

EVOLUTION OF EDTECH BUSINESS MODELS

Prospective monitoring 2024

SUMMARY OF 2024

First quarter

Second quarter

Third quarter

Last quarter



Definition of Edtech



Definition of Edtech:

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 teaching as an alternative to physically attending classrooms. These "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 courses. There are also educational robots that capture the attention of young people and support them in their learning.

EdTech provides tailor-made and on-demand services. It revolutionizes teaching, making it possible to design a personalized learning path for students.

Teachers and schools in general also benefit from these technologies, which facilitate the sharing 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



Prospective monitoring - Definition



Overview

Prospective monitoring consists of collecting strategic information in order to anticipate changes in the ecosystem and respond as quickly and appropriately as possible. This provides support for the implementation of a commercial and technological strategy.

Methodology

An effective method involves regular monitoring 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 educational institution to compete sustainably it needs to be constantly aware of changes in its market, so as 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.
- Analyze and compare this information with the organization's current strategy.
- Evaluate competition and their business strategies through their innovations.
- · Carry out a self-evaluation and develop a strategy.
- Find inspiration in business and technological trends.

DISCOVER OUR EDTECH TRENDS ANALYSIS



Summary of the March 2024 edition





Definition of Edtechs





Trends Analysis



Gapsmoov is a digital learning platform designed to develop learners' intercultural intelligence, in particular to enhance their soft skills.

DeansList

DeansList is an educational platform designed for schools, offering a complete behavior management solution.



Nolej is a platform that enables teachers to easily generate courses from text, audio or video using artificial intelligence.



Hivebrite is a social network, like Facebook or LinkedIn, that can only be used by former school graduates (ALUMNI).



Matific is a learning platform featuring a gamification system that makes learning mathematics fun and enjoyable from an early age.





Edtech trend analysis



Main technological trends

Represent **opportunities or threats** for the various players in the sector







Artificial intelligence







Virtual Reality (VR)



Publication of the "European edtech funding report 2024"

In its fifth edition of the "European edtech funding report 2024", Brighteye Ventures provides an overview of the state of the edtech sector in Europe, as well as global context. As the report highlights, European edtech has continued to demonstrate resilience, both in terms of deal numbers and funding amounts. In practice, European edtech deals accounted for almost 32% of all edtech deals worldwide in 2023.

News highlights



Leemons, a learning platform that adapts to different teaching models, raises EUR 1.5 million (CHF 1.44 million).



Klas, a Nigerian edtech supported by Techstars, raises **USD 1 million (CHF 882'220)** to develop its teaching platform.



ConveGenius, K-12 educational technology company, raises **USD 7 million (CHF 6.18 million)** for AI Gen advancement and international expansion.



IStoria, an educational technology specialist based in Saudi Arabia, has closed a total investment of **USD 1.3** million (CHF 1.14 million).



Gapsmoov: Deciphering and understanding culture





Gapsmoov is a digital learning platform designed to develop learners' intercultural intelligence, in particular to enhance their soft skills.

Type

Digital learning platform.

Competitive advantage

The tool aims to develop students' intercultural intelligence, an area too often underestimated.

Price

The solution offers a one-year subscription to the platform for EUR 299 (CHF 282) per year and per person. For schools, a license per year and per department would cost EUR 890 (CHF 838), and for an entire school, the license would cost EUR 3,800 (CHF 3,577).

Number of users

Little relevant information has been found on this subject, however, the solution claims several thousand users.

Level of development

The start-up was founded in 2020 by Virginie Deshayes and Thibaut Issindou. The company is quality certified by bodies accredited or authorized by the French Accreditation Committee (Cofrac) on the basis of the national quality reference framework, demonstrating the reliability of the platform. According to LinkedIn, Gapsmoov employs between 2 and 10 people.



How does it work?

First of all, you need to log on to the platform using your identification details. Then select the culture corresponding to the user's information needs, so as to acquire knowledge about the cultural particularities of a country, and compare them with one's own culture.

Lien https://www.gapsmoov.com/



Gapsmoov: Deciphering and understanding culture

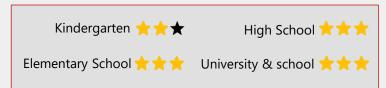




Features:

- The site and its various modules are available in French and English.
- The "explore" mode is based on micro-learning that deciphers 90
 professional situations in different countries and cultures. It
 combines short videos by professionals, case studies and quizzes.
- The "compare" mode takes into account and compares the different cultures of 70 countries, with aspects such as proximity, mastery of silence, implicit/explicit, etc. The "Cultural Match Indicator" is an algorithm that instantly calculates the cultural proximity between two countries. In addition, advice is given on how to turn differences into opportunities.
- The "practice" mode, available with a subscription type, enables you to attend and exchange with experienced trainers.
- The final mode, "Evaluate", tests knowledge of a specific country or multicultural skill. After a quiz of around 30 questions and a certain number of correct answers, the platform issues a certificate of achievement.











