

SEEDS | science by teenagers for teenagers

a guide for teachers and
educators

How to empower teenagers in health issues

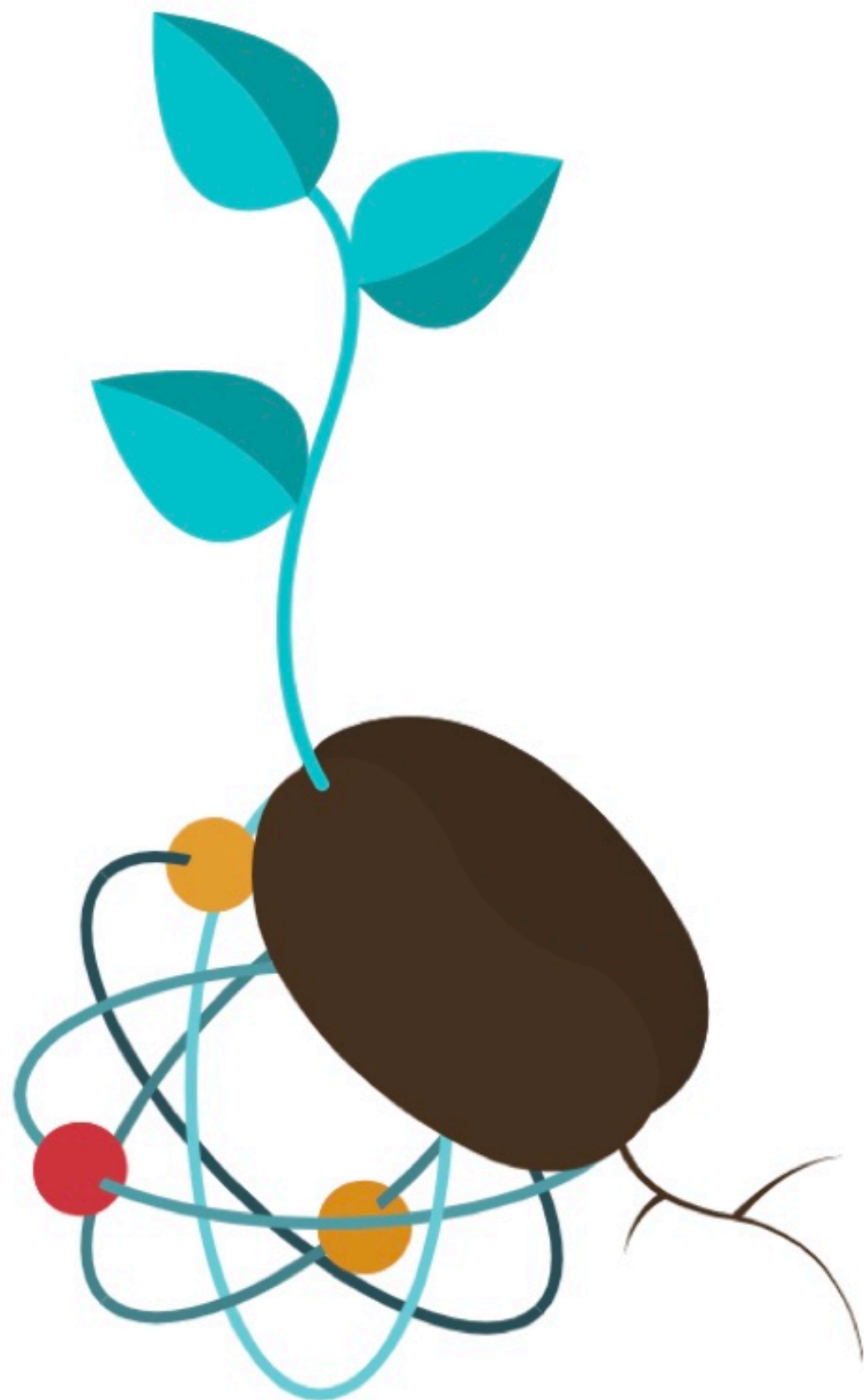
This guide

fostering healthy lifestyle in teenagers

Teenager's bodies are going through many physical changes that need to be supported by healthy behavior and balanced diet. According to the World Health Organization (WHO), teenagers establish patterns of behavior – for instance, related to diet, physical activity, substance use, and sexual activity – that can protect their health and the health of others around them, or put their health at risk now and in the future.

your role as a teacher and educator

Health and Education are intrinsically related: improvements in Education are related to better health outcomes and vice versa. This guide provides information on four issues (healthy snacks, physical activity, sedentary behavior and screen time) of primary importance in the lives of teenagers. It also proposes some practical tips to apply in the daily practice to help you as a teachers to empower your students.

