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The 2017 Symposium

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Apr 12th, 11:00 AM - 2:00 PM

# The Bible Story Producer App

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Baxter, Michael D.; Bragg, Noah W.; Dennison, Grant W.; Jacubec, Robert J.; Lockridge, Andrew D.; and Riffle, Abigail M., "The Bible Story Producer App" (2017). *The Research and Scholarship Symposium*. 13.

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**Presenters**

Michael D. Baxter, Noah W. Bragg, Grant W. Dennison, Robert J. Jacubec, Andrew D. Lockridge, and Abigail M. Riffle

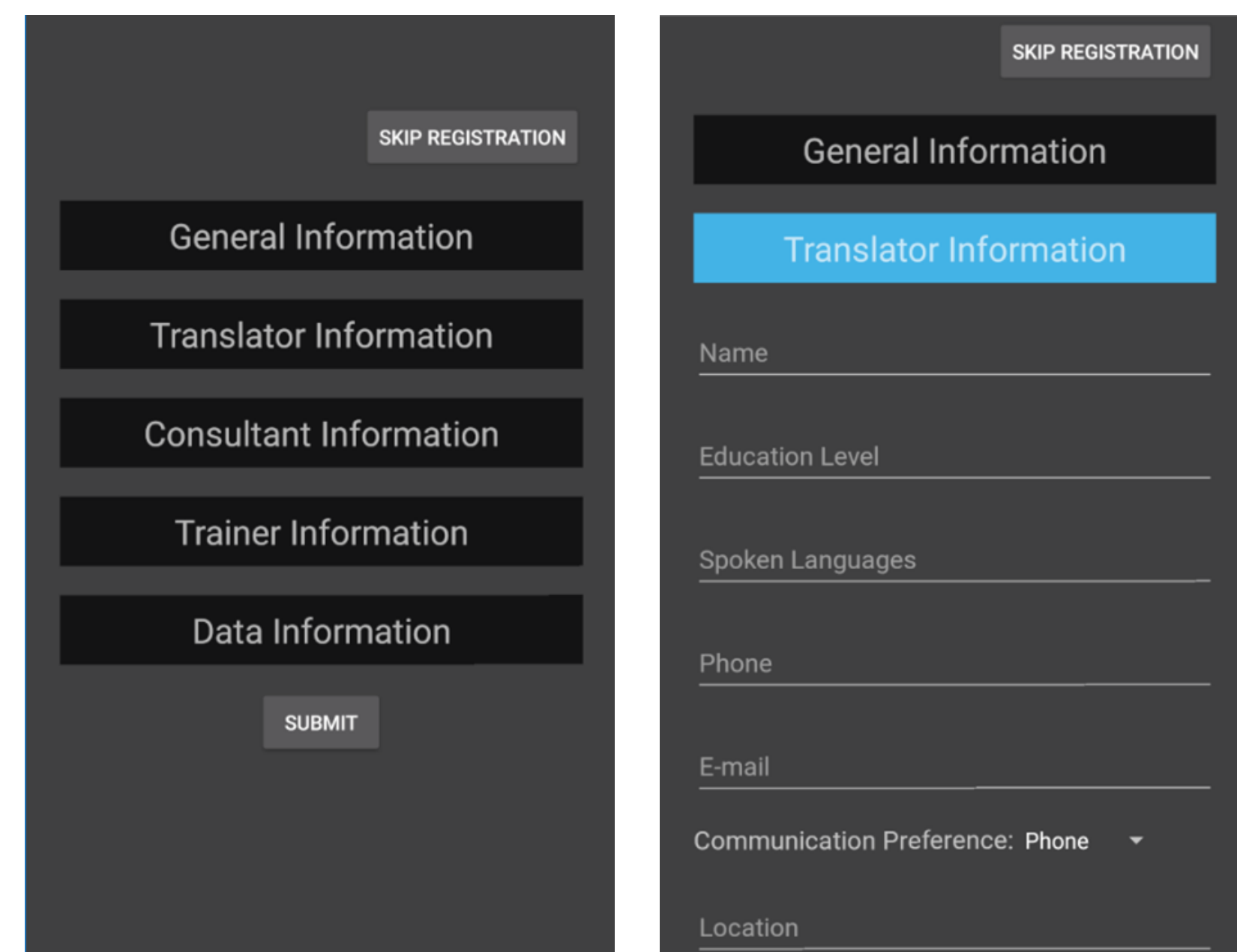
# The Bible Story Producer App

## An Oral Bible-Story Translation Tool

Faculty Advisor: *Dr. Seth Hamman*

Students: *Michael Baxter, Noah Bragg, Grant Dennison,  
Robert Jacubec, Andrew Lockridge, & Abigail Riffle*

