

Erasmus+ AdAPptive – WP3 Learner Analysis Tools

Participants

Grade 4 pupils (10-11 years of age)

5 pupils per classroom – weakest readers based on the classroom teacher's assessment

Instruments

Reading achievement (country and curriculum specific)

- standardized word reading test
- passage reading test

Reading attitudes

- **SRQ-Reading Motivation** (De Naeghel, Van Keer, Vansteenkiste & Rosseel, 2012)

- **Reading self-concept** (4 items from PIRLS) - Ina V.S. Mullis, Michael O. Martin, Ann M. Kennedy, and Pierre Foy (2007). *IEA's Progress in International Reading Literacy Study in Primary School in 40 Countries*. Chestnut Hill, MA: TIMSS & PIRLS International Study Center, Boston College (page 139-140).

- Reading is very easy for me.
- I do not read as well as other students in my class (reverse coded).
- When I am reading by myself, I understand almost everything I read.
- I read slower than other students in my class (reverse coded).

4-point scale, as follows: agree a lot, agree a little, disagree a little, and disagree a lot

Executive functioning

- **BRIEF-2: Behavior Rating Inventory of Executive Function – second edition** (Gioia, Isquith, Guy, & Kenworthy, 2000)

Dutch adaptation by Huizinga & Smidts (2020)

There is a teacher report form (61 items) and a parent report form (62 items)

There is also a shorter and cheaper version: *BRIEF-2 Screeners* (12 items).

We decided to use the **BRIEF-2 screener**.

User Experiences of children (about using the app)

- **EGameFlow questionnaire** (Fu, L.L., Su, R.C., & Yu, S.C. (2009). EGameFlow: A scale to measure learners' enjoyment of e-learning games. *Computers & Education*, 52, 101-112.)

Subscale score for: Concentration, Goal clarity, Feedback, Challenge, Autonomy, Immersion, Knowledge Improvement.

Note: a shortened and simpler version of this instrument will only be administered at posttest (33 items?)

Procedure

Pre- and posttest measures of all the instruments (except EGameFlow questionnaire)

We try to make a 'google form' version of the questionnaires to be filled in online (anonymously) and eventually read-aloud for those who have problems with reading.

- pretest at the start of the COP (or maybe at the start of next academic year - given the time available this academic year after the first COP in Flanders, the Netherlands and Czech)
 - we will use this year as a 'try-out' of the instruments and do the 'hard' version next school year
- posttest at the end of the school year

Pupil monitoring data on reading development of the whole class

If possible, for the pupil monitoring data we will collect (a) data from several previous measurement moments (e.g. in grade 2 and 3), and (b) we will also collect data from the same moments (grade 2, 3, and 4) of previous cohort(s). In this way, we can compare growth of the pupils during the app-period with their previous growth curves and contrast this with growth curves in previous no-app cohort(s), using a so-called difference-in-differences design.