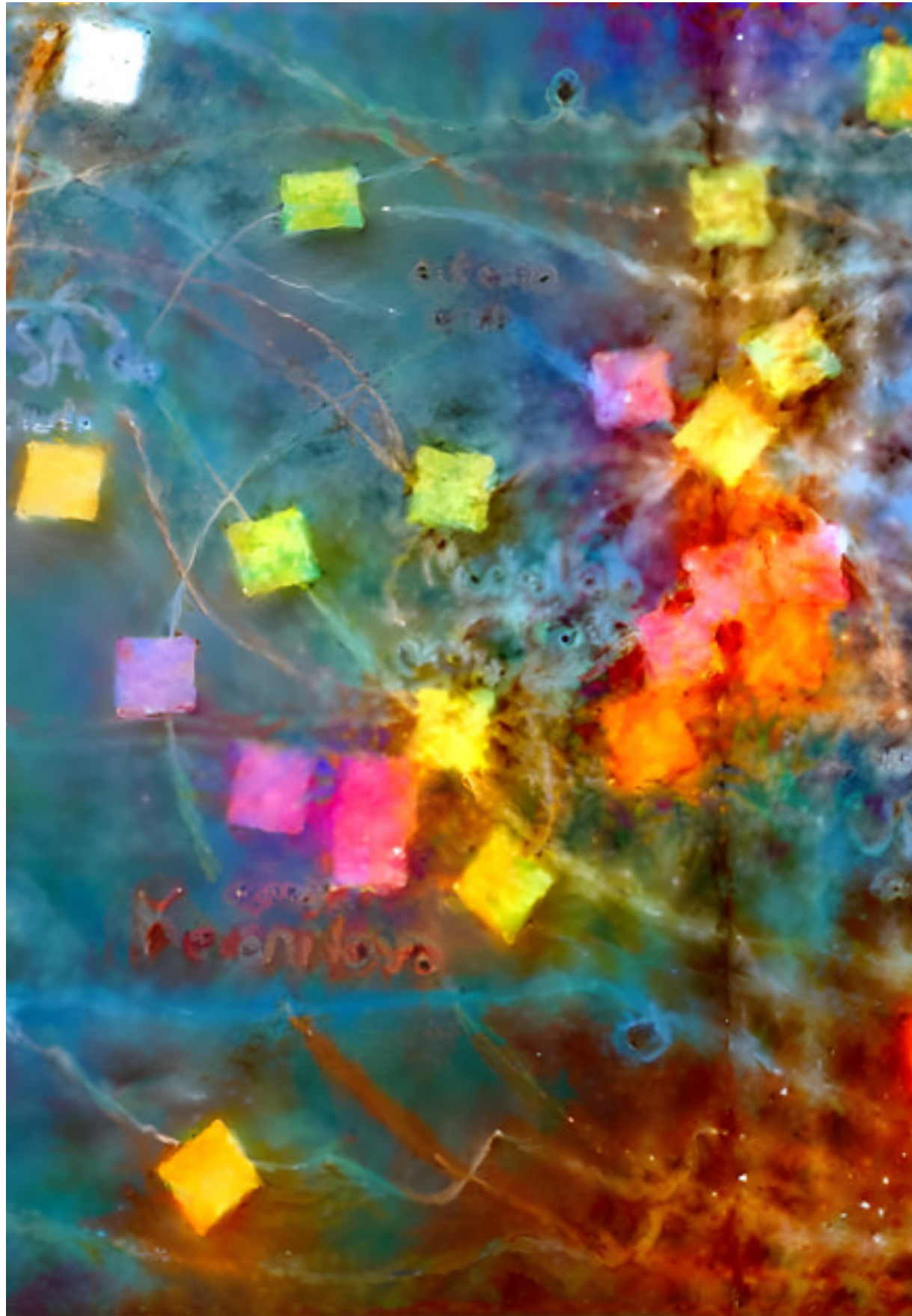


What is SEEDS

science by teenagers for teenagers

SEEDS is a science project by teenagers for teenagers. It aims to empower them to live healthy lifestyles and to help them explore how important and exciting science is. They will use citizen science to create new experiments for healthy lifestyles. These will run for six months in schools in Spain, the Netherlands, Greece and the UK