Today, the language barrier is considered to be the greatest difficulty in doing business in a foreign country. In general, cultural differences between countries are often underestimated. Gapsmoov provides invaluable assistance to learners in understanding different cultures.

- The "explore" mode enables **learners to gain a better understanding of different cultures very quickly,** thanks to a micro-learning system. First, a general video is produced by professionals from the country concerned. Then, you can select the objective of the presentation: "How to make a successful presentation to Americans", "How to run a meeting with Indians" or "How to build bridges with the French", for example. The strength of these presentations lies in their ability to **provide recommendations in a professional environment, and to develop soft skills in less formal settings.** The tool comes into its own in a more traditional course, illustrating the various points made by the teachers. Getting advice from qualified professionals and diversifying course materials can **increase learner involvement.** This type of tool is also interesting for teachers who want to learn more about the habits and customs of different countries.
- The multiplication of cultures and countries means it can be integrated into a wide range of subjects. The tool could be used in business-oriented courses, but also in language courses to better understand a country as a whole. In this way, **there is a mutualization of the tool** that makes it advantageous for a school. Similarly, the ability to use the site and watch videos in two languages (French and English) **facilitates its use by a large number of individuals**.
- The setting up of 2-hour virtual classes in mini-groups with intercultural experts encourages exchanges and gives students the opportunity to ask specific questions that might be difficult to access with simple internet searches. **It also develops soft skills**, which are increasingly in demand in the workplace.
- The quizzes and evaluation mode **enable the level of understanding of a class or students to be assessed.** It could be envisaged that obtaining a certificate of knowledge given by the platform would be required before attending a course, in order to improve fluency.

However, this solution can be optimized:

- The tool emphasizes very business-oriented skills, even if in some ways it can be integrated into more "classic" courses. It could be interesting to introduce much more general themes that would appeal to a larger number of learners. Indeed, for the moment, the solution seems to be aimed mainly at business schools.
- It's a pity that, in the digital age, the platform is only available on a computer and not with an application that can be used on a tablet or smartphone.





Nolej is a platform that facilitates content creation for teachers. Simply make a text, audio or video available, and the artificial intelligence creates lessons and assessments for students.

Type

Content generation tool.

Competitive advantage

The solution uses artificial intelligence to generate learning modules from a variety of media, saving a considerable amount of time.

Price

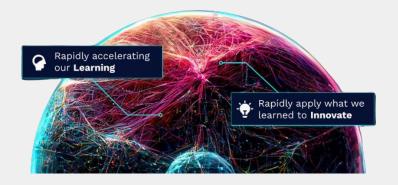
According to <u>Elite Content Marketer</u>, Nolej offers a package starting at USD 19.99 (CHF 17.28) per month. For schools, a quotation is required.

Number of users

According to the <u>EdTechActu</u> website, the solution is already recognized by some 60'000 teachers in 800 schools in 10 different countries.

Level of development

Vincent Favrat and Nejma Belkhdim founded the start-up in January 2020. However, it was not officially launched until July 2023. Nolej won the GESAwards France at the end of November 2023, and raised EUR 3 million from Educapital and Square Knowledge Ventures. The start-up is now looking to step up a gear and target 10 million teachers worldwide.



How does it work?

The tool takes the form of a platform for uploading different documents to create more captivating learning modules. Several media are available to diversify teaching methods. Teachers can also modify suggested documents.





Features:

- The tool is compatible with many learning management systems (LMS), such as moodle, Google Classroom, Canvas, Microsoft Teams and others.
- Various types of content can be used to create learning modules: video, text, audio or even a simple web page.
- The content is analyzed by artificial intelligence, so the teacher doesn't need to intervene in the creation process unless he or she wishes to do so. The Al finds the relevant words and also provides the definition (taken from Wikipedia) of the key notions.
- A wide variety of learning modules are available. These range from simple summaries and videos with explanations to interactive games such as crosswords and flashcards.
- It is possible to **give assessments on specific content**, which is then automatically corrected by the platform.
- The platform appears to support several languages, including French and English.









Classes can sometimes be boring for students due to the lack of interaction between teachers and students. What's more, creating or redesigning learning modules is often a long and tedious task for teachers, taking them away from more qualitative tasks. Nolej offers a number of advantages for solving these problems.