### The Registration “Pre-phase”

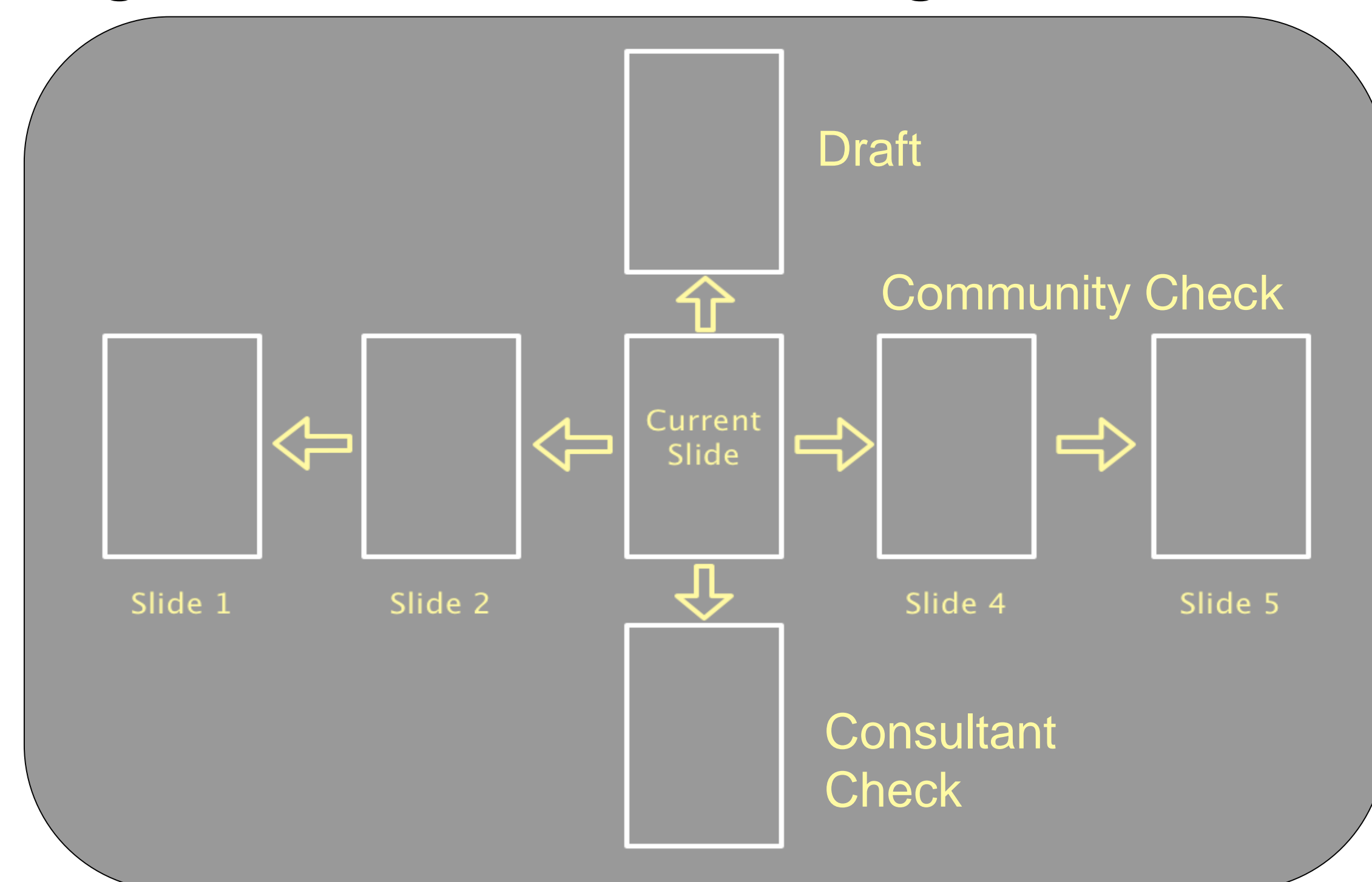


The Registration “Pre-phase”

- Collects user data for archival and quality-control purposes
- No required fields
- Can always be skipped
- Appears on start-up until submitted
- Fields organized under collapsible headings

### App Navigation

The grid-based interface is navigated by swiping.