Citizen science



Citizen science

a new alliance

Citizen science is the involvement, at different levels, of the public in scientific investigation and data collection. A citizen science project can involve one person or millions of people collaborating towards a common goal. Projects of citizen science can be devised in different fields, typically ecology, astronomy, medicine, computer science, statistics, psychology, genetics, and also in social science, humanities and the arts. The massive collaborations that can occur through citizen science allow investigations at wider scales — leading to discovery that a single scientist or group could never achieve on their own, or even help to design the scope of new researches.

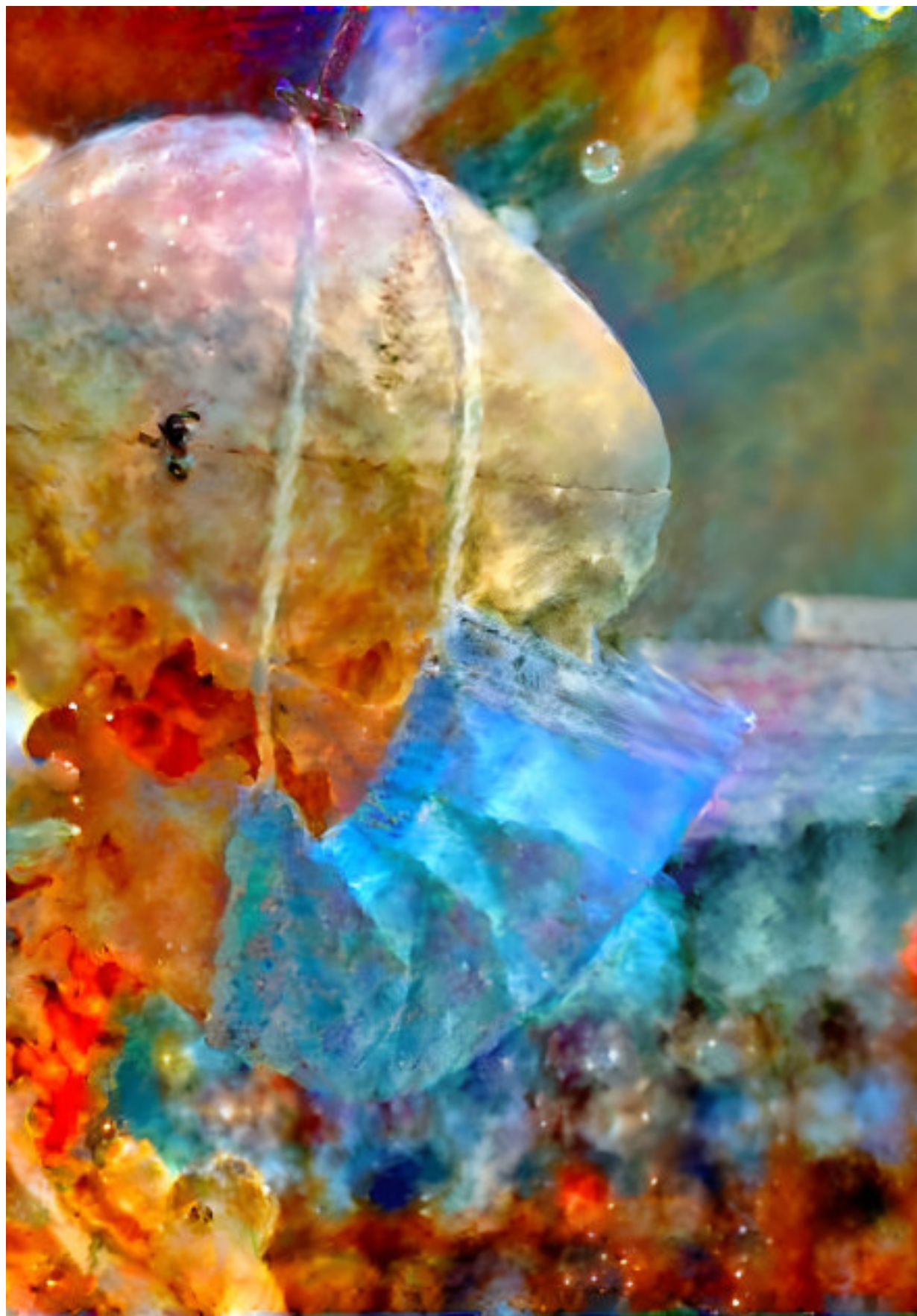
citizen science in education

Citizen science is a growing and promising field, and its potential for education are now being explored. Through the collaboration between citizen and scientists, new knowledge and awareness on the practices and methods of research are generated.

Citizen science has great potential for schools. It allows direct involvement of students and facilitates the connection between science and their life experience. It develops critical thinking and field learning of the scientific method, as well as establishes a real connection with the world of research through concrete projects. Teachers have a more active and rewarding role which allows to overcome the old educational model of mere transmission of knowledge and to become the protagonists of a change towards a modern and active educating community. All this allows schools to play a more active role in the educational ecosystem as proposed by the most recent European indications promoting open schooling.



Fact sheets



Teens and health

your role as teacher

Teenagers are often oblivious to their health and do not think about the long-term consequences of their present behaviors. Sleep, nutrition, substances and addictions, mental health are just some of the issues on which to focus attention. As educators and teachers, important points of reference for their life, you can do a lot to empower them and make them more aware. Awareness is the first step towards more responsible choices. In this guide you will find basic information and some ideas on how to intervene in your daily practice.

