

# SALLI APP

**SALLI**, which stands for “**Supporting Access to Literacy Learning Implementation**” is a research tool designed to both gather data as well as support high quality professional development aligned to curriculum implementation. SALLI is based upon a research design using Experience Sampling Methodology, which allows for gathering in-moment data on respondents experience and perceptions during or immediately after a targeted experience. SALLI was designed, however, not only as a research tool but as a way to better organize, support, and improve the quality of professional learning to teachers.

## SALLI & Experience Sampling Methodology

Experience Sampling Methodology (ESM), sometimes referred to as EMA or ecological momentary assessment, is a research methodology in which participants perceptions, actions, and behaviors are gathered in the moment of activity. It’s a well-established tool in both medicine and psychiatry where it’s been used to study dieting behaviors, elderly isolation and depression, pharmacological effects, smoking cessation problems, domestic violence, among other issues. It’s been applied to educational settings to study teacher, parent, and even adolescent student perceptions immediately after, or while in the midst of, targeted instructional practices (see Schneider, 2006<sup>1</sup>) or study patterns of actions (e.g. literacy practices) across contexts (such as in and out of school).

The tool we developed, Supporting Access for Literacy Learning Implementation (SALLI), is designed as an app (for both android and IOS operating systems) sits on an educator’s phone providing a hub for a classroom literacy intervention that has a strong professional development component. The APP organizes resources to support teacher learning and implementation (e.g., video clips on implementations; articles; templates; tip sheets; pictures). These resources can be immediately downloaded on the app or, to save, provided as links that teacher can click and go to whenever on a wireless network. These can be saved and ranked by teachers in “my library” or shared with a colleague or friend. The core of the app, however, is the interaction between the project professional learning team and the teacher. As a research tool, the app interface is designed to gather real time data of teachers’ experiences (problems and successes) to gather data across sites on what is and is not working. As a learning tool, it allows coaches to either directly interact quickly with teachers (while archiving dialogue for later analysis) or gather patterns of responses. As a design hub, it can be structured to provide short surveys which, based upon the response, immediately (and without direct interaction by staff) send teachers to professional learning or curriculum resources). Notably, this is set up to function strictly by text messaging for teachers who either don’t wish to download the app or lack a phone with sufficient space or infrastructure to support it.



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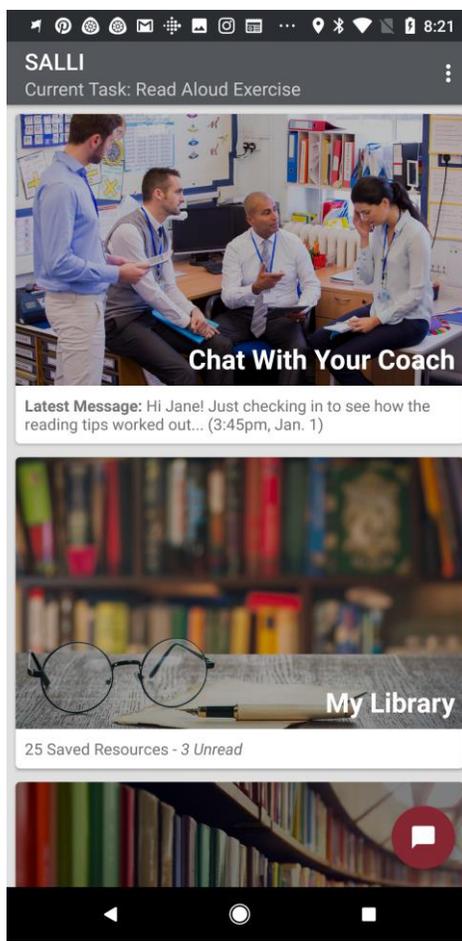
SALLI can be downloaded on either an android or IOS phone or used as an interface on a PC to send text messages to those without smart phones. SALLI is designed flexibly to meet the needs of different projects and researchers (e.g. individual features can be turned off/on and content and branding modified).