- The most interesting point is its adaptability. Indeed, the solution supports many different media, such as video, audio and text. This means it can handle an infinite number of themes and subjects. **The tool can be used by all teaching staff.** What's more, it's also suitable for all classes, from middle school to university studies. **This high degree of adaptability means that it quickly pays for itself in terms of cost savings,** thanks to the sharing of resources between different teachers.
- Adaptability is also evident in its compatibility with various LMSs, including Google Classroom, Moodle, Canvas and Schoology, to name but a few. This diversity reduces the need to modify existing systems, and helps keep costs under control for schools.
- The solution offers teachers significant time savings, leaving them free to focus on more rewarding tasks. They will be less inclined to reproduce exactly the same lessons from one year to the next, thanks to the ease with which content can be created. This time-saving feature means that a wider range of topics can be covered, which should lead to greater involvement on the part of learners.
- Nolej generates different learning modules in the form of games such as crosswords, gap-fill texts, flashcards and so on. This not only diversifies learning modes, but is also fun. **Students' attention should increase**, especially for those who have difficulty with very vertical courses and prefer to practice. Overall, the solution stimulates the whole class, **which should improve academic results**.

However, there are two points to bear in mind:

- Setting up assessments with this type of platform is certainly a time-saver for teachers, but it's not a fix-all solution; it should be supplemented with more traditional tests. Indeed, answers that are not completely correct will be marked as wrong by the tool, and **consequently the way of assessing is less precise in relation to a teacher.** This method will also format some of the students' answers, thus **limiting their reflections.** It seems appropriate to use open-ended questions to get a better grasp of students' general understanding.
- Nolej works with OpenAl, a platform based in the USA. Furthermore, it is never clear with this type of tool how the data is used. It's important to think about GDPR standards even if little sensitive information is likely to pass through.

DeansList: Encouraging exemplary conduct



DeansList is an educational platform designed for schools, offering a complete behavior management solution. Its aim is to improve student behavior while simplifying communication between all stakeholders.

Type

Educational platform.

Competitive advantage

The solution focuses on student behavior within the school.

Price

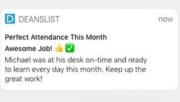
No relevant information was found. It seems that this tool is only available on request.

Number of users

No information has been found on this subject. The solution highlights schools such as Lawrence Public Schools, KIPP Public Schools and Springfield Public Schools

Level of development

The first version of DeansList was developed in 2010 at Phoenix Collegiate Academy with Akshai Patel as founder. In 2013, DeansList was launched as a company to offer services to other institutions. Today, the company is based in New York and has around ten employees. The solution appears to be fairly mature and has been implemented in several schools.





How does it work?

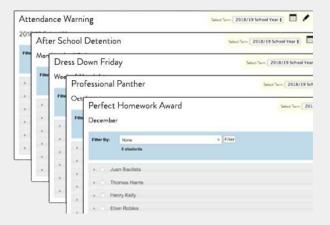
Each user has a login to connect to the platform, with specific functionalities. Schools can communicate and send documents directly to parents, notifying them of grades, late arrivals, absences, etc.

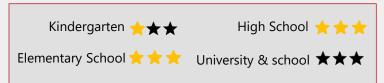




Features:

- The solution offers more direct means of communication with the various school stakeholders, such as messages on the phone, calls, messaging on the app, etc.
- Student behaviors are logged in the tool, allowing authorized persons to view student conduct.
- Deanslist **references potential incidents and streamlines the process** to limit wasted time. This translates into digitized incident letters, SMS alerts for parents, direct notification of class attendance and lateness, etc.
- Comprehensive reports and charts of students' progress throughout the week are sent to families. Similarly, school results are digitized.
- The platform can also be used to manage the school meals system, with invoices and payment methods transmitted.
- The tool offers translation into different languages, both for reports and with the messaging system.
- According to the website, the solution offers strong connectivity with existing software thanks to APIs.





DeansList: Encouraging exemplary conduct



Communication between the various stakeholders is a major issue for schools, enabling them to pass on information more efficiently. DeansList relies on a high degree of digitization of schools, coupled with a system for evaluating student behavior, with the aim of creating a healthier, more efficient environment.