fact sheet: healthy snacks

Teenagers eat irregularly and often choose unhealthy, high-fat, highly processed foods.

Snacks are eaten between main meals and provide us the nutrients and energy that our bodies need throughout the day, reduce the feeling of fatigue and improve concentration levels.

As teachers and educators, it is certainly difficult to prevent your students from consuming unhealthy snacks or energy drinks.

Some ideas for your daily practice:

- reduce the frequency with which they consume them
- bring some good examples
- read with them the ingredients
- read with them the nutrition labels
- reflect and discuss with them.



fact sheet: physical activity

Regular physical activity during adolescence prevents and mitigates symptoms of depression and anxiety, prevents hormonal imbalances, and ensures a healthy body composition and proper physical development. It has also benefits for memory, attention, and concentration.

Currently, due to academic pressure, there is a tendency to substitute sporting activities with academic activities. The negative effects of this choice are reflected not only on physical health but also on school performance.

According to the World Health Organization, adolescents should do at least an average of 60 minutes per day of moderate-to-vigorous intensity, mostly aerobic, physical activity, across the week. They also should incorporate vigorous-intensity aerobic activities, as well as those that strengthen muscle and bone, at least 3 days a week.



fact sheet: sedentary behavior

Avoiding sedentary behavior can be easy. Indeed physical activity refers to all movement: ways to be active include walking, cycling, wheeling, sports, active recreation and play, and can be done at any level of skill and for enjoyment by everybody.

The World Health Organization calculates that 81% of adolescents do not do enough physical activity. As a teacher you can encourage your students to limit the amount of time spent being sedentary, particularly the amount of recreational screen time.

Beyond suggesting your students to engage in sports activities, you can:

- dedicate 5-10 minutes per class to body activities
- perform some of your classes outdoor.

