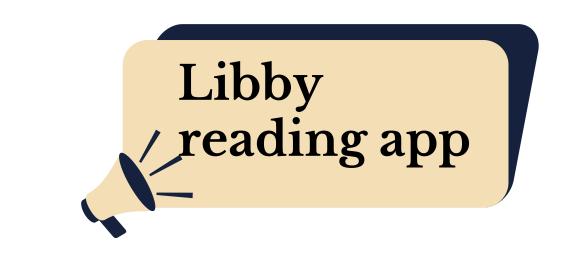
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Arabic coffee highlights an important aspect of generosity in Arab societies and the associated traditions of hospitality. Serving and drinking Arabic coffee is a daily ritual for communities, groups and individuals. It is served at weddings and tribal gatherings (reconciliation and conflict resolution majalis) in all submitting States including Jordan (the new submitting State). The practice is associated with specific rituals and rules of etiquette that are passed down informally from one generation to the next. For instance, older people and guests are served first, and the coffee must be poured using the right hand. It is also customary for the person drinking the coffee to shake their cup to signal that they are done. Arabic coffee is a popular practice that is enjoyed by all segments of society. In gatherings, it is often accompanied by the recitation of poetry, stimulating discussions, and the exchange of memories. In Jordan, Arabic coffee is held in high regard as a symbol of generosity and hospitality in the offices of government officials and statesmen, including ministers, representatives, and directors, and is always present in the homes of Jordanians, whether in Jordan or abroad. In addition to being a symbol of generosity, hospitality and respect, it acts as a call for peace and dialogue within and across countries.

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The practice is associated with specific rituals and rules of etiquette that are passed down informally from one generation to





Tools for Visual Learners

- · Visual Summaries (e.g., Canva AI Image Generator):
 - Key Features: Create engaging visual representations of content
 - Benefits: Aid memory retention and understanding through visual cues
- AI Image Generators (e.g., <u>Poe.com</u>):
 - Key Features: Generate images based on text prompts
 - Benefits: Help visual learners connect concepts with imagery





For less able learners

 How can images support understanding and make complex ideas easier to grasp?

For able learners

 How can images challenge students to expand their expressive repertoire and use more creative language?

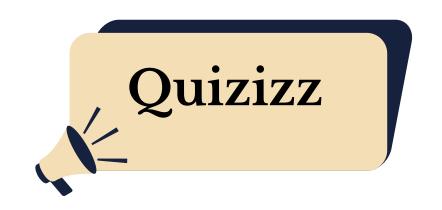
Tools for Kinesthetic Learners

- Nearpod, Kahoot, and Quizizz are excellent tools for creating gamified activities
 - Key Features: Gamified learning experiences that encourage active participation
 - Benefits: Facilitate hands-on learning, catering to those who learn best through movement and interaction









Normal Quiz functions

Good database of activities

Useful AI functions



Tools for Social Learners

- <u>Padlet</u>, <u>Miro</u>, and <u>Lucidspark</u> are great tools for collaboration and discussion:
 - Key Features: Enable real-time collaboration and discussion
 - Benefit: Foster communication skills and teamwork



Tools for Mixed-Ability Learners

InsertLearning:

Key Features: Create texts with embedded support like glossary, annotations and guiding

questions

Benefits: Provide necessary support for comprehension; help to bridge gaps in understanding

MagicSchool:

Key Features: Modify reading levels and content complexity of reading materials

Benefits: Ensure all learners can access the material at their level

Google Forms:

Key Features: Adjust question complexity/ vary difficulty

Benefits: Allow students to demonstrate understanding in a way that matches their ability







Hands-On Activity:
Crafting a Multimodal
Process Description
with Padlet
(Caleb Acton)







https://padlet.com/site/product/howitworks



Ideas for Curating Differentiated Resources

- Create <u>separate columns</u> or sections on a Padlet board for different student <u>abilities</u> or <u>interests</u>.
- Provide <u>tiered materials</u> such as simpler explanations, videos, infographics, or <u>challenging</u> extension articles within the same Padlet board.
- Students can <u>later select and explore</u> resources matching their current levels and interests.



Pre-teaching New Vocabulary or Concepts

- Post definitions, images, audio pronunciations, or videos to introduce and clarify new vocabulary or key concepts before the lesson.
- Students can preview content at their own pace, reducing anxiety and encouraging self-directed learning.



Creating Choice Boards

- Set up choice boards on Padlet, providing multiple pathways for students. For instance, different columns or sections might represent various activity types (visual, auditory, kinesthetic, verbal).
- Allow students to select tasks based on their preferred learning styles or interests.







