EVOLUTION OF EDTECH BUSINESS MODELS

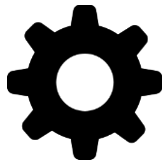Prospective monitoring
June 2021
by Geneva Intelligence

Summary of the June 2021 edition

Definition of Edtechs

Methodology

Trends Analysis

Riipen brings together companies and schools and their students so that they can collaborate on common projects.

Nanaba is an application that locks recreational applications on learners' phones. Solving a review quiz unlocks them.

The Juice is a digital platform that provides age-appropriate, non-biased and non-partisan news articles through a press review, "the daily juice".

The **Beekee Box** is a portable learning platform designed to transmit and share educational content anywhere and everywhere.

Vonder is a gamification platform that converts educational content into short and gamified lessons.

Definition of Edtechs:

The acronym EdTech is short for Educational Technology. **EdTech represents the use of new technologies to facilitate and improve knowledge learning and transmission.**

For example, e-learning provides individual digital training instead of physically attending classrooms. The "classrooms" and MOOCs (Massive Open Online Courses) are lectures broadcast on the Internet. The LMS (Learning Management System) makes it possible to distribute educational content online, including the possibility of offering a complete course. There are also educational robots that capture the attention of young people and accompany them in their learning.

EdTech provides tailor-made and on-demand services. It revolutionises training, making it possible to **design a personalised learning path for students.**

Teachers and schools in general also benefit from these technologies that facilitate the transmission of knowledge in collaboration with their students through participatory and pedagogical teaching. In addition, they use these technologies as **online platforms to better organize, control and monitor learning and adapt their teachings to students**. This allows them to provide more relevant and effective services.

Overall, Edtech benefits students and teachers as well as schools by **facilitating administration and communication**. They improve dialogue, education, learning and above all pedagogy.

DISCOVER MONITORING METHODOLOGY

Definition of Prospective Monitoring

Overview

Prospective monitoring consists of collecting strategic information to be able to anticipate changes in the ecosystem in order to respond as soon as possible and adequately. Prospective monitoring provides support for the implementation of a commercial and technological strategy.

Methodology

An effective method is to conduct products and service developments monitoring.
The below steps were taken to carry out the monitoring and illustrate the results:
- Research, analysis and comparison of a dozen innovative offers in the field of Edtech.
- Identification and understanding of the commercial and technological benefits of these results.
- Identification of Edtech trends and innovations. Trends represent market characteristics and developments.

Objectives

For a company or an educational institution to be sustainably competitive it needs to be constantly aware of changes in its market in order to either limit potential risks or benefit from these changes. This would involve the following:
- Monitor competitive products and service developments.
- Identify and distinguish innovative trends and strategies over the long term.
- Analyse and compare this information with the organisation's current strategy.
- Evaluate competition and their business strategies through their innovations.
- Carry out a self-evaluation and develop a strategy.
- Find inspiration in the business and technological trends.

DISCOVER EDTECH TRENDS ANALYSIS

GENEVA INTELLIGENCE
STRATEGIC INFORMATION

In the car on the way to Ploumanac'h in Brittany, Léon recalls with delight the best moments of this school year made special because of the Covid-19 pandemic. His thoughts dwell particularly on the **new technologies introduced by his school this year to facilitate and improve the learning of students and the transmission of knowledge by the teachers.**

One of these technological marvels was suggested by Minerva, his French teacher, who encouraged her class to adopt the **Nanaba** application. This app blocks the recreational applications on Leon's phone, such as Youtube, Facebook and Instagram, which he is so fond of, in order to take a quiz to review the concepts that have been taught in class. If Leon passes the test, the recreational applications are unlocked and he can use them as he pleases. This application has undoubtedly helped Minerva to be more serene by no longer chasing cell phones during her class.

In keeping with her talent for unearthing new technologies, Minerva also implemented the **Vonder** solution in her classroom, which converts educational content into short and gamified lessons. Through various games and quizzes, Leon and his classmates were able to review grammatical and syntactic concepts that had been introduced and explained by Minerva beforehand.

Albus, his English teacher, never one to rest on his laurels, proposed a new medium called **The Daily Juice** in place of the traditional BBC morning newscast and the audio CD in Leon's schoolbook. This press review compiles and rewrites neutral and objective articles every morning, free of any bias or partisanship, for Leon to read. By going through this concentrated information every morning, Leon has been able to develop his critical thinking skills, his general knowledge and has cultivated a passion for reading the press.

On another note, Albus also offered his class the **Riipen** application, which connects companies and schools so that they can collaborate on joint projects. Through this application, companies benefit from Leon's and his classmates' skills, while the latter can expand their professional network, gain work experience, enhance their CVs and improve their chances of entering the world of work when they grow up.

During a class outing to Rochers de Naye in the heights of Montreux, with the aim of discovering the richness and diversity of the Swiss fauna and flora, Leon was particularly impressed by a solution used by Severus, his history teacher. In the middle of nowhere, without an Internet connection, Severus was able to maintain his course normally by sharing documents and educational content on the cell phone of Leon and his classmates, via the **Beekee Box.**

Lulled by the passing miles of tarmac and the promise of a peaceful vacation, Leon ponders future innovations that will be offered by Albus, Minerva and Severus after the summer break to create new educational experiences and make the school day even more fun and interactive.

DISCOVER EDTECH TRENDS

Riipen: when the world of work meets the world of education

Riipen is a platform that connects companies and students. Companies share their needs and projects while students publish their expertise. By carrying out a business project, students are able to obtain university credits.

Type

A tool that promotes the acquisition of knowledge and skills.

Competitive advantage

The solution promotes the employability of students and the attractiveness of the courses offered by an institution.

Price

The solution is based on a freemium model. It can be used for free in its basic functionalities while the more advanced ones will require the use of a professional subscription for USD 2'499 per year and more depending on the needs.

Number of users

The start-up claims more than 10'000 organizations and companies registered on the platform as well as more than 320 schools representing 72'000 students.

Stage of development

Riipen was founded in 2014 in Vancouver, Canada. Between 2017 and 2019, the company raised USD 5.8 million to ensure its development in the United States. The company, now well established in North America, is looking to expand internationally. Riipen employs more than 100 people.

How does it work ?