Upward and downward strokes change the current phase, while lateral strokes change the current slide (wrapping at the edges for slides). The grid maintains a coherent and intuitive presentation of the images, text, and recordings.

### Overview

The team developed an Android Application to help bring Bible stories to people who don't have Scripture in their heart language.

### Key Facts & Terms

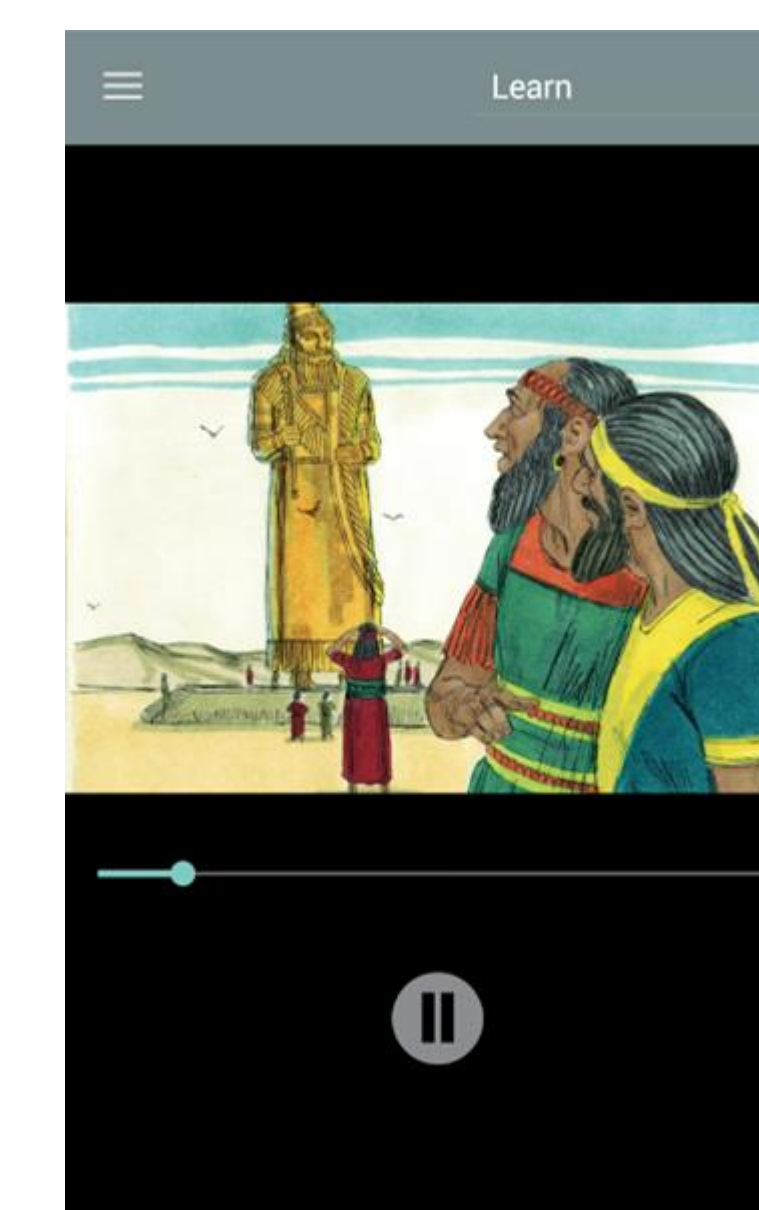
- The app needs to be stocked with templates.
- **Template:** A collection of audiovisual data needed to make a Bible story video in a language of wider communication (LWC).
- **LWC:** A language Scripture has already been translated into.
- **Mother tongue:** The target language, into which Scripture has not yet been translated. This language is only spoken and does not contain an orthography.