- The solution records the various behaviors of students within schools. The aim is **to highlight positive attitudes and penalize negative behavior**, both towards the school and towards other students. The tool produces statistics to monitor potential changes over time. These reports are sent directly to learners' families, ensuring that parents can see how their children are progressing. The most valuable aspect of this method is that it **limits bullying in schools**, and undesirable behavior in general. Sending the report directly to parents also means greater involvement on the part of the family, resulting in a more rapid change in the pupil's behaviour. Thanks to this tool, student assessment not only takes into account academic results (know-how), but is also based on interpersonal skills, which are rarely assessed, yet are essential in the world of work (soft skills). Students are also encouraged to take responsibility for themselves and prepare for higher education.
- DeansList offers a number of features to facilitate the digitization of schools, including managing the meal system, student attendance/absence, transmitting grades, exercises, etc. Parents can thus obtain information directly, facilitating the work of the administration and **limiting the loss or delay of documents.**
- As explained above, the tool offers various means of communication to facilitate exchanges between the various parties involved. Teachers can converse directly with parents to pass on information much more quickly. These much more direct exchanges should **increase parents' involvement in their children's school life, improving their academic results.**
- Instant translation of documents and conversations is a real asset. Indeed, communication with parents can be difficult if they have a poor command of the school's official language. A translator **facilitates exchanges between parents and teachers,** which is beneficial for student follow-up.

Nevertheless, vigilance is essential:

- This type of solution puts additional pressure on students, who may feel constantly evaluated, even during breaks between classes. This pressure is accentuated by the sending of reports and messages directly between teachers and parents. It becomes more difficult for learners to differentiate between school and private life.
- The use of digital technology can exacerbate existing inequalities by reproducing social disparities. Parents with a limited understanding of digital tools and already little involvement in their children's schooling will be even less likely to become more involved, unlike those who are already very involved and regularly use smartphones, computers and so on.







Hivebrite is a social network like Facebook or LinkedIn, available only to former school graduates (ALUMNI).

Type

Social networking.

Competitive advantage

Hiverbite offers a much wider range of functionalities than a simple ALUMNI group on platforms such as Facebook or LinkedIn. In fact, the platform is far more user-friendly and practical.

Price

No relevant information was found on this subject. It seems that this tool is only available on a cost-per-user basis. According to a <u>BFM Business</u> interview in October 2023 with Jean Hamon, founder and chairman of Hivebrite: "the price starts at between EUR 10'000 and 15'000 for one year".

Number of users

The company claims nearly 1'000 customers, including Princeton, Stanford, Yale and Notre-Dame universities, as well as the Obama Foundation, Boeing and Roche.

Level of development

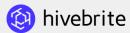
According to <u>l'Usine Digitale</u>, the start-up announced on Tuesday October 17, 2023 that it had closed a EUR 35 million Series B round, led by Quadrille Capital alongside Insight Partners and Edward Filippi, historical investors. Since its creation in 2015, the company has raised a total of EUR 54 million in financing. It has a number of high-profile customers, demonstrating a strong level of development.



How does it work?

Hivebrite customizes a platform that is only available to members of a school, and to former graduates. The solution behaves like a conventional social network, integrating more specific functionalities.

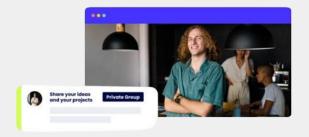




Features:

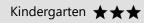
- It is possible to set up different groups where each individual has different accreditations, ranging from the user who can only view the page to the administrator who can control everything.
- When setting up an event, fundraising promotion and processing are carried out directly via the platform. Donations are processed via an integrated payment gateway. Alumni can easily make a donation using the payment method of their choice.
- The platform claims to be able to migrate to Hivebrite in less than 8 months, with the same features and the same number of individuals.
- Creating an event becomes very easy, especially for the registration system, which takes just a few clicks. In addition, pages are grouped by theme and keyword, facilitating the search system for users. These pages can be private or public, as required.
- It is possible for a company to share information and documents with a group of people or a defined group, notably via e-mail campaigns.
- **Direct contact is possible** between the institution and the members of the platform, as well as between the members themselves.
- Hiverbrite offers the possibility of creating a detailed profile similar to that on LinkedIn, with a location-based system that enables nearby alumni to be discovered if desired.
- The solution provides statistics on engagement rates.