Universities or professors publish on Riipen the "programs" that students follow. The educational institutions are thus put in touch with companies that have themselves shared projects they would like to see carried out by students. If the projects proposed by the company correspond with the university's program, the latter selects the students to launch the project. Schools, companies and students are thus able to collaborate, talk and receive feedback directly from the platform.

Link https://fr.riipen.com/
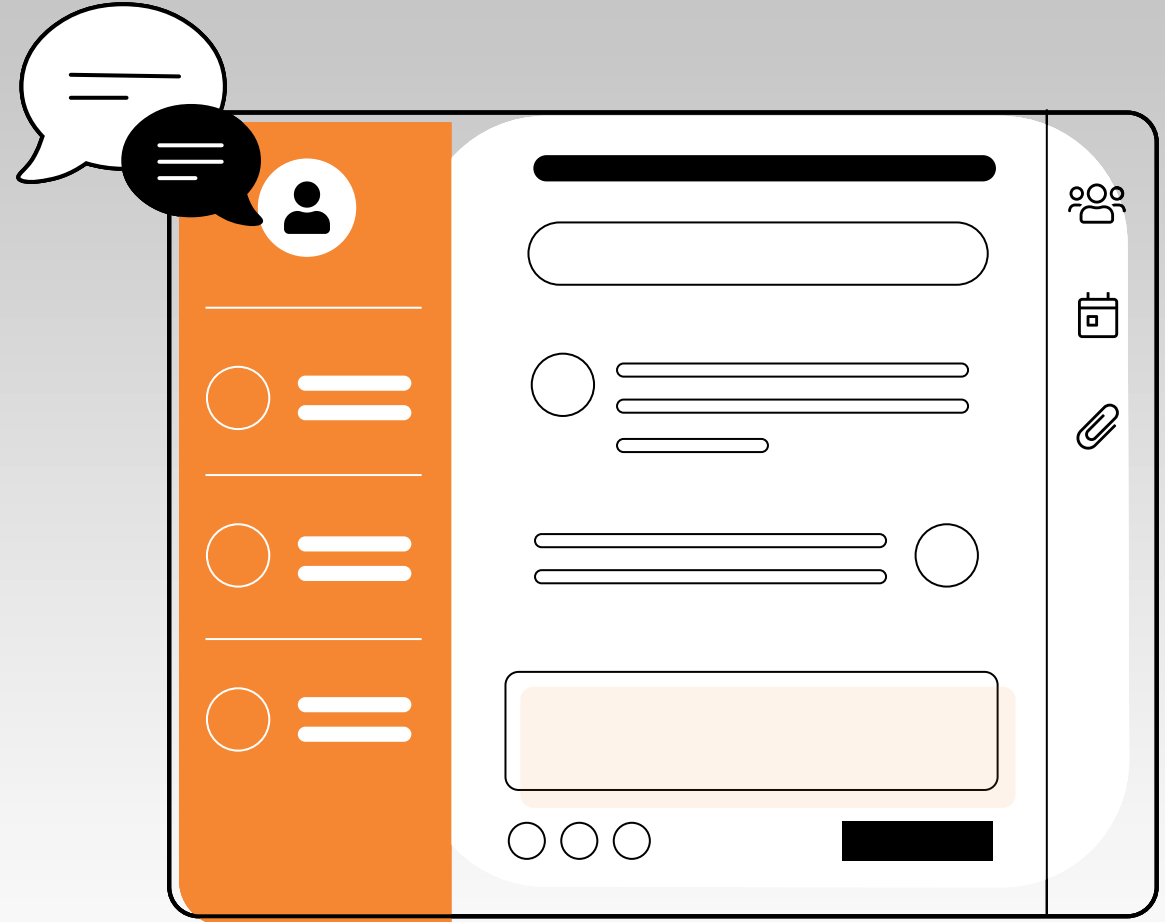
Riipen: when the world of work meets the world of education

Advantages

- Very fast and intuitive design of projects on the platform for companies and programs for educational institutions.

- Numerous project management and communication applications integrated into the platform (video conferencing, file sharing, calendar, reminders, notifications, etc.)

- Feedback and evaluation of students regarding the project possible within the platform.

- Integration of the solution with the school's learning management system.

- Possibility for schools to invite the member companies of their network to join the platform for free to post projects.

- Possibility for students, universities and companies to respectively develop their professional network, attractiveness of their training and employer brand.
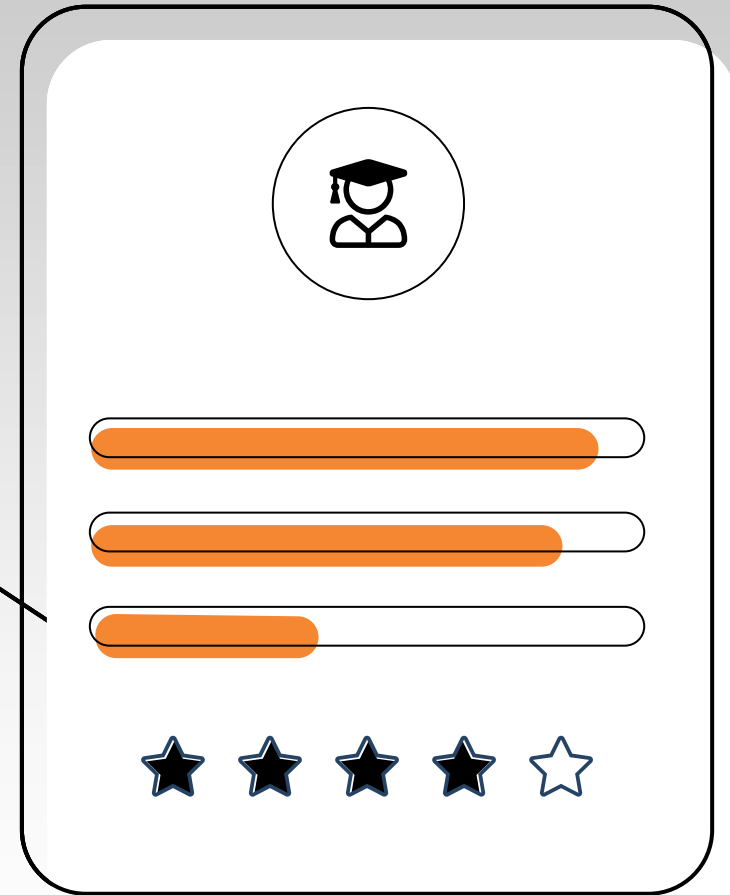
Suitable for:

Kindergarten	⭐	Primary School	⭐
Secondary School	⭐⭐	University	⭐⭐⭐⭐

# Riipen: when the world of work meets the world of education

Riipen is a digital platform that connects companies, educational institutions and their students so that they can work together on various projects.

