

Elements Project - Planning my content

Target audience - My target audience is going to be students aged 14+. This app is going to help them become more aware of the essential vitamins and minerals which are needed for their body to healthily function and allow them to work more productively as students

I am going to focus on designing the mineral side of the the app. If I had the time I would've included some essential vitamins however. I am very interested in healthy eating and this is an area I am very passionate about and something that I wish that I had been made more aware of when I was of this age.

School is a very testing time, physically, mentally and emotionally. One of the key components to thriving in school is a healthy, well-balanced diet.

There are many minerals present on the periodic table which are required in our daily consumption. For this project I am going to focus on at least eight of these main minerals. Hopefully I will be able to get a couple more done, but we'll see how things go.

The eight mineral elements I am going to focus on firstly are...

 magnesium

 calcium

potassium

 iron

 sodium

 phosphorus

 sulfur

 chloride

Relevant information that should be included...

I don't want my app to be extremely cluttered and I want everything to be informative and relevant in order to engage the younger audience. I feel like there needs to be a scare factor behind the information as well, which will inform them of what happens when these minerals are not taken, i.e. the adverse affects it could have on their body and how it will affect their ability to work and learn.

Order of the information...

I think it is important that I add the scientific nature of each element as that is what the project is all about. It is supposed to be an educational app.

I will then go to discuss its purpose and then the negative effects of not having enough. I will then end on a more positive note explaining the benefits of it and relevant sources.

There are a number of common reactions to stressful circumstances such as these, including:

- Behavioural - these could involve avoiding or escaping from the situation and turning to alcohol or drugs, a change in appetite or an inability to concentrate.

- Physical - you may experience an increased heart rate, sweating, shaking, headaches, butterflies and over-breathing.
- Psychological - stress can lead to fear, panic and the feeling that something bad is going to happen.

Though researchers are still working to definitively prove the link, existing data suggests that with better nutrition students are better able to learn, students have fewer absences, and students' behavior improves, causing fewer disruptions in the classroom.[1]

Improve Nutrition to Increase Brain Function

Several studies show that nutritional status can directly affect mental capacity among school-aged children. For example, iron deficiency, even in early stages, can decrease dopamine transmission, thus negatively impacting cognition.[2] Deficiencies in other vitamins and minerals, specifically thiamine, vitamin E, vitamin B, iodine, and zinc, are shown to inhibit cognitive abilities and mental concentration.[3] Additionally, amino acid and carbohydrate supplementation can improve perception, intuition, and reasoning.[4] There are also a number of studies showing that improvements in nutrient intake can influence the cognitive ability and intelligence levels of school-aged children.[5]

Provide a Balanced Diet for Better Behaviors and Learning Environments

Good Nutrition helps students show up at school prepared to learn. Because improvements in nutrition make students healthier, students are likely to have fewer absences and attend class more frequently. Studies show that malnutrition leads to behavior problems[6], and that sugar has a negative impact on child behavior.[7]

However, these effects can be counteracted when children consume a balanced diet that includes protein, fat, complex carbohydrates, and fiber. Thus students will have more time in class, and students will have fewer interruptions in learning over the course of the school year. Additionally, students' behavior may improve and cause fewer disruptions in the classroom, creating a better learning environment for each student in the class.

Promote Diet Quality for Positive School Outcomes

Sociologists and economists have looked more closely at the impact of a student's diet and nutrition on academic and behavioral outcomes. Researchers generally find that a higher quality diet is associated with better performance on exams,[8] and that programs focused on increasing students' health also show modest improvements in students' academic test scores.[9] Other studies find that improving the quality of students' diets leads to students being on task more often, increases math test scores, possibly increases reading test scores, and increases attendance.[10] Additionally, eliminating the sale of soft drinks in vending machines in schools and replacing them with other drinks had a positive effect on behavioral outcomes such as tardiness and disciplinary referrals. [11]

Every student has the potential to do well in school. Failing to provide good nutrition puts them at risk for missing out on meeting that potential. However, taking action today to provide healthier choices in schools can help to set students up for a successful future full of possibilities.