

## DESIGNING LISTENING COMPREHENSION TASKS USING NOTEBOOKLM IN EFL CONTEXTS

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Integration of AI-based tools into language education offers promising avenues for enhancing key skills such as listening comprehension. Among these tools, NotebookLM, a Google Labs AI-powered platform, presents unique opportunities for creating effective and personalized listening tasks for learners of English as a foreign language (ELF). This abstract explores how NotebookLM can help educators create customized and contextually relevant materials to develop students' listening comprehension skills.

NotebookLM allows users to upload audio transcripts, lecture notes, articles, and multimedia content, which the AI can then analyze and transform into guided questions, summaries, and discussion prompts. By aligning AI-generated tasks with the learners' proficiency levels and interests, instructors can scaffold listening activities with pre-listening vocabulary support, comprehension checks, and post-listening reflections.

To create tasks that enhance students' listening comprehension skills, the following steps are recommended:

1. Select an audio source appropriate for your learner's level. Ensure it has a transcript or generate one using transcription tools (e.g., Google Docs voice typing or a third-party AI transcription service).
2. Upload your materials, including the transcript, background readings, and vocabulary lists, to NotebookLM.
3. Prompt NotebookLM to generate *pre-listening questions* (e.g., "What do you already know about the topic?"), *while-listening comprehension questions* (multiple choice, true/false, short answer), and *post-listening discussion prompts*. Here, you can prompt to generate questions with simpler vocabulary or more challenging inference-based queries, depending on your students' language level.
4. Review the AI-generated content and revise as necessary.
5. Distribute the task using your preferred platform (e.g., a learning management system, Google Workspace or Microsoft 365 tools).
6. Evaluate student responses to adapt the difficulty of materials for future lessons. You can also upload the results to NotebookLM and use AI assistance to analyze performance.

To summarize, NotebookLM exemplifies how AI tools can reshape language education by supporting the creation of efficient, adaptive, and learner-centered listening comprehension tasks tailored to individual needs and evolving educational contexts.