The use of Riipen can enhance the attractiveness and credibility of the training provided by the educational institution for three reasons:

- **Better employability of students upon graduation**, with a stronger CV, a more developed professional network, and skills and knowledge relevant to the job market, can enhance the reputation of a program and, by extension, the credibility of its degree.

- **The attractiveness of a training program** can be reinforced by offering this service to students. In a very competitive market, schools that are concerned about the employability of their students will be more attractive to students who are particularly attentive to their future insertion in the job market.

- Thanks to Riipeen and the students, the schools are able to transform the companies that collaborated on the projects into true ambassadors of the institution, thus **consolidating the reputation of the school.**

However, the solution has several limitations:

- The use of this solution by educational institutions can lead to a **more precarious labor market**, especially for young graduates. Companies may be more inclined to "use" the skills of students offered free of charge via Ripeen than to employ young graduates. The use of many interns by companies, without offering firm job offers, is often decried. Taking over a solution that promotes this practice and trend thus presents a reputational risk for the school.

- Not all subjects and programs offered by an educational institution are equal in terms of their attractiveness to companies. The educational institution will have to be able to **propose alternative projects** for courses or programs that do not appeal to companies in order to avoid creating inequality between its various courses. Bilateral partnerships with companies, public administrations, without the intermediation of the platform, should not be neglected.

- Traditionally, higher education institutions have an internal careers and employment department or alumni network whose tasks include identifying job and internship opportunities. The use of Riipen could lead to **duplication and organizational tensions**. A potential solution to this problem would be to entrust the Careers and Employment Department with the search for job and internship offers for graduates and Riipeen with the search for offers for students still in school.
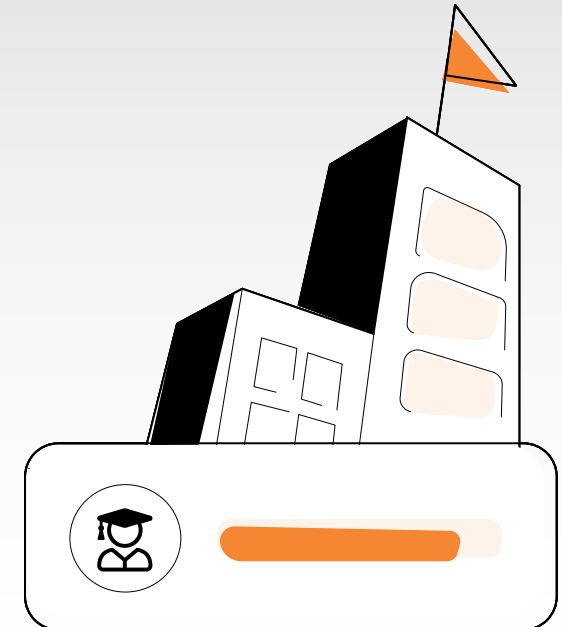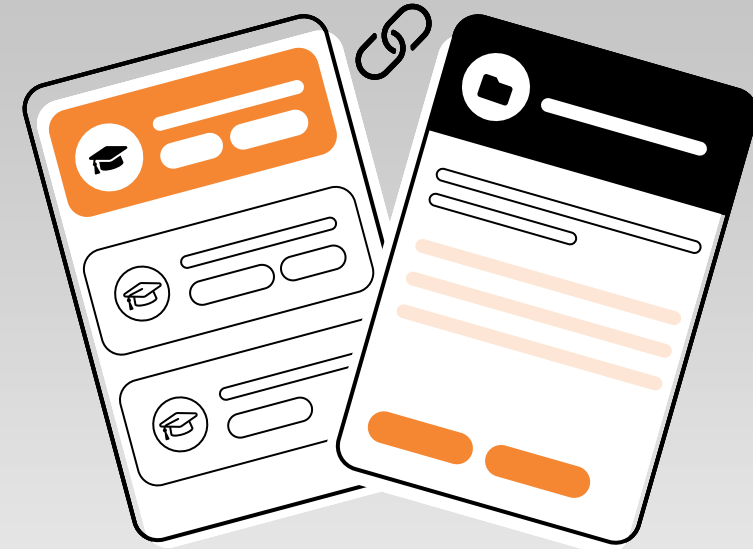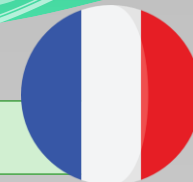
Nanaba: transforming the cell phone into an educational tool
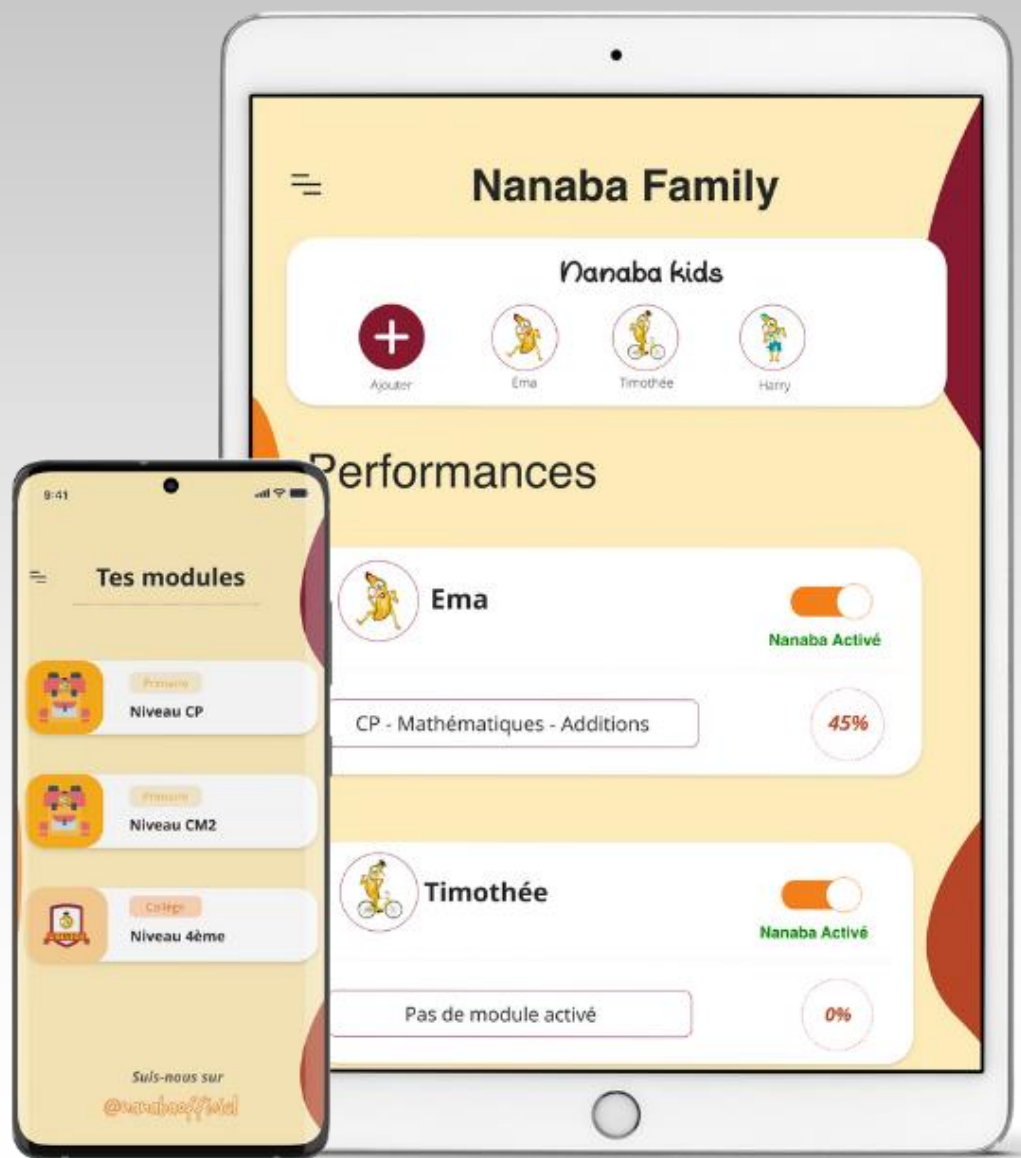
Nanaba is an application that once installed on the learners' cell phone will lock recreational applications such as Youtube, TikTok, video games or Instragram. Solving a review quiz will unlock the lock on other applications.

