



Beyond the Questionnaire

Language Learning Strategies in the Age of AI

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1 Background

- Language learning strategies (LLS) are essential for successful and autonomous language learning.
- Traditional questionnaires, such as the SILL (Strategy Inventory for Language Learning), provide useful insights but rely on retrospective self-report and offer limited understanding of why learners use particular strategies.
- The increasing integration of AI into language learning highlights the need for modernised assessment instruments, such as the SAILLI (Strategic AI-Integrated Language Learning Inventory), which examines strategies for AI-supported and digital language learning.
- Conversational AI offers new opportunities to move beyond static self-report toward ongoing, personalised strategy assessment and support.

2 Research Aim & Questions

To design and evaluate a conversational AI framework that assesses language learning strategies and supports the development of learner self-regulation.

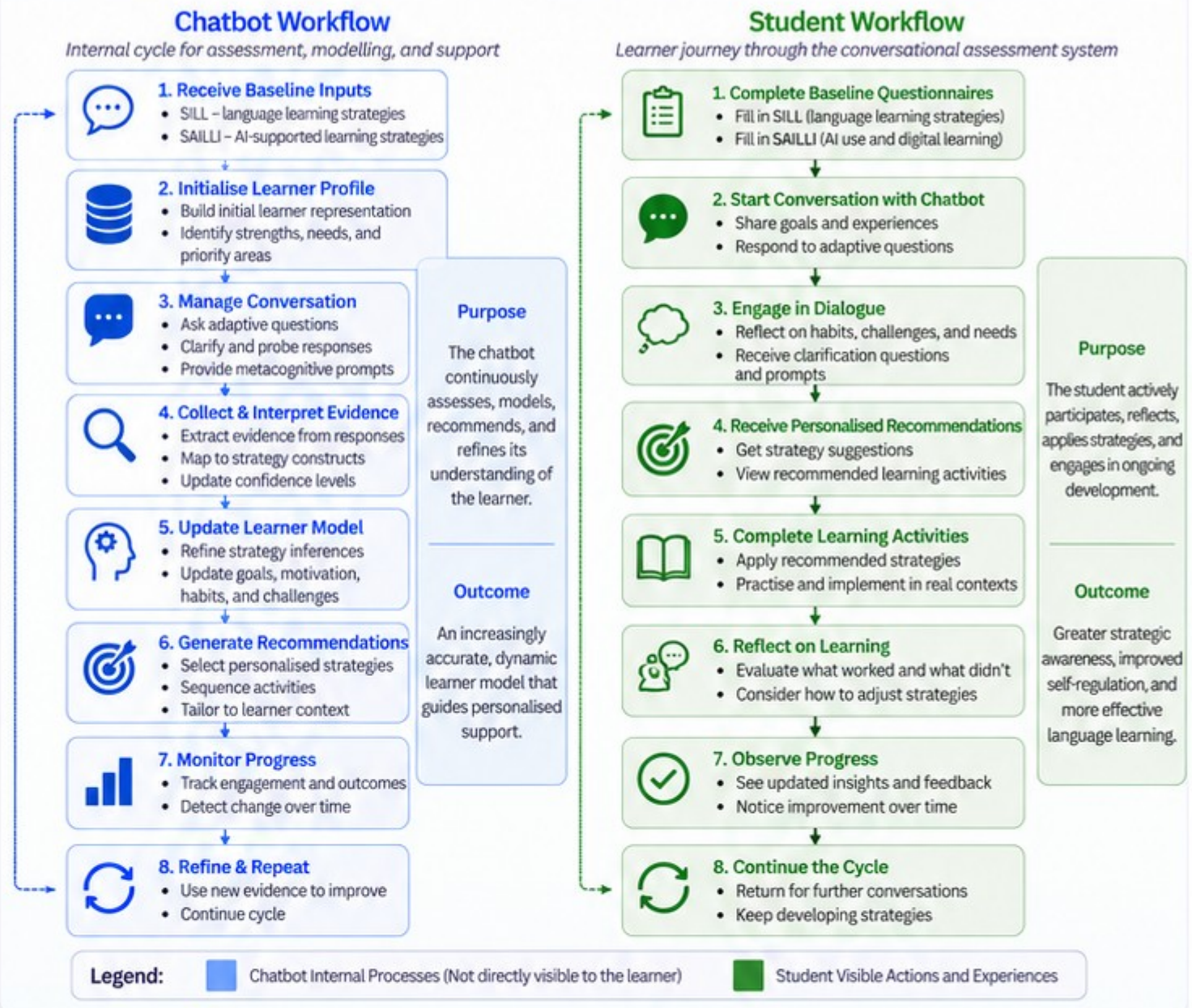
- How can a conversational AI framework integrate SILL and SAILLI with adaptive dialogue to assess language learning strategy use?
- How does conversational AI support the development of metastrategic awareness (plan, monitor, evaluate, adapt)?
- What are learners' perceptions of the usefulness, accuracy, and impact of AI-supported strategy assessment compared to traditional approaches?

3 Theoretical Foundations

- Language Learning Strategies (Oxford, 2017)
- Self-Regulated Learning (Zimmerman, 2002)
- AI in Language Education
- Strategy Assessment
SILL – general language learning strategies
SAILLI – AI-supported language learning strategies

4 The Proposed Framework

A continuous, conversational, and evidence-centred approach



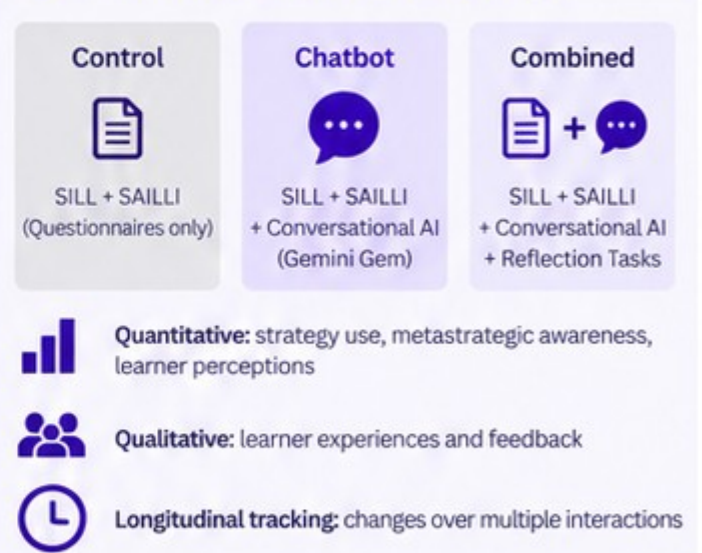
5 The Gemini Gem Prototype

Operationalising the framework



6 Proposed Evaluation

Three conditions, mixed-methods design



7 Expected Contribution

- A practical framework for AI-supported strategy assessment
- A modernised approach integrating SILL and SAILLI
- Insights into how conversational AI can foster metacognitive development
- Support for more autonomous, self-regulated language learners

8 Limitations & Next Steps

- Prototype tested within a specific context and population.
- Long-term impact on actual language proficiency requires further investigation.
- Future work could integrate automatic questionnaire transfer and include more diverse participant groups.
- Findings will inform the refinement of the framework and the design of larger-scale studies.

9 Read the Full Paper



Scan to read the full research paper