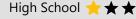












Elementary School ★★★ University & school ★★★











The quality of education and the reputation of an educational institution are often the decisive criteria for learners' choice of studies, while post-graduation opportunities are often overlooked. Paradoxically, former graduates are the main ambassadors of an institution, and keeping in touch with them is a great way to develop one's network - a considerable advantage when it comes to finding a job in the future. Hivebrite recognizes this perspective and energizes alumni groups, fostering exchange and collaboration within the Alumnis circle:

- One of the greatest strengths of this tool is to enable students to keep in touch with their former classmates, and to be able to forge links with future and former graduates. This feature is a real advantage for the professional world, enabling you to build a strong network with one's common schools. It can also be a great asset for universities and schools, boosting their profile and attracting future talent.
- Once they've obtained their credentials, alumni will continue to receive information from the school, as well as from various pages and groups to which they're affiliated. This connection provides a valuable opportunity for educational institutions to maintain contact with their alumni, helping to strengthen their presence and influence. **Alumni become ambassadors for the schools,** which again increases outreach.
- Hivebrite makes it easy to organize events, whether physical or online. These can be created in just a few clicks, unlike conventional methods. There's no
 need to set up a stand, count people, enter registrations and so on. In addition, fundraising and related processing are handled directly by the platform.
 Flexibility and ease of use encourage members to create different events to stimulate life on and off campus.
- The location function is particularly useful. It identifies alumni who live in or around the same city. This feature makes it **much easier to establish new contacts**, which is particularly useful when moving to a new city for a new job, for example.
- This type of tool makes it possible to **create a huge contact book for a school and its teachers.** If the platform's members have entered their details, as with LinkedIn, it's easy to find a speaker on a specific topic, for example. Where this is not the case, an e-mail campaign or an article on the news feed can greatly simplify searches.
- By analyzing the statistics provided by this tool, you can discover the engagement rate of an article, a group or an event. With this data, **it's easier to target relevant content** and bring people together.

Despite the advantages listed, there is one point to be made:

• The solution relies primarily on the involvement of alumni and the groups to which they belong. If these stakeholders are not well informed about the various functionalities, **the relevance of the solution could diminish considerably.** Similarly, it's essential that the institution's communication is not too intrusive, otherwise users **could lose interest in using it.**

Matific: fun for better conceptualization





Matific is a learning platform featuring a gamification system that makes learning mathematics fun and enjoyable from an early age.

Type

Mathematics learning platform.

Competitive advantage

The platform makes math more attractive with a gamification system.

Price

According to the website, the price is based on an annual fee of EUR 70 (CHF 66) for one year, or a monthly subscription of EUR 5.83 (CHF 5.55). A one-month subscription is available for EUR 9.99 (CHF 9.50). According to the Les Astuces de Julie website, the price decreases according to the number of subscribers.

Number of users

According to the official website, millions of users worldwide use the platform.

Level of development

Matific is an American company founded in 2012. In April 2013 it signed the first major contract for the production of 140 Common Core State Standards-aligned activities in the USA. The company is now present in over 120 countries, with 175 million mathematical problems solved every month. It collaborates with prestigious names such as Oxford University Press and JP International School. According to LinkedIn, the company employs over 150 people.



How does it work?

Teachers and students create an account on the platform. The teacher assigns different level groups to each class. The teacher can then assign exercises to the whole class, or to individual students from among all the exercises available in the catalog.



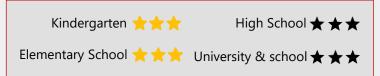


Features:

- The tool is equipped with an intelligent algorithm that assesses each student's progress and provides them with an individualized, tailored experience. The spaced repetition method is integrated into the adaptive algorithm, enabling students to revise and consolidate skills already acquired.
- Exercises are presented in the form of games, and the number of possible activities is quite impressive, with over 2'000 exercises on offer.
- Matific performs in-depth, real-time analysis of user data to facilitate observation of the time spent on the platform, find out how many students have completed their work, measure student progress, and so on.
- Activities are classified according to learner level (the class) but also by theme (fractions, geometry, algebra, etc.).
- The solution automatically defines and corrects homework for each student in the class.
- The tool integrates with several ecosystems already present in schools, such as Google Classroom, Microsoft and Clever.
- Various media are supported, with a version available on the Internet and an application downloadable from the App Store and Google Play, making it easy to use on tablets and smartphones.

Matific fonctionne





Matific: fun for better conceptualization





Certain concepts and myths persist, such as the idea of an innate predisposition to learning mathematics or languages. A notable example is the "math hump" theory, which has been disproved for many decades, but is still assumed by some people. For a child to excel in a subject, it's essential that he or she finds pleasure in it. That's why Matific uses gamification to reconnect mathematics with learners, while making life easier for teachers:

- The solution adapts to the level of each pupil, so that **as many people as possible are satisfied.** Learners with a good level will be able to improve and get ahead of the program, or go back over unclear notions. On the other hand, students who are struggling can progress at their own pace, with the help of the teacher. This is made all the more effective by the fact that the teacher has statistics at his or her disposal to better pinpoint the difficulties of each member of the class. **They can therefore target a certain part of the lesson if a majority of students do not understand a notion,** and move on quickly if exercises are quickly understood.
- The use of interactive games reconciles learners with mathematics, by diversifying learning methods and **generating greater involvement**. They'll be more inclined to do their work and ask questions. Another advantage is the ability to visualize certain concepts that can be complicated to understand, especially for younger learners. Games, but also images, **can facilitate understanding**, for example the image of slices of cake to represent divisions.
- · Working on several types of media is an advantage for schools, as they can exploit the material already available, thus limiting the investment required.
- Having a large database to provide homework assignments and having them automatically corrected is a significant time-saver for teachers, who can then devote their time to more qualitative tasks, such as helping students in difficulty.
- Statistics on screen time are a reassuring feature for parents. They can also monitor their children's progress and help them with exercises at home, **increasing** their involvement.
- Matific can easily be incorporated into programs that are widespread in schools, keeping costs down and facilitating integration.

Nevertheless, this solution can have some negative effects:

- This approach tends to encourage young people's dependence on digital technologies, which can lead to **increased eye strain and concentration problems**, disrupting their learning. It can also diminish their interest in other media such as paper. So it's only logical that **the students' parents should put up strong resistance to this type of solution.**
- Whether it's the school that supplies the material, or the parents who have to buy it, this represents a significant cost.
- Last but not least, Matific can widen the digital divide already present in the classroom.



Summary of the June 2024 edition





Definition of Edtechs



Methodology



Trends Analysis



CodeMonkey is an online platform that teaches learners coding languages such as Python and CoffeScript, all based on the principle of gamification.



Lingualeo

Lingualeo is a learning platform that enables you to learn several languages using a variety of learning mechanisms, including gamification and video viewing.



WeVideo is a video-creation software package that provides an all-in-one platform for easy content design, including features to increase interaction within the classroom.

showbie

Showbie is an educational platform that facilitates workflow management while offering the ability to digitize a wide range of classroom organization tasks.

⊗socrative

Socrative is an interactive quiz application that offers an experience similar to that of game shows, allowing participants to answer questions in real time.



Edtech trend analysis



Main technological trends

Represent **opportunities or threats** for the various players in the sector



Gamification



Artificial intelligence



Big Data



Virtual Reality (VR)



Publication of the report :
'Edtech in Higher Education: Empirical
Findings from the Project 'Universities and
Unicorns''

In this report, Centre For Global Higher Education concludes that EdTech in higher education is less advanced than presented by the industry. Data analysis is still simplistic compared to other markets, but universities are beginning to internalize the means of digitization. However, even if costs have fallen, the digitization process still represents a high-cost item.

Nouvelles marquantes



German education technology start-up a2zebra has announced a new financing round of **EUR 500,000 (CHF 488,524)**.



South African electronics technology startup HyperionDev raises **USD 5 million (CHF 4.5 million)** to expand operations.



Lirvana Labs raises **USD 5.3 million** (**CHF 4.8 million**) to strengthen its flagship Yeti Confetti™ Kids app, an Al learning platform for kids.



SecureMyScholarship, a Dubaibased edtech platform that connects students with scholarship opportunities, has raised **USD 550,000 (CHF 495,620)**.



CodeMonkey: Coding from an early age



CodeMonkey is an online platform that teaches learners coding languages such as Python and CoffeScript, all based on the principle of gamification.

Type

Educational platform.

Competitive advantage

The solution makes it easy to understand different programming languages through the use of games.

Price

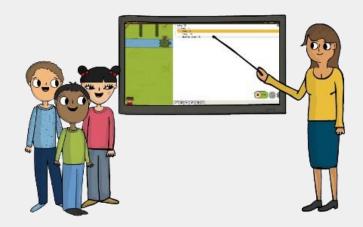
The tool offers different types of subscription. For an individual version, the price is USD 7 (CHF 6.3) per month; if the number of students is 5, then the price is USD 20 (CHF). Subscriptions are degressive according to the number of students. For schools or districts, quotations are available on request.

Number of users

According to the <u>74 Millions</u> website, the platform has reached over 75,000 teachers and 10 million students.

Level of development

CodeMonkey is an American company co-founded in 2014 by Jonathan Schor, whose aim was to make it easier for youngsters to understand coding. The platform has received numerous awards since its inception, demonstrating a high level of development, also reflected in a high number of exercises. According to its <u>LinkedIn</u> page, the company currently employs between 11 and 50 people.



How does it work?

Each learner has a login to connect to the platform via the website. Teachers can also log in with different functionalities to supervise their students. Games are offered according to class level.