Type

Tool for knowledge acquisition.

Competitive advantage

Transform the cell phone into a pedagogical ally by facilitating revision.

Price

The application is available for CHF 11 per year for primary school students and CHF 21 for secondary school students. A family offer, for up to four accounts, is available for CHF 31 per year.

Number of users

No relevant information could be identified in this regard.

Stage of development

Launched in France in June 2021, the start-up aims to rapidly expand internationally, particularly in the United States in the third quarter of 2021 and in China in 2022. The company expects to recruit more than 40 employees by the end of 2021 in order to develop a second version of the application for adults and foreign language learning.

Link   https://www.nanaba-shop.fr/
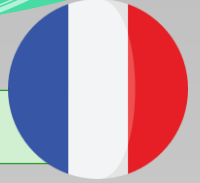
Nanaba: transforming the cell phone into an educational tool

Advantages

- The app encourages students to study in order to benefit from the recreational apps.

- Quizzes are available for the subjects French, English, math and general knowledge.

- More than 8,000 questions were written by national education teachers.

- The review modules are designed for primary and secondary education.

- The application is equipped with an artificial intelligence module that will adapt to the child's level. If the answers are incorrect and the level of the questions too high, Nanaba adjusts by offering alternative questions.

- Students have access to quiz corrections to help them acquire knowledge

- Parents or the school have access to the children's test results, allowing them to follow the progress done.

LE**19**45   ENFANTS : L'ÉTÉ DÉCONNECTÉ ?

Suitable for:

Kindergarten	★	Primary School	★★★★
Secondary School	★★★	Universisty	★

# Nanaba: transforming the cell phone into an educational tool

Nanaba is an app that locks recreational apps on a student's cell phone/tablet until the student solves a review quiz.

This solution has certain advantages for a school:

- This solution allows schools to **deal in an innovative and educational way with key distractions, namely the use of cell phones in class**. Instead of a repressive policy aiming at banning cell phones during class, the school and teachers can use this tool and students' cell phones to encourage them to revise.

- Similarly, Nanaba can be a way to **offer a new educational experience for students' revision**. Traditionally repetitive and uninviting, revision can take on a new appeal if there is a reward in the form of recreational applications and social networking.

- In addition, this application can partially **counteract the inequality in knowledge acquisition**. Not all students receive equal support from their parents or family units. Offering Nanaba to students by encouraging them to review by themselves can partially counteract this problem.

However, the solution has several disadvantages:

- The major disadvantage of the solution lies in its main advantage, namely the unlocking of recreational applications on the phone following a revision period. **This feature establishes a "right to reward" following an effort or a revision** period which caN reduce the students' "taste for learning" and be counterproductive on a pedagogical level for the school.

- **Nanaba's intrusion into the students' daily lives by blocking the phone's recreational applications is obvious.** The implementation of this solution will require at least an agreement from the parents and their involvement in the pedagogical process.

