



DigiEduHack Solution

Belfast - How do we use digital education to engage the next generation of food consumers?

Challenge: Can we develop a digital education solution to encourage young people to value food?

Body Buddy

An app to help children understand nutrients

Children lack an understanding of nutrients and how they affect the body which may lead to unhealthier choices and poor habits being developed leading to malnutrition. This app will teach children the different nutrients needed in different body parts, where to find them, and general anatomy.

Team: Body Buddy

Members roles and background

Undergraduate food students.

Contact details

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Solution Details

Solution description

The Solution:

An app targeted at Key Stage 2 children to be used as a teaching tool during school time. This will fit

in with PDMU (Personal Development & Mutual Understanding) sessions

Intiltled Body Buddy, the app will help children gain a basic knowledge on the different areas of the body, the different nutrients each body part requires and the food sources those nutrients are available from.

Aim:

This will help develop any understanding of food and nutrients from a young age, to aid more informed decisions, to help reduce malnutrition in children and young adults within the UK.

Overview of app:

Pupils will create a virtual character of themselves by selecting eye colour, hair colour etc. Pupils can then select body parts and see different nutrients required directly related to that body part. They can click an additional time and view the food sources of these nutrients. Gamification aspects can allow children to compete against each other.

Implementation:

- Teachers have access to different tests on the app, in which they can assign pupils to take in class.
- Pupil progress can be tracked by the teacher.
- Stats can be used by the government to gain knowledge of children (age 8 - 11) knowledge of nutrients sources and functions and view public health guidelines in which industries should follow.
- Interactive Teaching Tool

Solution context

The Challenge:

How can we use digital education to engage the next generation of food consumers?

The Problem:

Malnutrition is a major public health issue costing the NHS over £19 billion per year in England alone. Children lack an understanding of nutrients and how they affect the body which may lead to unhealthier choices and poor habits being developed leading to malnutrition.

Solution target group

Key Stage 2 children (UK system), 7-11 year olds. This app, however, could also be expanded to target a variety of target groups, including adapting it for older or younger ages, and adaptations to make it user-friendly for parents and teachers (to influence the influencers/teach the teachers).

Solution impact

- The (optimal) impact is improved knowledge of nutrients, what they are, what they do to the body, where they can be found among young children
- Teachers have access to different tests on the app, in which they can assign pupils to take in

class.

- Pupil progress can be tracked by the teacher.
- Stats can be used by the government to gain knowledge of children (age 7 - 11) knowledge of nutrients sources and functions and view public health guidelines in which industries should follow.

Solution tweet text

Helping children understand nutrients and their functions in the body is our app #BodyBuddy!
Download for your class today #FoodEducation

Solution innovativeness

The solution is original and builds on the idea that young children enjoy learning through games and online applications. Success of other apps (which teach different subjects) can be seen in classrooms across the globe (for example, Mathletics). Built-in gamification in the app means that children can compete against others in their class and earn points. It can be used to guide a lesson, or children can be sent to use it in their free time.

There are existing apps which cover different areas of food education, however, none that we could identify which focus on the important of nutrients. It can also be built upon to include "source of nutrients" which will add another unique facet to the app, teaching children where they can find particular nutrients in foods and teaching them about origin of foods along the way.

Solution transferability

The core Body Buddy app is to teach 7-11 year olds about nutrients, what they are and what they do to the body. As mentioned previously, "where we find these nutrients" is another aspect which can be incorporated which would involve exploring origin and source of foods with children. This shows transferability across different topics.

Also mentioned previously would be the ability to build upon the app or add in additional levels for different age groups and stakeholders. For example, a younger version for children aged under 7 could be used to learn the names of foods and nutrients, and an older version for 12+ could explore the more in-depth biological/physiological affects of nutrients on the body and pathophysiology of nutrient deficiencies. It could also have a level which aims to address a huge issue in food education: the low levels of knowledge among teachers and parents. There could be an additional level which "teaches the teacher" or "influences the influencer" targeted for an older audience, but with the same aim. This shows transferability across different target groups.

Solution sustainability

Implementation can be continued into the mid- and long-term through creation of new levels, features, and content, push notifications, and use by influencers (including teachers). Additionally, by building on the target groups (to include younger and older age groups, including teachers and parents) the app can be sustained across a larger audience. Children can use the gamification aspect of the app to compete against and among friends, meaning even if they have explored the content of the app, they may continue to use it in order to play with their friends (and/or their siblings, teachers and parents).

Solution team work

Team: We worked well and we would work together in the future.

Facilitators (Niamh & Steph): The team worked well, and if their solution was to be carried to the next stage, we could certainly envisage them succeeding in developing this concept further, with the appropriate mentorship.

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