Link https://www.codemonkey.com/



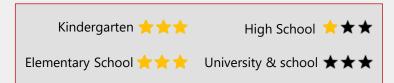
CodeMonkey: Coding from an early age



Features:

- The solution offers a range of games and courses to suit the age and class of learners.
- The platform is available directly from a web browser. Other media are also supported, such as tablets and smartphones.
- The tool features an automatic grading system and explanations of the various exercises.
- A class dashboard is provided for teachers, with various data. A detailed lesson plan is also available to facilitate application.
- The programming languages used in the games are real programming languages, notably Python.
- CodeMonkey is aligned with U.S. curriculum standards (no conversion with potential European standards).
- Summer camps are possible, but represent an additional cost and rates are available on quotation only.







CodeMonkey: Coding from an early age



In a world where computing, data and artificial intelligence are becoming increasingly important, it seems appropriate that academic subjects should evolve as well. CodeMonkey proposes to inculcate the basics of programming from an early age, so as to be better prepared for future needs.

- It's much easier to acquire new skills when they're instilled at an early age. This is particularly true of learning new languages. Whether it's to find a job, or to understand certain mechanisms such as artificial intelligence, there's an **increased need to understand computing language**, i.e. coding. It makes sense to make programming courses available to learners, especially when they are based on widely-used languages such as Python. The key is not to master coding perfectly, but to learn the basics. That's where CodeMonkey comes in, **using gamification to engage young students.** The platform not only offers practical lessons, but also, for slightly older students (around 10 years old), indispensable ethical concepts, especially in fields such as artificial intelligence.
- The immediate availability of courses, with no need for computer skills on the part of the teacher, is an undeniable advantage. The teacher can teach the course to all students, whatever their level. In fact, modules are adapted to suit the level of the class or the age of the students, limiting the number of specific teachers in a school, which reduces costs.
- The solution offers exercises to be completed at home, accompanied by an automatic grading system, **considerably freeing up teachers' time.** They can then devote their time to more qualitative tasks, such as assisting learners in difficulty, or exploring subjects such as ethics and data protection.
- The dashboard available to teachers, with usage reports for each student, gives an overall view, and enables them to observe the progress of individual students, **pinpointing those in difficulty.**
- This solution is an attractive alternative for **students wishing to get off the beaten track of more traditional options**, especially for those who are already thinking of going into an IT-related field.

However, this type of tool must be used with care:

• Integrating this platform requires a certain **amount of digital investment**, whether in the form of computers or tablets, which generates costs for schools or families if they have to purchase the equipment. What's more, it's important **to limit the amount of time young learners spend in front of screens**, to avoid eyestrain and possible cognitive development problems.



Lingualeo is a learning platform that enables you to learn several languages using learning mechanisms such as gamification and video viewing.

Type

Language learning tool.

Competitive advantage

The platform offers several methods to help you master a language.

Price

Lingualeo offers a Freemium model. The paid version includes more features and content. Subscription for one month is USD 6 (CHF 5.5), for one year USD 50 (CHF 45) and for 2 years USD 63 (CHF 57).

Number of users

According to the official website and Wikipedia page, the platform has over 23 million users.

Level of development

LinguaLeo was launched as a web application in March 2010 by Russian entrepreneur Aynur Abdulnasurov and his four-strong development team. The start-up subsequently won a number of competitions and received several investments. Today, it appears to be a well-developed and recognized platform for language learning.



How does it work?

Log on to the web version or the application to select your native language, then the language you wish to learn. Thereafter, a wide range of tools are available, depending on the learner's needs and level.



Features:

- The platform assesses language skills, with a test to determine learners' level of proficiency in a given language.
- Training is offered in the form of various games, such as "sprint", where the aim is to find as many words as possible in a short space of time, or the "word translation" mode.
- You can also play with friends and hold competitions between members of a class.
- The platform is available in many languages, at least when the native language is French: in fact, 8 languages are offered. The number of languages can increase or decrease depending on the native language.
- It's possible to use the platform directly on the web version or via the app, which is available on a range of devices including smartphones and tablets.
- The "jungle" mode allows you to learn in a highly entertaining way, by translating well-known music, watching video and film extracts, reading articles and so on.
- In addition to exercises and games, courses are available, grouped by theme.



Kindergarten ★★★ High School ★★★

Elementary School ★★★ University & school ★★★



Learning a new language, especially English, is a must for the world of work on the one hand, and to be able to understand and be understood in many countries around the world on the other. Unfortunately, assimilating a new language is complicated for many learners, which is why it seems essential to start acquiring new knowledge early. Lingualeo proposes the use of games as a way of learning a language.