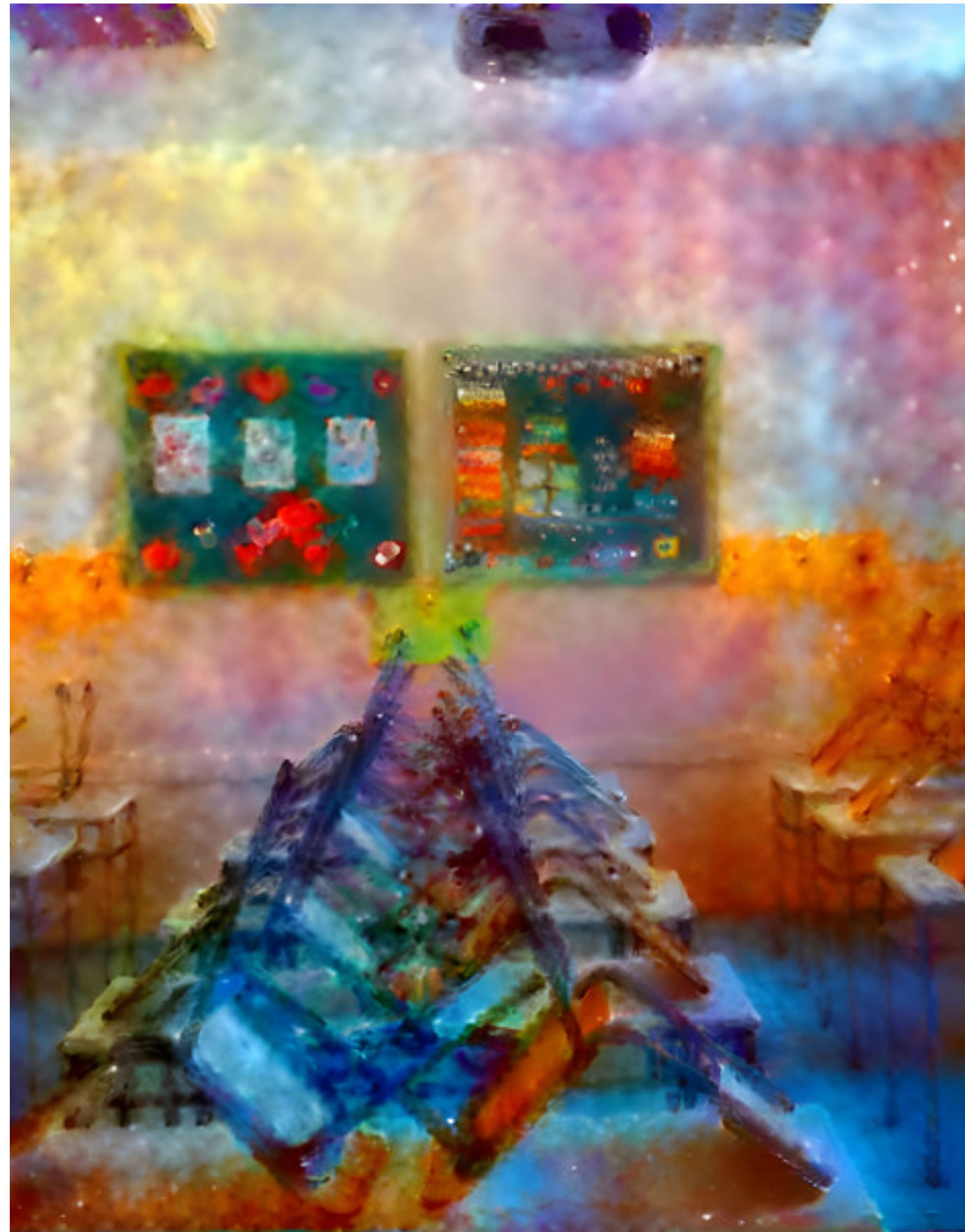


fact sheet: screen time

Time spent in front of a screen affects health. Dry eyes, itchy eyes, blurry vision, and headache are often the case. A prolonged screen time also reduces the time spent on physical activity and can take away time from sleep. Ultimately it can affect emotional stability.

COVID-19 has brought to the fore the need to rethink the concept of screen time from a health perspective. Internet and internet-enabled devices have become important tools for learning, socialize and connect with peers and relatives.

As teachers you can help your students to become aware of the purposes of using online technology in the learning process and in their life, about the age and context , and of the need to ensure the optimum balance between the offline and online life.



