The CIRCLE Application – Quick Guide

The CIRCLE application was developed to provide a fine-grained assessment of children’s experiences in preschool classroom environments, including: (a) the context of children’s classroom activities, (b) the behavior of teachers and other adults in the classroom, and (c) the child’s engagement with people and objects. This system was designed for children from 3 to 5 years of age.

The CIRCLE application is a stand-alone Android-based data collection system – it can be installed on any Android-based smartphone or tablet. Variables are recorded on a momentary time-sampling basis as they pertain to an individual child (i.e., the Focus Child). Within a single observation session, data can be collected for 1-3 Focus Children. The observer focuses on one child at a time, typically switching to a different Focus Child every 10 minutes, and cycles through the selected Focus Children until 30-60 minutes of data are collected for each child. Within each 10-minute segment, data are recorded during a series of 40 15-second intervals.

At the beginning of an observation session, the observer enters information to identify the observation session, followed by information to identify the selected Focus Children. Up to 3 Focus Children can be entered for observation within ONE observation session.

After timing begins, the observer alternates between: (a) 15-second intervals for observing and recording CLASSROOM CONTEXT variables (b) 15-second intervals for observing and recording TEACHER variables, and (c) 15-second intervals for observing and recording CHILD variables. This alternation continues until the 10-minute segment is complete.

The data entry program signals the observer with a tone at the beginning of each observation interval and presents a list of the variables to be observed in that interval. The observer then selects the specific category, within each variable, that best describes events that occurred at the moment of the interval tone. The categories within each variable are assumed to be mutually exclusive and exhaustive (i.e., for each variable, one and only one category is recorded during every 15-second interval).

Data collected using this application is stored in a SQLite format on the Android device until it is uploaded to a Windows-based PC for data analysis in ACCESS. The ACCESS database will be configured to import the SQLite data on the Android device via ODBC connection. The following shows some examples of the different output generated from the ACCESS database.