- **The digital divide should not be ignored by the school.** Not all students have a cell phone or the same computer skills. When using this solution, the school must be able to ensure that all students can benefit from the solution under the same conditions, otherwise an inequality of knowledge acquisition would be created among them and would counterbalance the benefits brought by Nanaba in reducing inequalities related to tutoring.
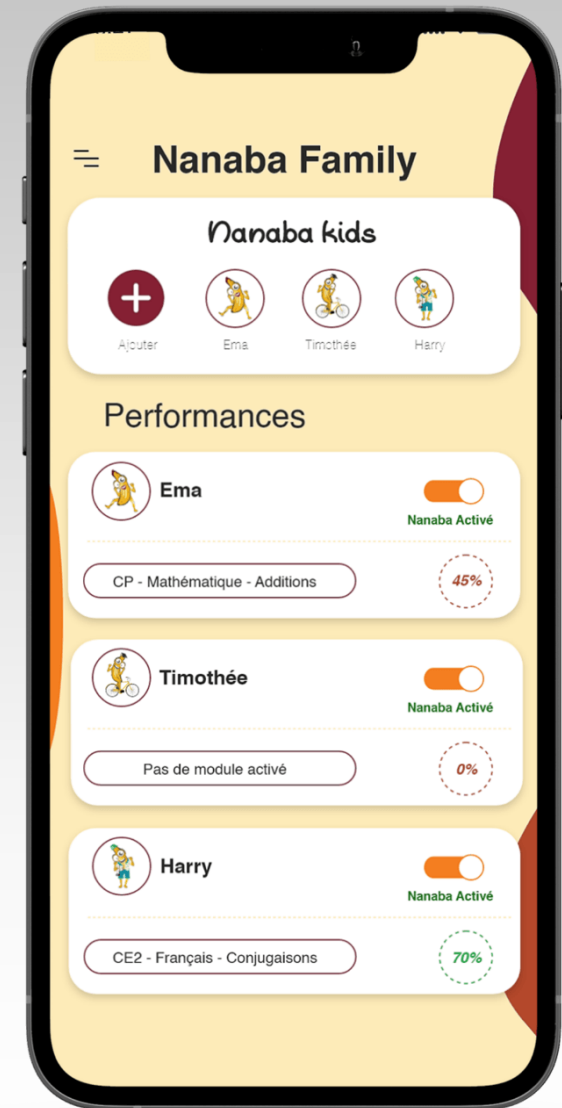
The Juice: Developing learners' critical thinking skills

The Juice is a digital platform that provides age-appropriate, non-biased and non-partisan news articles, as well as additional educational content such as vocabulary words and short instructional videos through a press review, "the daily juice".

Type

Tool to assist in the acquisition of knowledge and skills.

Competitive advantage

Develop a critical mind, a general culture as well as a taste for current events and reading the press.

Stage of development

The company was founded in 2019 in Miami, USA. The Juice is the sister company of New and News that also offers non-biased articles for adults. Since its inception, nearly 30 employees have been hired.
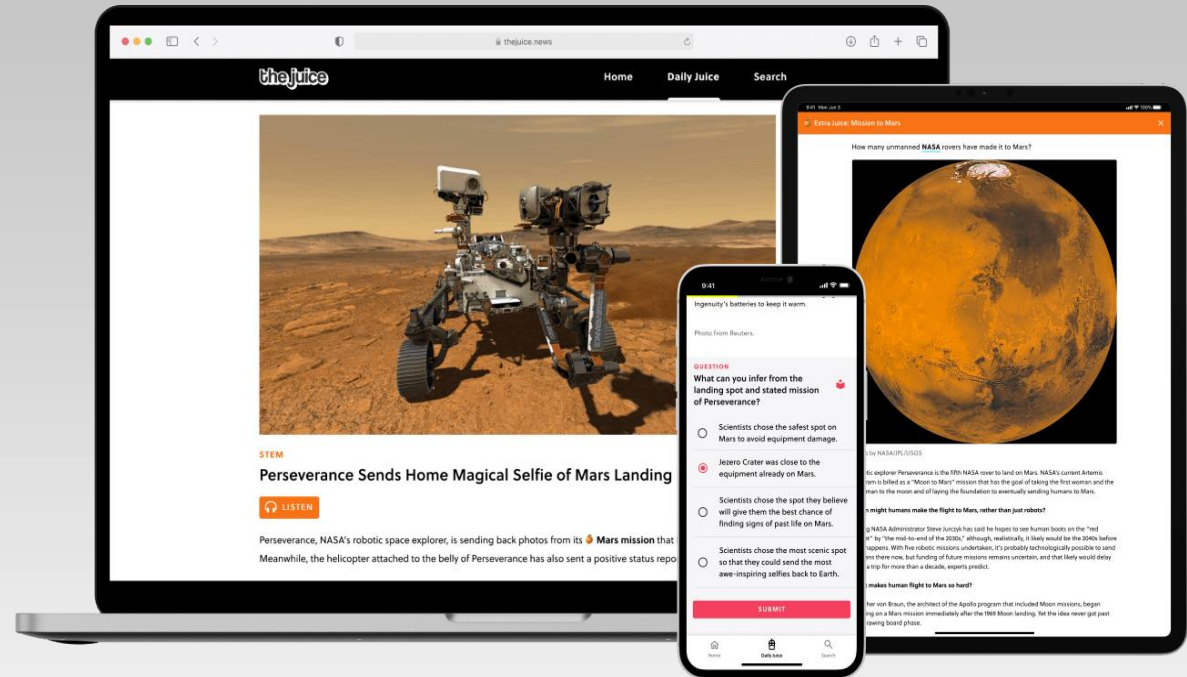
Number of users

The company claims to send its press review to nearly 30,000 students every day.

Price

In order to get the press review every morning, you need to subscribe for USD 7 per month per user. The annual subscription is fixed at USD 60.

Link https://thejuicelearning.com/

How does it work ?

The Daily juice is written every night by the Juice team. Each publication contains:

- 4 educational news articles between 200 and 300 words
- 1-3 educational news supplements that go deeper into the analysis (between 600 and 800 words)
- An infographic that helps improve digital reading
- A "Bright Side story" about an inspiring story
- A video that teaches a concept in science and technology
- 6 quiz questions on the publication of the day
- A dozen interactive vocabulary words
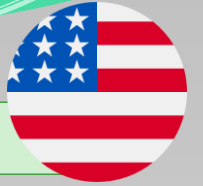
the juice

The Juice: Developing learners' critical thinking skills

Advantages

- News written by The Juice is limited to 200 words and is free of partisan posturing and bias.

- The press review is available every day from Monday to Friday.

- The articles are written at four levels for student comprehension and reading.

- A quiz is available in the press review to check the students' understanding of the press review.

- The press review is accessible from the digital platform on the Internet, on any electronic device with the application and via newsletter.

- Teachers can customize the press review by adding their own content.