Padlet for student interaction within or beyond the classroom



Interactive Discussions and Brainstorming

- Facilitate <u>real-time discussions</u> by posting <u>open-ended questions</u>.
 Encourage debates of opposing topics. Students can respond using text, images, audio, video, GIFs, or drawings, thus catering to various communication preferences.
- Encourage quieter students or those who need more processing time to contribute asynchronously, ensuring everyone's voice is heard.



Collaborative Projects and Group Work

- Students can
 collaboratively
 organize research
 findings, create
 multimedia
 presentations, or plan
 projects on a shared
 Padlet board.
- Teachers can monitor individual and group contributions, guiding and supporting students as needed.



Creative and Multimodal Expression

- Assign multimodal tasks such as digital storytelling, creative writing, or visual art projects.
- Allow students to express their understanding creatively and authentically, enhancing student motivation and engagement.



Al supported Padlets







Tool #2 InsertLearning (Michelle)



InsertLearning

- A tool for transforming websites into interactive learning experiences
- Key Features: Teachers can add guiding questions, discussions, multiple choice questions, highlights, definition clues, sticky notes, images, and videos directly onto any webpage.
- When students visit the webpage, they can engage by responding to questions and discussions, as well as taking their own notes.
- Benefits: Offers essential support for comprehension and helps bridge gaps in understanding



Explore InsertLearning (Student Perspective)

- In this demonstration, you'll explore the features of InsertLearning from the student's perspective.
- Step 1: Go to https://insertlearning.com/ on your Chrome browser
- Step 2: Add the InsertLearning extension to Chrome



InsertLearning

https://ich.unesco.org/en/RL/arabic-coffee-a-symbol-of-generosity-02111







Hands-on Practice: Using InsertLearning



Using InsertLearning (Teacher Perspective)

- In this hands-on activity, you'll learn to use **InsertLearning** to add **annotations** to a webpage to scaffold students' learning.
- Step 1: Return to the InsertLearning Dashboard using the panel on the left (OR visit https://insertlearning.com/ with your Chrome browser)



Using InsertLearning (Teacher Perspective)

- Step 2: Navigate to a website. You can either choose your own website or use the following: https://www.bbc.com/news/articles/cgj6j7yvz550
- Step 3: Click the InsertLearning icon in the toolbar of your Chrome browser to launch the tool



- Step 4a: Select the 'Insert Question' icon from the panel to add a question to any paragraph of the webpage
- Step 4b: Type your question or select one from the list provided
- Step 4c: You can create openended questions or turn them into multiple-choice questions by entering options in the answer box.



- Step 5a: Click on the 'Insert Discussion' icon from the panel to initiate a discussion thread on the content
- Step 5b: Add the discussion thread to any paragraph of the webpage
- Step 5c: Create open-ended questions to encourage dialogue and peer interaction



- Step 6a: Use the highlight tool to emphasize key points/difficult vocabulary
- Step 6b: Add comments to the highlighted text to provide explanations of the words.



• Step 7: Attach sticky notes to embed images or videos to enhance understanding



- Step 8a: Assign the annotated webpage to students by sharing a link (or via Google Classroom/Microsoft Teams).
- Step 8b: Track responses and engagement through the InsertLearning dashboard







Tool #3 MagicSchool (Michelle)



MagicSchool

- An AI tool designed to support teachers in creating tiered lesson materials for mixed-ability classes.
- Key Functions:
 - Text Leveler: Automatically adjusts reading material to various difficulty levels to ensure all students can access the content, regardless of their reading ability.
 - Worksheet Generator: Creates customized worksheets based on specific topics and skill levels.
 - Choice Boards: Offers a variety of activities and tasks that cater to different learning styles. This empowers students to choose how they demonstrate their understanding, fostering engagement and agency.
 - Assignment Scaffolder: Breaks down complex assignments into manageable steps with guided support. This helps students build confidence and skills gradually, and make challenging tasks more approachable.