### App Purpose

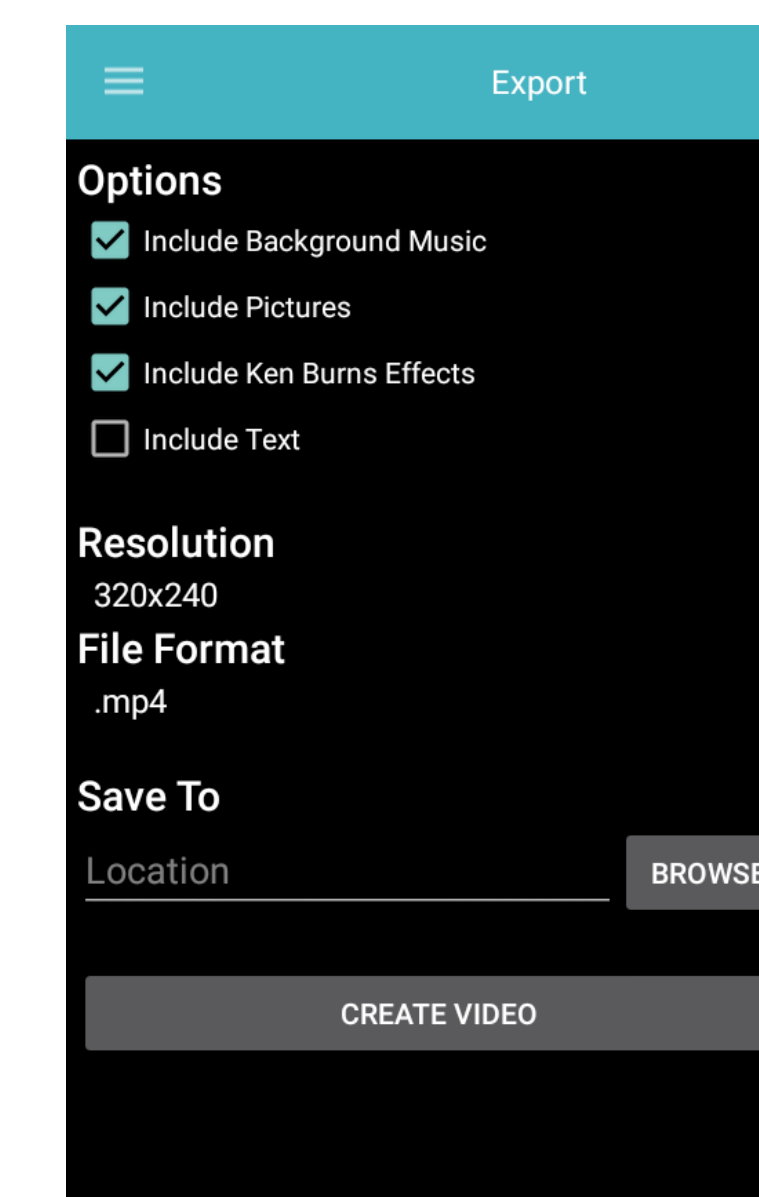
The purpose of the app is to facilitate the translation of LWC templates into mother-tongue Bible story videos. This translation is carried out by bilingual laypersons who have received only minimal training.

### The Translation Process

- **Learn** – View the video with LWC narration, becoming familiar with the story. (See right.)
- **Draft** – Record a draft translation of the narration in each slide.
- **Community Check** – Collect feedback from peers in community concerning the clarity and naturalness of the draft translation. Return to make revisions in draft phase as necessary.
- **Consultant Check** – Verify with consultant that the translation is accurate—that its meaning is faithful to the source text.
- **Dramatize** – Re-record the approved translation more expressively, possibly enlisting multiple voice actors.
- **Export** – Output a single video file for distribution, automatically synthesizing pictures, narration, and soundtrack. (See right.)