- Through a statistical module, teachers are able to track which students have opened and read the press review as well as their answers to the quiz.

Suitable for:

Primary School ★★★★

Secondary School ★★★★
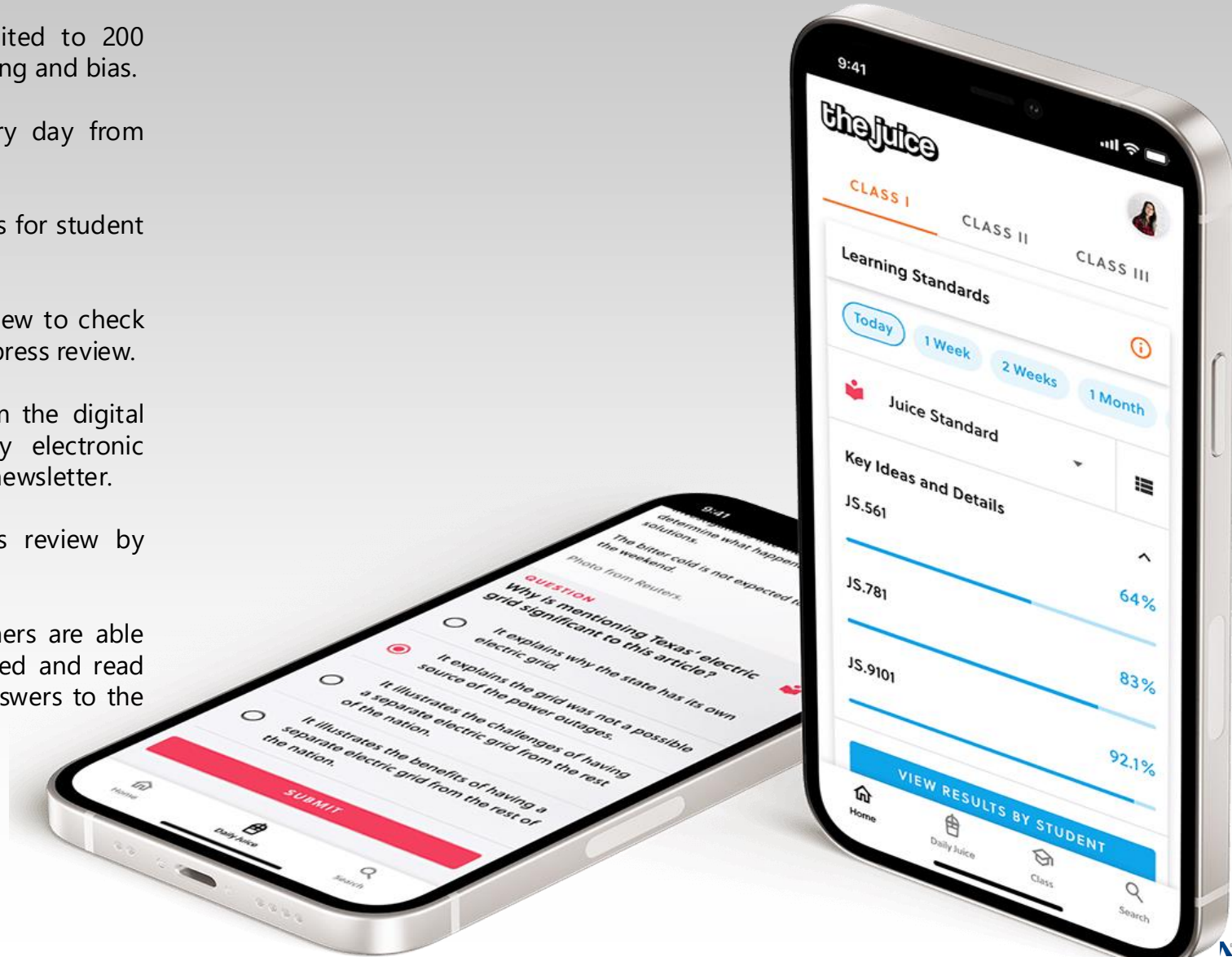
The Juice: Developing learners' critical thinking skills

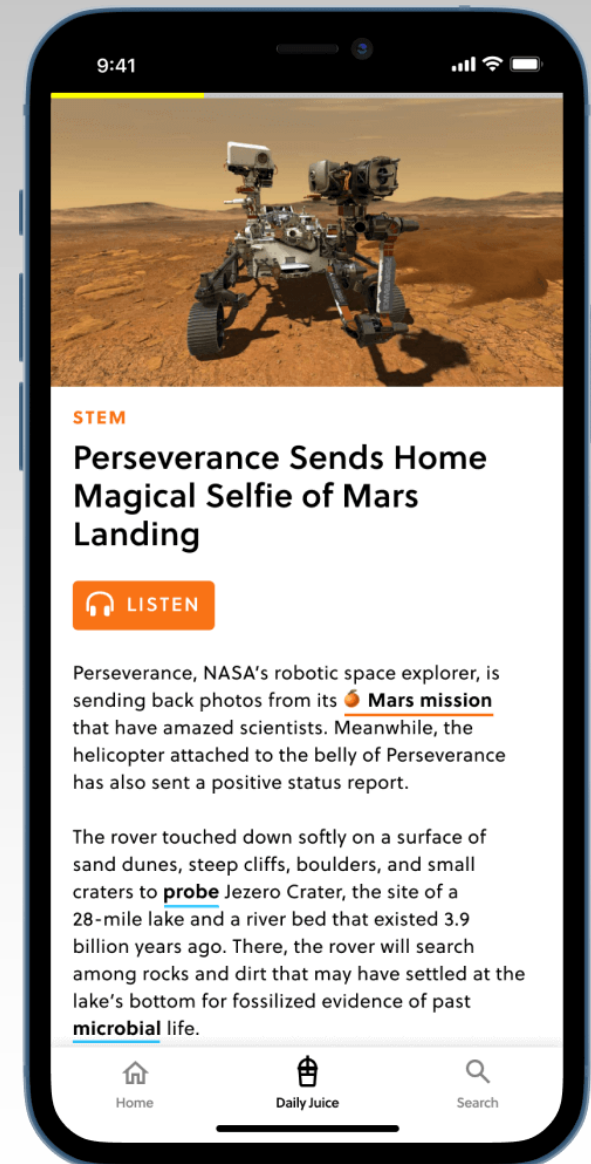The Juice is a news review produced by teachers and educators to provide students with unbiased, partisan news in multiple levels of understanding and reading.