The protocol we are currently piloting involves participants receiving either a message on a downloaded app associated with the project or (more simply) a text message on their phone either at a targeted time (e.g. after the literacy block during student recess; immediately before the school day begins) or at randomly selected times. A series of very short (3 maximum) multi-choice survey questions are posed and participants select an option and text back a response. Questions can be branched so that by responding in a particular way to one question (e.g. selecting a “problem” that occurred in a lesson), participants get a different kind of follow-up question. These are designed to reflect in the moment perceptions and experiences, take very little time (1-3 minutes), and use a technology that most teachers have readily accessible.

This methodology has the advantage of quickly and cheaply aggregating immediate feedback from large numbers of participants about the extent to which educators are enacting particular targeted practices, their perceptions and reflections on them, and their questions and problems. Given the widespread use of cell phones with text messaging functions - even in our rural communities - we believe there will be very few challenges to implementing this approach. Email surveys will be used as a back-up method as needed.

SALLI does five things very well:

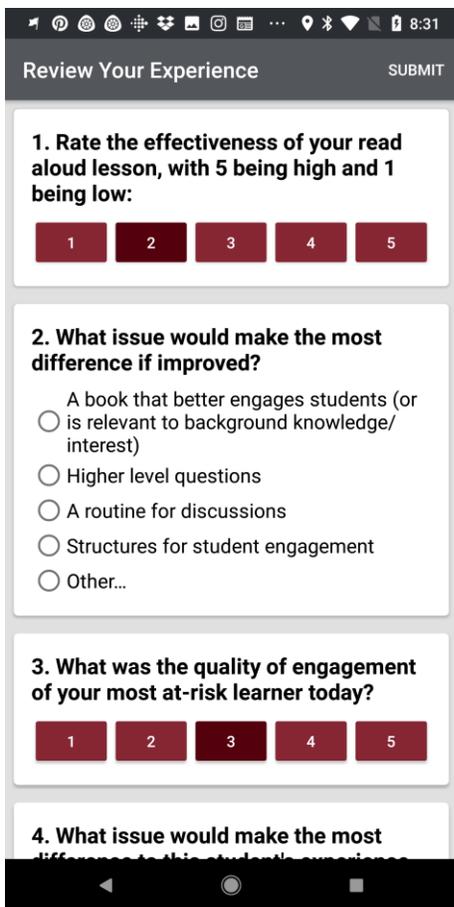
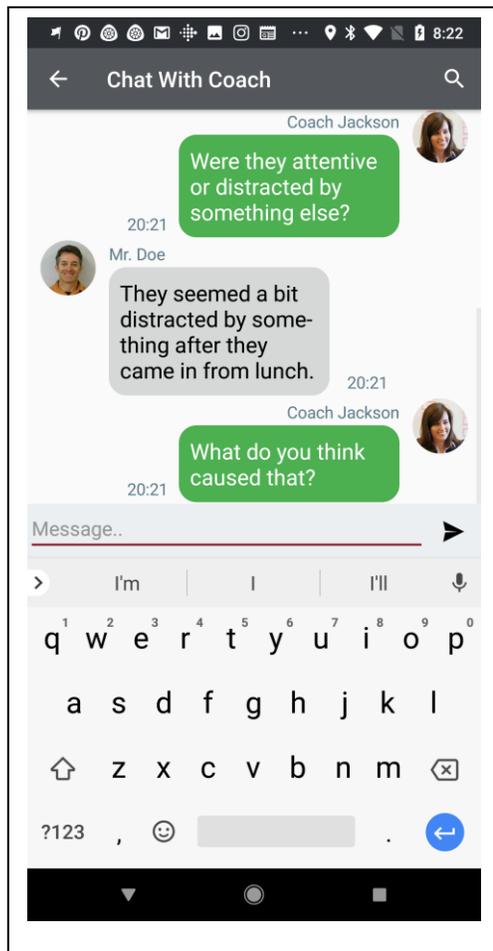
1. SALLI provides a personal library that allows teachers to organize, rate, and share curriculum and professional development resources, and permits coaches to deliver a program resource (video, article, podcast, webinar, lesson plan, case, etc.) either directly to the teacher, as a download into the library, or provide a link (recommended option because it requires less data and space) that the teacher can open (and rate or share) when she has time.



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- SALLI allows a coach and teacher to easily interact in text message/dialogue format and importantly track the interactions for later study or review by those interested in improving or revising the next formal professional development sessions.