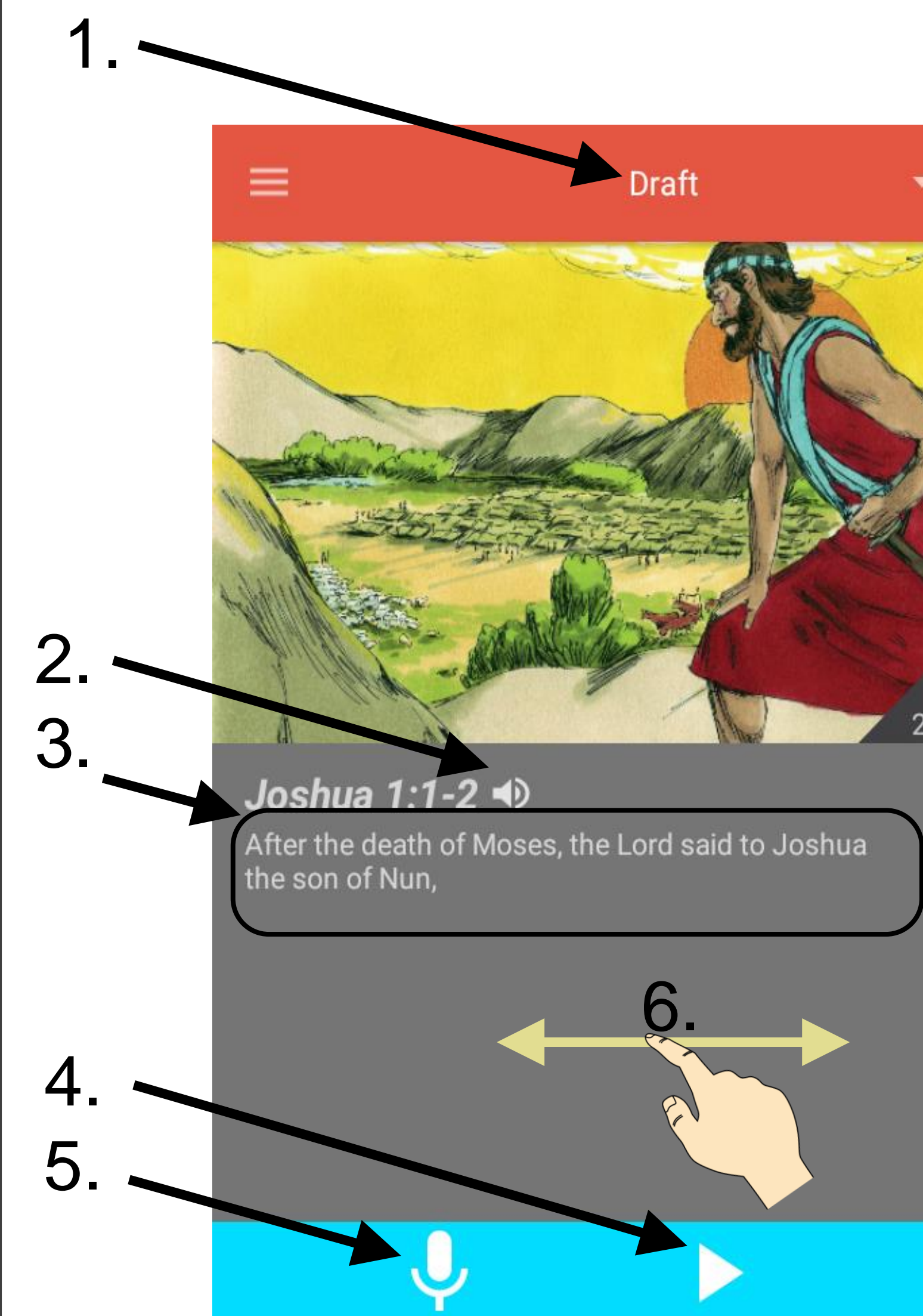


The Learn Phase



The Export Phase

### The Translation Interface



The Draft Phase Interface

The Draft Phase typifies the translation interface:

1. **Navigate** to a different phase using the drop down
2. **Play** LWC Bible verse audio
3. Slide narration in **LWC text**
4. **Play** the draft translation
5. **Record** oral draft translation in mother tongue
6. **Swipe** left or right to change the current drafting slide

### A Library for Animated Slideshow Videos

Essential to the function of the app is the creation of animated slideshow videos from the image, narration, and soundtrack resources during the export phase.



To address this problem, the team developed an entire Java library with capabilities to:

- Encode/decode audio and video
- Concatenate narration audio files
- Mix narration and background soundtracks
- Sequence story pictures aligned with narration
- Animate images with panning and zooming