The solution has significant advantages for a school:

- The Juice **helps to develop critical thinking skills, general knowledge, and an interest in current events among learners**. Using The Juice allows the teacher to save a considerable amount of time in creating a press review. Even more so if he has to purge the partisan dimensions from it.

- Proposed in English, the use of The Juice would be particularly relevant in English classes. It would allow students to **develop their vocabulary while reinforcing their knowledge of the Anglo-Saxon world**. By offering this service, a school would be able to offer a new educational experience to its students, an innovative alternative to the BBC newsletters and audio CDs of traditional textbooks.

- Not all **parents educate and accustom their children to reading the press in the same way**. By making this service available to students, the educational institution will be able to partially compensate for this inequality and encourage the development of a critical mind.

However, the solution has some disadvantages:

- Although the intention of offering non-biased and non-partisan articles is attractive, **offering neutral articles remains difficult except for purely factual articles devoid of any analysis**. However, the selection of one piece of information over another is already an analysis in itself. Moreover, the press review is essentially based on American media and world views.

- Paradoxically, by wanting to develop students' critical thinking skills by removing the partisan aspects of an article, The Juice could be counterproductive. **The solution does the work that a learner should do in identifying and questioning the treatment of a news story**. Ideally it would be up to the student to identify the postures and partisan references to develop their critical thinking. In this regard, The Juice could introduce a partisan article in its press review so that the student can engage in this exercise. The teacher can also add by themselves unprocessed articles to confront their students on this issue.

STEM

Perseverance Sends Home Magical Selfie of Mars Landing

🎧 LISTEN

Perseverance, NASA's robotic space explorer, is sending back photos from its 🔴 **Mars mission** that have amazed scientists. Meanwhile, the helicopter attached to the belly of Perseverance has also sent a positive status report.

The rover touched down softly on a surface of sand dunes, steep cliffs, boulders, and small craters to **probe** Jezero Crater, the site of a 28-mile lake and a river bed that existed 3.9 billion years ago. There, the rover will search among rocks and dirt that may have settled at the lake's bottom for fossilized evidence of past **microbial** life.

Home   Daily Juice   Search

Beekee: Learn and transmit anywhere

The Beekee Box is a portable learning platform designed to transmit and share educational content that works anywhere and does not require Internet access.

Type

A tool to support the acquisition of knowledge.

Competitive advantage

The solution does not require an Internet connection or power supply to operate, making it possible to teach and share content with learners anywhere.

Price

No information on the commercial price of the Beekee Box is available. However, its founders claim that its manufacturing cost is around CHF 150 and requires about ten hours.

Number of users

No information could be identified on this subject. Designed for humanitarian trainers in the field, the Beekee Box is used by Médecins sans Frontières and Inzone, a humanitarian education program of the University of Geneva.

Stage of development

Beekee was founded by two researchers in educational technology at the University of Geneva. The researchers obtained funding from the Swiss National Science Foundation and Innosuisse in 2022 to transform their scientific results into a commercial application. This funding takes the form of a grant of CHF 130'000 which will cover the salary of the project leader, Vincent Widmer, for one year and the purchase of equipment.

Link   https://beekee.ch/index.html

How does it work ?

The teacher drops the educational material on the Beekee Box with his computer and then takes it to the field. Once on site, he just has to turn it on and in less than a minute, he will create a local wireless network to which learners can connect using their own devices to collaborate in real time, share and retrieve documents or even follow complete training courses.

Beekee: Learn and transmit anywhere

Advantages

- The Beekee Box is easily transportable (12 cm high and 8 cm wide for a weight of 250 grams).

- High storage capacity up to 256 GB.

- Autonomy of 1.5 hours without battery and up to 10 hours with external battery rechargeable with solar energy.

- No dependence on availability of a power supply or Internet connection.

- The solution works with any computer, cell phone or digital tablet.

- 25 users can connect simultaneously to the Beekee Box.

- The data exchanged on Beekee Box are secure and physically stored on the box.

- The Beekee Box works on open source model. Possibility to build it by yourself.

Suitable for:

Kindergarten	★	Primary School	★★★★
Secondary School	★★★★	University	★★★★

Beekee: Learn and transmit anywhere

The Beekee Box is a device generating a wireless network to transmit educational content to learners without using the power grid and an Internet connection.

The solution has many advantages:

- Schools could take advantage of the Beekee Box to offer their student**s new educational experiences by teaching in unusual places** such as in the countryside, in museums or in any place without an Internet connection and of educational interest.

- **This could facilitate school trips**. For example, the educational institution would be able to provide education under the same conditions in the classroom in the morning while allowing extracurricular activities in the afternoon.

- This solution is very interesting to develop in the context of the international Geneva since many international organizations are present there and may need to use the Beekee Box. Operating in open source, **a joint charity project between a school that would build the Beekee Box with its students and an international institution** that would bring this technology on the field would enhance the reputation of the school as being innovative, social and open to the world.

However, the solution has certain limitations:

- The "**right to disconnect**" in a school setting would not be promoted through this technology. Learners are already frequently exposed to digital devices in classroom and home settings. This issue is becoming more and more important in society, the workplace and the educational world and could represent a reputational risk for the institution.

- Although the solution seems accessible in terms of price for industrialized countries, **acquiring a Beekee Box will represent a certain budget** for the least developed countries. The possibility to build the solution, thanks to an open source operation, potentially reduces this problem. However, advanced electronic equipment is required for its development, such as 3D printers.

- The solution has the merit of being able to be used in places where the Internet connection is missing or incomplete and where power cuts occur frequently. However, the Beekee Box is aimed at students or teachers with a smartphone, computer or digital tablet to power the box or connect to the system. Thus, **the solution reduces the problem of the digital divide** without fully addressing it.

Vonder: Learning while having fun

Vonder is a gamification platform that converts educational content into short and gamified lessons.

Type

Knowledge acquisition tool.

Competitive advantage

Promote student learning through gamification and microlearning.

Stage of development

Vonder was founded in 2018 and claims to be profitable since its first year of operation. While the startup has shown strong growth since its inception, the startup had a 2020 goal of increasing its user base and employees by 3x.