Sample Text

- This section will demonstrate how reading materials can be adapted to accommodate various learning styles, abilities, and interests.
- For demonstration purposes, the following sample text will be used:

https://ich.unesco.org/en/RL/a rabic-coffee-a-symbol-ofgenerosity-02111

Arabic coffee, a symbol of generosity

Arabic coffee highlights an important aspect of generosity in Arab societies and the associated traditions of hospitality. Serving and drinking Arabic coffee is a daily ritual for communities, groups and individuals. It is served at weddings and tribal gatherings (reconciliation and conflict resolution majalis) in all submitting States including Jordan (the new submitting State). The practice is associated with specific rituals and rules of etiquette that are passed down informally from one generation to the next. For instance, older people and guests are served first, and the coffee must be poured using the right hand. It is also customary for the person drinking the coffee to shake their cup to signal that they are done. Arabic coffee is a popular practice that is enjoyed by all segments of society. In gatherings, it is often accompanied by the recitation of poetry, stimulating discussions, and the exchange of memories. In Jordan, Arabic coffee is held in high regard as a symbol of generosity and hospitality in the offices of government officials and statesmen, including ministers, representatives, and directors, and is always present in the homes of Jordanians, whether in Jordan or abroad. In addition to being a symbol of generosity, hospitality and respect, it acts as a call for peace and dialogue within and across countries.



MagicSchool









Hands-on Practice: Using MagicSchool



Using MagicSchool for Lesson Preparation

- In this hands-on activity, you'll learn how to use MagicSchool to adapt texts and create worksheets.
- Step 1: Visit https://www.magicschool.ai/
- Step 2: Sign in or Sign up for an account



Using MagicSchool for Lesson Preparation

- Step 3: You can either choose your own text or use the following:
 - https://bit.ly/coffee_culture
- Step 4: Click the 'Text Leveler' tab on the homepage to adjust the difficulty level of the text
- Step 5: Go back to the homepage and click the 'Worksheet Generator' tab to create worksheets







Hands-on Practice: Preparing a Text to Support Learner Diversity (Joshua)





Task: Visualise "Discovering My Roots" (Longman English Edge, 2023) to engage diverse learners. Access text: https://edge-eng-js.pearson.com.hk/

Canva

- Identify Challenges: Review text; list 2–3 issues for less-able learner.
- Use Canva's 'Magic Media' (Apps > Magic Media) to generate images
- Alternatively, visit Grok.com and enter a prompt (e.g., 'A teenager seeing a cousin at a bus stop in a rural village'). Download the image.

Share Your Product on Lucidspark (link in folder on Desktop).

Grok



Task: Visualise "Discovering My Roots" (Longman English Edge, 2023) to engage diverse learners. Access text: https://edge-eng-js.pearson.com.hk/



Try uploading the pictures onto Grok and any other Al chatbots and ask:

- What is this place called?
- What are these people doing?
- How is this celebration different from traditional New Year Festivals celebrated by the Hans?

Grok







Self-directed Speaking Practice

ElevenLabs



ElevenLabs - AI Speaking Tool for Conversations

Ask students to chat with the AI agent for brainstorming new ideas.



ElevenLabs - Generate a Podcast on a Passage



Now, have a go!

Question 1 As a teacher

I am teaching _(Reported speech)_ at the moment, and my class has _25_ students with varying levels of abilities. What is your suggestion for a using tools for help lower ability learners to learn this item?

Question 2 As a student

I need to express my opinion on _____ during next month's school exam. Do you have any suggestion on how I can express ____?

Please give me three arguments supporting _____



Langua Talk: Self-Directed Speaking Practice

Key features:

- Define your goals (e.g., fluency level or topic mastery)
- Customise AI feedback, which is of great importance to primary school learners



LanguaTalk: Empowering Self-Directed Speaking Practice



LanguaTalk



Now, have a go!

General Conversation

Hello, how are you today?...

Pretend to be a student and make some mistakes in your replies.

Vocabulary Builder

Ask it to define a word, e.g., 'Gigantic'.

Ask it to help 'you' (as a student) prepare for the upcoming speaking examination at school.

Co-creating a story

Ask it to co-create a story with you, e.g., Once, there was a castle...'







Final Reflection



Reflecting on Your Strategies

What challenges have you faced when adapting English lesson materials (e.g., texts, tasks) for students like those with dyslexia or limited vocabulary? Share one strategy or tool you will try.

Post your idea through Lucidspark.

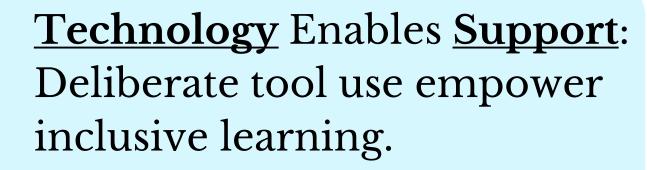


This Workshop's 4 Key Messages

<u>Diversity</u> Requires <u>Intention</u>: Neurodiverse learners (e.g., ADHD, dyslexia) need tailored support.



SDL Builds Confidence:
Goal-setting turns
challenges into
opportunities.





Scaffolding Enables Autonomy: Teachers organize materials on tools like Lucidspark or Miro









