

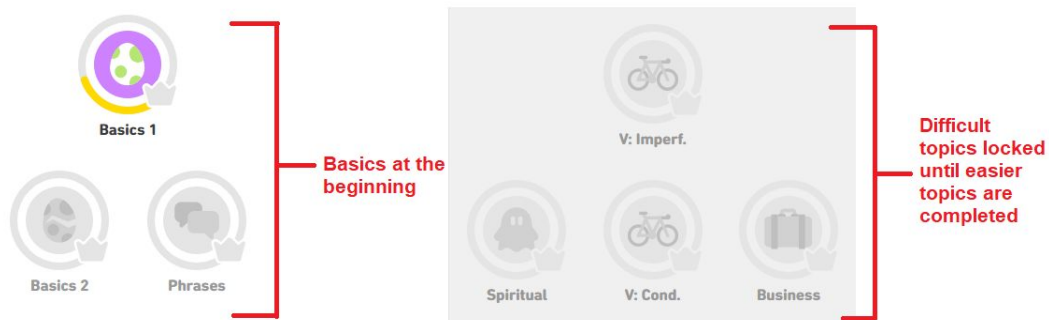
Primary School Maths Teaching Aid

The idea:

I'm making an app and writing a dissertation for my final year in college and I need to do some background research before I get going so I was just wondering if you could take a look at this and let me know if you have any suggestions, comments or ideas about anything I have so far!

The app, hopefully, could be used as a teaching aid for primary school teachers to use when going through the math curriculum. The idea behind this is that every student goes at their own pace and so if the teacher moves on too fast for some students or is going to slow for other students that they can use this app to further their education one way or another.

This app will be similar to Duolingo (but for maths obviously) in the sense that there is a hierarchy of topics/pathways. They will have to complete earlier tasks before they can move on to the more difficult ones.



Hierarchal System in Duolingo

Below is an example of a question in Duolingo.

The app I'm developing will follow a similar structure but with basic equations.

For example it could be something like:

$$[\] + 7 = 10$$

[1] [2] [3] [4]

Choose the correct number to complete the equation.

Write this in English



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Example of Duolingo Questions

The students will progress through levels, making mistakes and getting correct answers and at the end of the week the app will send the parent, teacher or both an easy-to-read report listing all of the progress the student has made and all of the mistakes that they have made so that revision can be done either in class or at home with a parent depending on where the teacher is in the curriculum.

Your Input:

1. [a] Do you think the app could be useful for you as a primary teacher?
[b] Would students use it?

It could be extremely useful and could benefit students. Students love online interactive apps, this wouldn't seem like work to them.

2. Do you think there are any problems with the idea and if so what do you think could be done to correct them?

Not every child in the class will be provided with an iPad at all times to use the app. If each class in the school were to use the app every day, there wouldn't be resources for them to use it.

However, it could be an excellent resource in SEN for learning support or resource teachers.

3. Do you know of any resources (websites, books or both) that I could look into to access the curriculum for primary school maths?

NCCA Mathematics curriculum online, NRich maths online, Mental Maths (combine all curriculum strands to make quizzes).

4. What form of device are primary school students most comfortable with? (e.g Desktop Computer, Laptop, iPad/Tablet, mobile phone)

IPads are usually available in most schools, there are usually a set of laptops in schools. However, there won't be enough to provide every child with one.

5. Off the top of your head do you think there is any other kind of minigame-esque questions that would be helpful (and hopefully fun) to engage students more with the app?

NRich maths have brilliant problem solving questions that I use to introduce my lessons and recap on a topic. NZ maths can be useful too.

6. [a] Do you think having a section of the app dedicated to times tables would be worthwhile creating?
[b] Is there anything else in the same vein as this idea that you think could be essential to have in the app?

Yes, this could work well.

7. Is there a specific age the app should NOT be aimed at (junior, senior, 1st class)? Is there any point in targeting students this young?

Yes definitely, they learn so much from a young age and early ed maths education is such a huge aspect to their school day. It would be important to note what they are learning in maths at this age, e.g. they learn to number 5 in junior infants and 10 in senior infants, they learn to understand that the numbers come after each other and each number has a value, this could be a huge part to the app. Younger children would react best to online games and it might be worth your while looking at Bee Bots, which are used in junior classes to teach directions.

8. Do you have any suggestions for the name of this app?

9. Can you think of any ideas that would keep the students more engaged in the app?

Setting timers, keeping them on task and feeling that they are achieving something. Giving points or positive reinforcements when they achieve a goal.

10. Are there any common difficulties students have with maths that I could address with the app?

Other Suggestions & Additional Feedback: