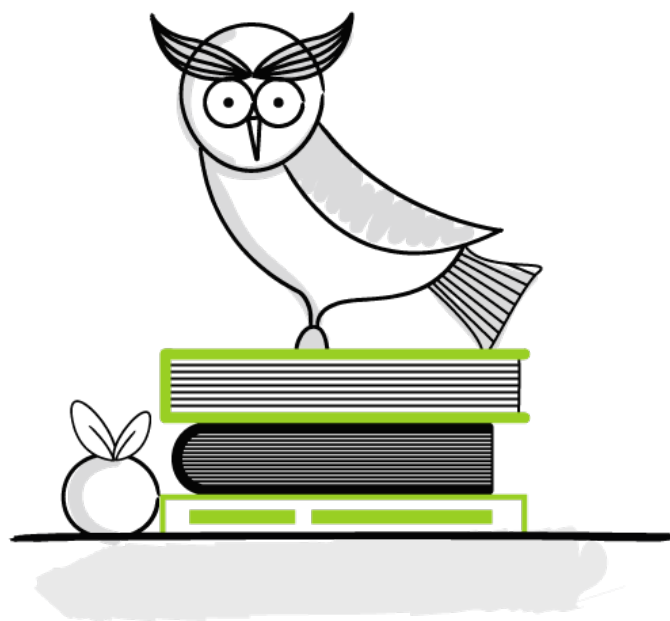


Which in-app features can help PE teachers to suppress noise levels?

Literature Study



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Version

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1. Context

1.1 Research question

This research document is based on the following research question:

“Which (mobile) in-app features can help PE teachers to suppress noise levels by implementing behavioral changes?”

The goal of this question is to understand how PE teachers can use apps by changing their students' behavior, as well as which features can help them achieve this.

2. Method

2.1 Literature study

To answer this research question, I will be using the literature study CMD method, because this is a topic that I am not familiar with, and to get a grasp of the subject and possible solutions I need to study existing material.



3. Results

3.1 (Mobile) App features

Involving the students

Since we are targeting PE teachers, it is important to be able to cater to their students as well if we want to involve them in the process of reducing noise levels. We can do this by implementing playful elements to indicate noise levels to children, so they can become self aware of their noisiness. Too Noisy (*A Noise Level Meter Built for the Classroom. | Too Noisy, n.d.*) is an app for teachers to control noise levels in classrooms by showing entertaining graphics based on different noise levels, so the children can see when they are being too loud.

Features in the Too Noisy app that PE teachers could benefit from:

- Adjustable sensitivity level (set a lower threshold for what is considered “loud” based on your mood/activity).
- Interactive/entertaining backgrounds based on noise levels so kids can have a say in what background they want to see.
- “Star” system that shows stars increasing or depleting based on how often the children are loud, PE teachers could perhaps ask for a certain star minimum to have a class that is considered more fun by the children.

Studies show that children are more likely to engage in behavioral changes if they feel encouraged to achieve something, which could be achieved by using the “star” system mentioned above. (*Department of Health & Human Services, n.d.*)

Another playful app that helps reduce noise levels is Bouncy Balls (Interactive, n.d.), which indicates noise levels by showing bouncy balls on a screen (website), and the higher the noise levels, the higher the balls bounce.



Bouncy Balls UI, 2023

4. Conclusion

I've noticed that there are tons of classroom apps that function similarly, using features like graphical indications of noise levels to help apply behavioral changes to loud children during loud activities. Since so many apps are using these features, I am going to assume that they are effective to reduce noise levels. To be more sure of this conclusion, I would have to continue this research by contacting these applications and asking them what they based their choices on, which I don't currently have the time for, so I am just going to assume for now.

5. Literature

1. *A Noise Level Meter built for the Classroom.* | *Too Noisy.* (n.d.). Too Noisy.
<https://toonoisyapp.com/>
2. Department of Health & Human Services. (n.d.). *Behavioural disorders in children.* Better Health Channel. <https://www.betterhealth.vic.gov.au/health/healthyliving/behavioural-disorders-in-children>
3. Interactive, N. (n.d.). *Bouncy Balls – Manage classroom noise with bouncing balls!* Bouncy Balls.
<https://bouncyballs.org/>