The tool supports (and tracks) open ended dialogue interactions either between a coach and teacher or open ended questions between SALLI and a teacher. Chat functions allow a coach to respond directly and program leaders to use the computer interface to track (or code) patterns of responses across sites. In addition, SALLI as an AI coach can be set up using an internal logic to sort and classify responses to open ended questions and then respond with resources or further branched questions based upon associating word choice with predefined relationships.



- SALLI can easily be programmed to send short text message length surveys which can be branched with distinct follow-up questions.

The series of multi-choice questions can show up at predefined times for each teacher (e.g. after their morning read aloud time) or at random times/days. They can also be set up to come via text message surveys if teachers don't have a smartphone or wish to download the app. These are meant to be short (take no more than 3 minutes) and branched so the follow-up question is different based upon the response to the previous one. They allow program implementers to notice patterns within and across schools.

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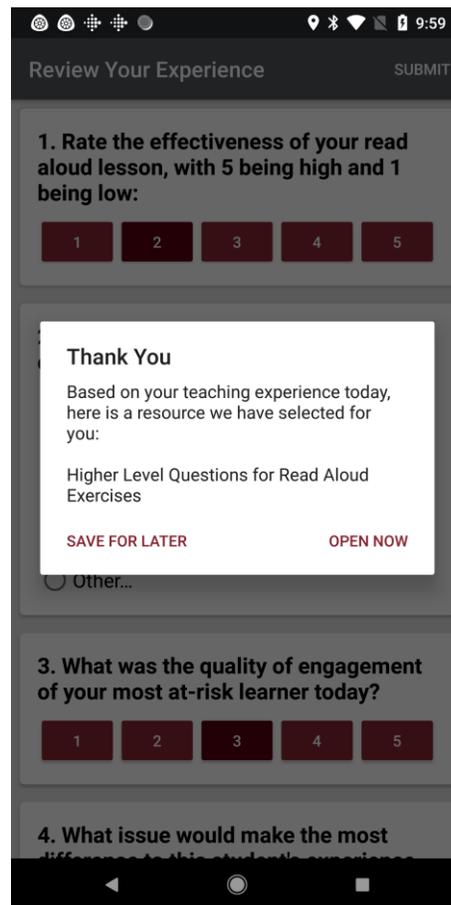
4. SALLI can automatically send a resource suggestion back to the teacher based upon individual response patterns either in dialogue interactions or text message survey.

These resources can either appear as a link in a text message, as downloaded in a link (which uses less space and data), or as the full resource into the “my library” section of the app. The system tracks when the resource is opened or reviewed, can be set up to provide a reminder if not opened, and ask an automatic follow-up question about the link’s level of usefulness. Teachers can choose to share the resource with colleagues, rate it, and use it as a prompt to ask questions of a coach.

5. SALLI aggregates data (from surveys; by using internal logic to code dialogue messages) across multiple contexts and respondents to provide evaluation data about teacher, program and program impact. This can be used *formatively* to adjust or improve the nature of the professional development and coaching and to provide *summative* findings of impact.

Because it provides rapid turn-around of information, data gathered during ESM can be used formatively to inform both overall project support and differential coaching and support within SEEDS sites (e.g. by informing technical assistance focus areas during professional development meetings and/or targeted training for coaches or instructional leaders). There are multiple ways in which identifying information can be hidden or revealed to protect human subject as part of data collection efforts. In the current pilot, we are using it as a formative tool, where responses are kept confidential and shared only with the research team and the assigned project coach.

As a summative evaluation tool (gathering respondent data across multiple sites), data is anonymous and aggregated in a way to look at patterns of information across a system and not direct feedback to specific classrooms. Response patterns will allow us to identify districts/school where implementation is going particular well and thus highlight the practices and conditions that support school change as well as systems where additional support or technical assistance is needed. ESM data is meant to be used not as a stand-alone evaluation tool but rather in concert to other forms of data collection (teacher and administrator surveys; student achievement data; artifact analysis).



<sup>i</sup> Schneider, B. (2006). In the moment: The benefits of the Experience Sampling Method. In M. Pitt-Catsoupes, E. E. Kossek, & S. Sweet (eds.), *The work and family handbook: Multi-disciplinary perspectives and approaches* (pp. 469-488). Mahwah, NJ: Lawrence Erlbaum Associates.