Info

Further reading

Practical tools, SEEDS project, <https://seedsmakeathons.com/category/practical-tools/>

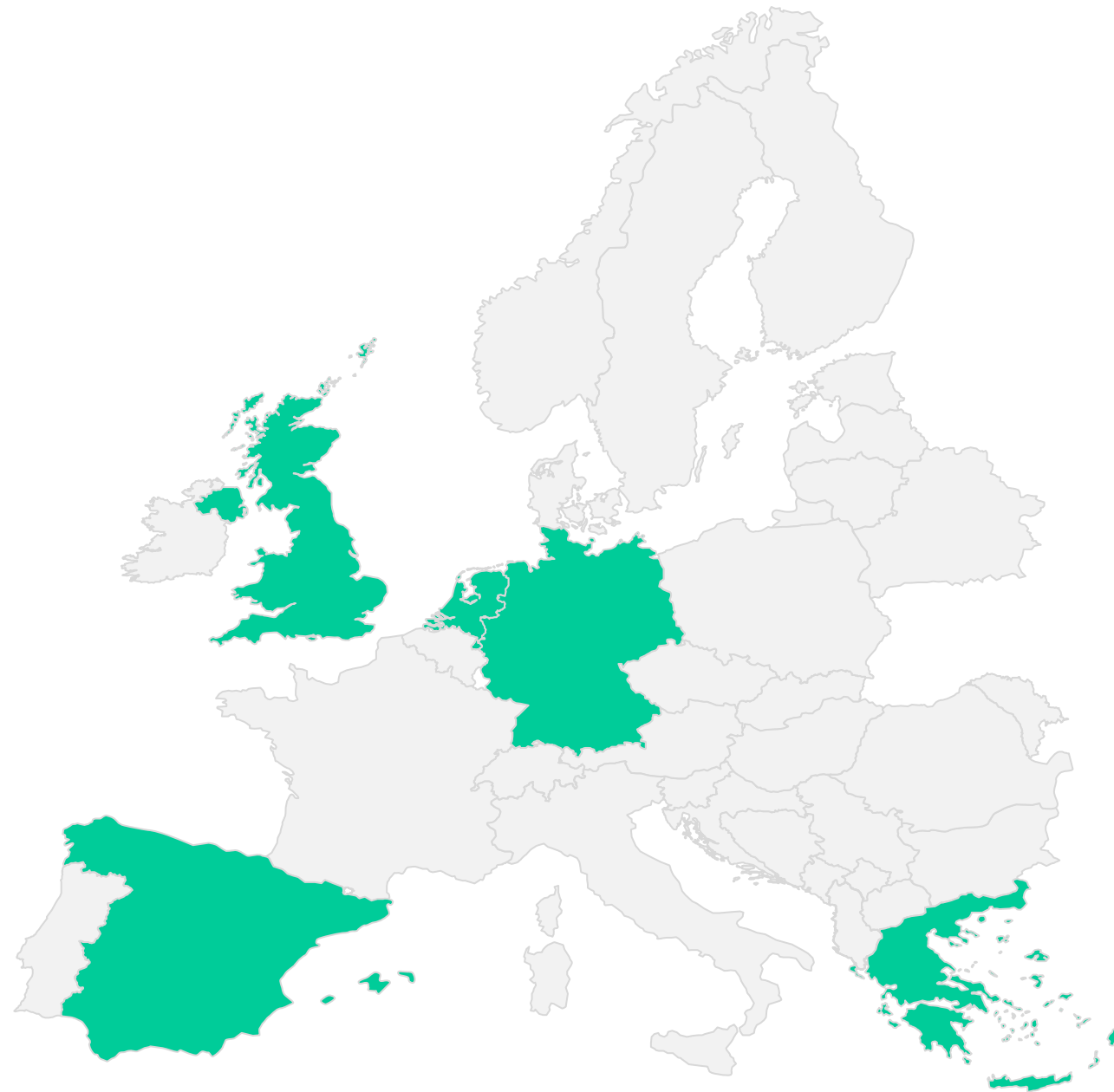
Healthy eating for teens, National Health System UK, <https://www.nhs.uk/live-well/eat-well/healthy-eating-for-teens/>

Healthy diet, World Health Organization, <https://www.who.int/news-room/fact-sheets/detail/healthy-diet>

Adolescents Health, World Health Organization, https://www.who.int/health-topics/adolescent-health#tab=tab_1

Global Recommendations on Physical Activity for Health, World Health Organization, <https://www.who.int/dietphysicalactivity/physical-activity-recommendations-5-17years.pdf>

The SEEDS team



who we are

A group of nutrition, public health, physical activity and citizen science experts, working across Europe to explore how the SEEDS approach can help improve healthy lifestyles and STEM interest in teenagers.

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