Calcularis: Ideas to analyse

Guided Training

- Look for patterns on common exercises where students have the same mistakes. Even just learning which exercises are the ones with more mistakes would be already great.
- When a student doesn't perform well on an exercise is sometimes sent back to a
 previous exercise to train and strength sub-skills needed to succeed on the failed
 exercise. I would like to know how often this happens on a student lifetime in Calcularis.
 And when this happens, how many times a student is "sent back" to a previous exercise.
 This could help us to define a student being on a loop, or what we call "needs attention"
 or "stuck".
- Average duration for a student to master (complete) a skill . high level skill: Number processing 0 - 10, Addition / Subtraction 0 - 10 . low level skill: Subitizing, Number representation, Ordinality, Number line, etc
- It would be super great if they can come up with a general model to map an individual student to level of high skills knowledge (number line, addition, subtraction, multiplication, division). Something like from 0 to 5 levels of knowledge.
 - The idea I had for this is a radar chart



• Is there a relation with students not completing their session required learning time with spending too much time on other pages (zoo/shop/profile/progress)?

Free Training

- What's the most used exercise in free training? (per range and high level skill)
- Is there a tendency or relation on students performing worse/better while using free training vs guided training?

Help

• Do students watch the help video until the end? (although I'm not sure we can know if video is finished or not).

Progress

• In theory this view is for students to self reflect on their progress and motivate them on their training. Anything that can tell us any difference on performance once they visit this page would be of help.

Zoo / Shop

- What's the most common task performed while in the Zoo? And more in detail, I refer to the lowest level task a student can perform in the Zoo:
 - shop an animal
 - o change animal name
 - shop beverage
 - o shop food

The reason for this question is that I'm wondering if there is a tendency on gamification towards getting as many animals as possible vs a few animals but feeding them and become sort of a pet for the student, an animal to take care of. We might be able to take conclusions of focusing generally on getting as many assets as we possibly can or focus on a few assets but well done.

• Do students that enter in the zoo in average spends the maximum time limit we impose (3 minutes I believe)?

• Tendency on students spending their stars and diamonds in zoo vs shop.

General

- Do students use the log out button to exit the app?
- What's the average usage x session or x week of the status area items. time item > pauses learning time and opens a dialog on learning time info. star item > pauses learning time and opens a dialog for stars collection info. diamond item > pauses learning time and opens a dialog for diamonds collection info