Number of users

Vonder claims more than 55'000 users of its platform.

Price

No information could be found on this subject.

How does it work ?

Vonder offers three games to make educational content fun. The "Flash" module allows teachers to create questions and answers for students. "Jump" offers three lives to the learner who must answer within a given time and go as far as possible in the quiz and "Quest" is similar to an adventure and an educational quest. The teacher only has to insert his pedagogical content in the different games via the knowledge management tool offered by the platform.

Link https://www.vonder.co.th/
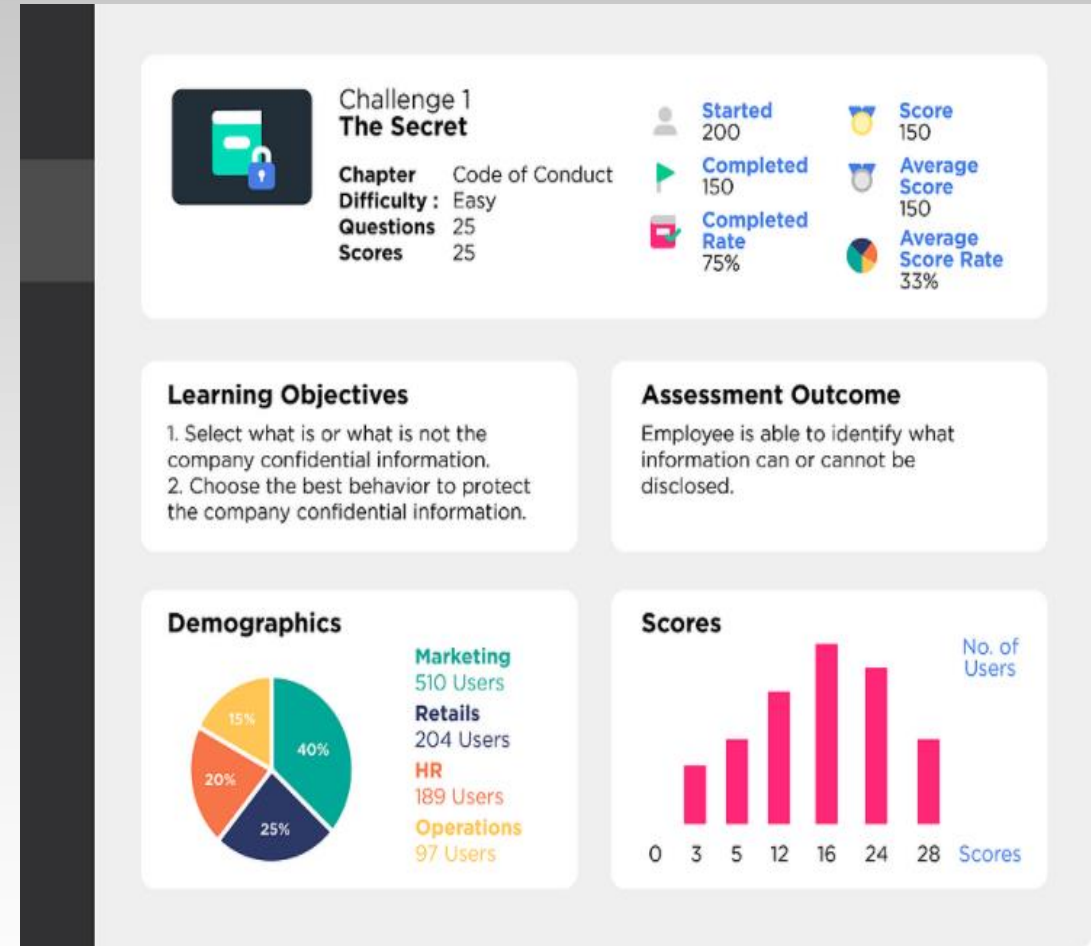
Vonder: Learning while having fun

Advantages

- The platform makes teaching fun by offering courses through games and quizzes.

- Vonder does not require any computer coding skills. The solution is very intuitive and easy to use, allowing teachers to insert their educational content into Vonder games very quickly.

- The solution provides schools with a statistical and analytical module to track students' progress and all their learning interactions.

- A reward and ranking system is built into the games and keeps students highly engaged in their learning.

- Vonder also offers support for creating educational content if requested by the school.

- Vonder can be used for extracurricular activities offered by the school. A "company " version of Vonder is available.

Suitable for:

Secondary School ★★★★

Primary School ★★★★

Vonder: Learning while having fun

Vonder is a platform allowing teachers to integrate their educational content into games.

The solution has significant advantages:

- By converting the educational content into short, gamified lessons, the school strengthens the means it offers to **fight against the dropout of its learners**. The fun aspect of the lessons reinforces the students' motivation and engagement in their learning. Vonder can also be offered to students as a means of revision to reduce the inequality of learners in the acquisition of knowledge as seen with Nanaba.

- Vonder can be used to **evaluate students' work and learning in an alternative way**. Instead of traditional grades, the educational institution can use this technology to grade students through the various games and rewards. This helps to reduce the stigma of grades and the anxiety that learners may feel about traditional assessments.

- The school can also take advantage of the Vonder solution to **consolidate the technological means to improve the management of "school life"**. The "enterprise" version of Vonder offers a chatbot that allows users to access relevant information very quickly, particularly on an Internet or Intranet site. The solution could be used by a school to guide students or their parents in the search for administrative documents related to school life (transcript, online correspondence book, internship agreement ...).

However, the solution has several disadvantages:

- **The collaborative aspect is absent in Vonder**. Although students can exchange orally with each other before answering the questions proposed by the teacher via the games, no collaborative functionality within the platform is proposed. The presence of collaborative features (shared rewards, peer review...) would have strengthened the appeal of Vonder.

- **Gamification poses a reputational risk to the school**. For some parents, games are not synonymous with seriousness. The school will therefore have to communicate on the pedagogical benefits of this solution to the parents and if possible involve them to guarantee the use of Vonder.

- As with any gamification solution, **complex concepts and parts of the curriculum** cannot be conveyed solely by Vonder. It is therefore important to design the solution as an additional tool for teachers and schools to keep students engaged and motivated.