Early Stages of Design Research Project with Specialist Teachers of the Deaf or Hard of Hearing
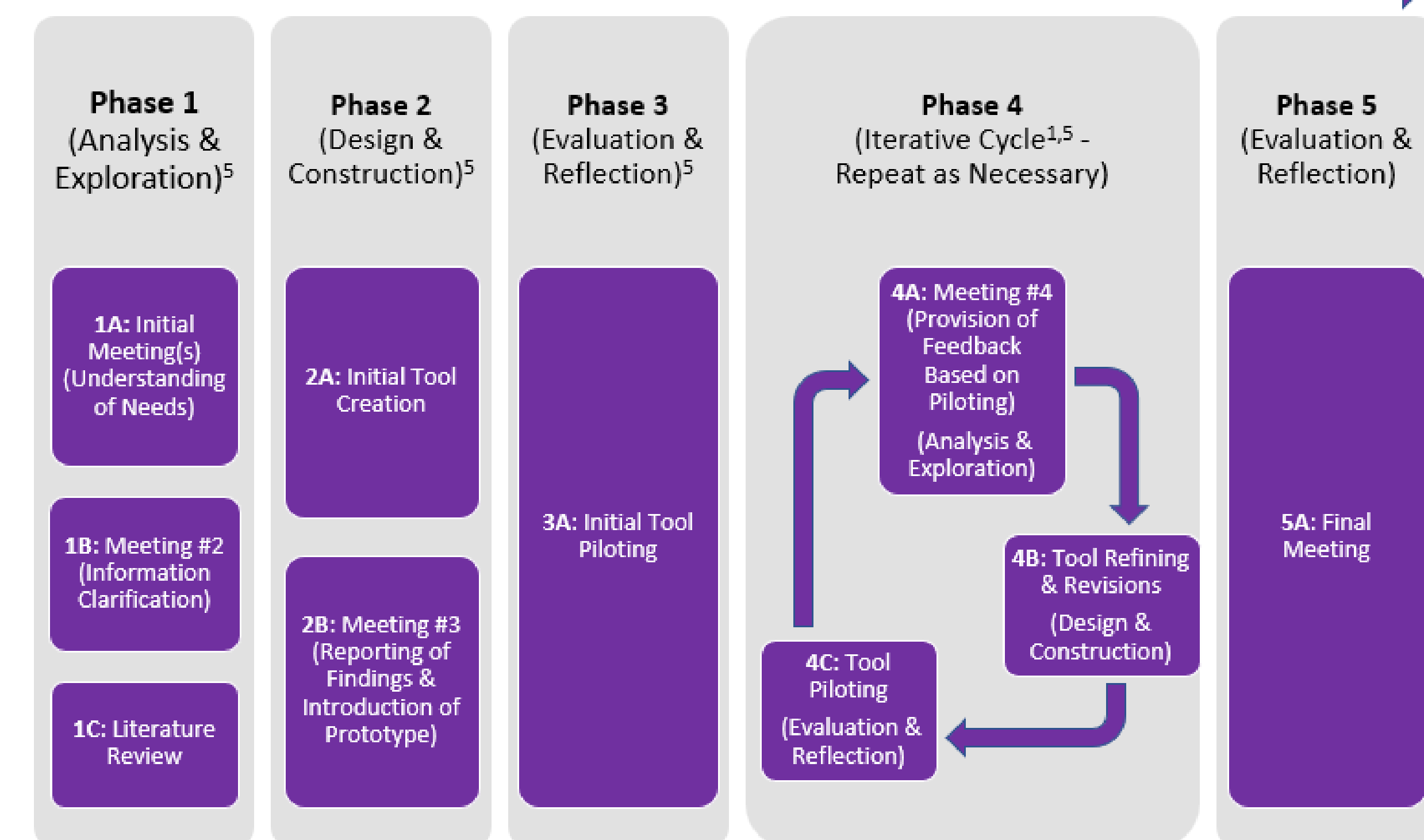
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Introduction

- Specialist teachers (STs) support students who are Deaf or Hard of Hearing (DHH) in the classroom
- Curriculum-based assessment and intervention tools are needed to foster these students' language and literacy development
- Educational Speech-Language Pathologists (SLPs) and STs have expert knowledge about assessment and intervention requirements in this service
- Study aim: Develop a bespoke tool for use by STs in the assessment and intervention of curriculum-based spoken language in DHH students

Methods

Phase 1 (Analysis & Exploration)[5]
- **1A: Initial Meeting(s) (Understanding of Needs)**
- **1B: Meeting #2 (Information Clarification)**
- **1C: Literature Review**

Phase 2 (Design & Construction)[5]
- **2A: Initial Tool Creation**
- **2B: Meeting #3 (Reporting of Findings & Introduction of Prototype)**

Phase 3 (Evaluation & Reflection)[5]
- **3A: Initial Tool Piloting**

Phase 4 (Iterative Cycle[1,5] - Repeat as Necessary)
- **4A: Meeting #4 (Provision of Feedback Based on Piloting) (Analysis & Exploration)**
- **4B: Tool Refining & Revisions (Design & Construction)**
- **4C: Tool Piloting (Evaluation & Reflection)**

Phase 5 (Evaluation & Reflection)
- **5A: Final Meeting**

Potential for incorporation of individual interviews within these (sub)phases depending on the need for additional information or due to participant absence from group meetings

References:
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Results

Phase 1:
- Gaining understanding of: current practices, available resources, and needs of STs
- Similar ideas clustered together
- Language and literacy ideas guided development of the prototype

Phase 2:
- Protype developed with four curriculum-based assessment components (Table 1)

Table 1. Assessment Prototype Components

Component		Description
Vocabulary	Curriculum-Based Vocabulary Lists	Lists by grade level and by subject compiled from provincial curriculum documents
	Rating Checklist	Checklist to determine the student's level of knowledge of a vocabulary item
	Strategy Checklist	Checklist with strategies to use to target the student's knowledge of a vocabulary item
Morphology	Production & Decomposition	Tasks to target morphological production (adding morphemes) and decomposition (removing morphemes) of inflectional and derivational morphemes *Example: Farm. My uncle is a _____. (farmer)* *Biking. He likes to ride his _____. (bike)*
Sentence Combining	Sentential Syntax	Tasks to target combining different types of sentences (e.g. inserting adjectives, compound subjects, etc.) *Example: The man ate the burger. The man was starving.* *(The starving man ate the burger.)*
Discourse (Narrative & Expository)	CUBED NLM[6]	CUBED Narrative Language Measures: Listening
	Narrative Development Checklist[7]	Telling a story based on a picture or story starter *Example: Tell me a story based on this picture.* *Tell me a story. I'll tell you the beginning and you tell me the rest. "It was a dark and gloomy night…"*
	Meta-Narrative Knowledge[7]	Meta-narrative questions based on story told in Narrative Development Checklist task *Example: Did you tell me a title for your story?* *What characters were in your story?*
	Explanation Questions[7]	Explain how to use an object or how to play a sport *Example: How do you use this object?* *Tell me all about this sport.*
	Opinion & Justifications[7]	Provide an opinion and justification for it *Example: How do you feel about doing chores around the house?*
	Rules of the Game[2]	Explain a game or sport with prompts for the components to include *Example: Tell me all about this game. Here's a list of things you can talk about.*

Implications

- Specialized end-users can provide valuable insight into the features and topics required to develop a curriculum-based assessment, which can inform tool design