- The solution offers a wide range of media and learning methods, such as games and the translation of music, TV series, film extracts and texts, among others. This diversity enables teachers to **make lessons more dynamic** by drawing on a wide range of content to stimulate learners. Similarly, students **can work independently according to their preferences.** For example, an at-home exercise might involve understanding the lyrics of a song, which is both motivating and rewarding for learners, who can then gain a better understanding of their favorite artists.
- The various exercises and content are generally grouped by level of difficulty. At the start of the application, a test is available to **assess the student's level**, which is then classified into four categories ranging from beginner to experienced, virtually equivalent to fluent command of the language. This difference in levels is a real asset for teachers and students alike. Everyone can progress at their own pace. Teachers can concentrate on learners who are having difficulty, and leave those who are progressing better to perfect their skills at higher levels of difficulty. What's more, the ability to adapt content to the level of each student means that a single tool can be used over several years. In this way, **students are not confused by a new tool, and schools save money.**
- The solution is available in several languages, offering two significant advantages. Firstly, if a student's mother tongue differs from the one taught, they can **improve their language skills.** Secondly, Lingualeo can be used in a variety of language courses, **pooling resources and reducing costs for schools.**
- The possibility of playing with friends and organizing competitions with different games is a good way of stimulating students. Setting up a group develops class cohesion, and confrontations increase the spirit of competition.

There is still room for improvement:

- Lingualeo uses games for language learning, but it unfortunately doesn't take into account science-based learning methods like Duolingo, which facilitate memorization.
- A feature to regulate screen time for younger learners might be a good idea, so as not to over-solicit learners.



WeVideo: Interactive learning through video





WeVideo is a video-creation software package that provides an all-in-one platform for easy content design, including features to enhance classroom interaction.

Type

Video creation software

Competitive advantage

The tool makes content creation much easier, and also increases interaction.

Price

The price depends on the number of users, but also on the features. For the basic video-creation version, the price is USD 57.85 (CHF 52) per year; for a class with many more possibilities, the price is USD 243 (CHF 222) per year. For schools, quotations are available on request.

Number of users

According to information provided on the official website, WeVideo exceeds 38 million accounts created, attracting a wide range of users, from businesses to teachers to individuals.

Level of development

Founded in Norway in 2011 with the aim of developing video creation, the company is now headquartered in Mountain View, California, with a team based in Romania. It works with over 100 employees, making it one of the most highly developed companies in this segment. In 2023, it won Common Sense Media's "Selection for Learning" award, with a perfect 5-star rating for overall learning.



How does it work?

The teacher logs onto the platform to create a video that records both the face and the computer screen. The tool then offers a number of features to make the video more interactive and stimulate learners.

WeVideo: Interactive learning through video

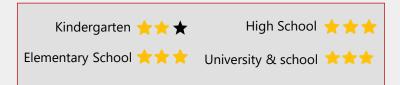




Features:

- The solution integrates with a variety of existing workflows, including popular learning management systems such as Canvas, Google Classroom, Zoom and others.
- Recording a video using the camera and computer screen capture is easy.
 The video can then be reworked using editing tools integrated directly into the platform.
- WeVideo uses a cloud to store the content produced, and the platform is available on several media and operating systems, including IOS and Android
- The **tool offers a wealth of royalty-free content** to enhance videos: use of over 460,000 videos, 125,000 music resources and more than 415,000 images.
- Elements can be added to create interaction with learners.
- A class dashboard is available, as is individual data for each student.
- Students can receive feedback from teachers online by submitting a video.
 A collaborative mode is also available.





WeVideo: Interactive learning through video





Often, classroom learning is quite vertical. The teacher delivers the lecture and the students take notes. This is particularly true in university lecture halls, where the teacher is usually the main speaker and the students are rather passive, coming forward only to ask questions. With this in mind, WeVideo aims firstly to simplify the creation of video content, and secondly to make it much more interactive, with the help of a range of features.

- Few teachers have any knowledge of video editing, which limits the creation of this type of content. With a basic knowledge of a computer, WeVideo **makes it easy to create content**, with features such as voice recording, screen recording, cutting out a part of the video, synchronizing takes, and so on. This ease of use means that course materials can be diversified, which can **increase learner motivation**. What's more, videos stimulate a different way of approaching lessons, with a much more visual method compared to more traditional teaching, **which should boost results**.
- Beyond the beneficial aspect of changing media, the tool emphasizes interaction between learners and teacher. The aim is to transform any video into an interactive experience. Numerous features are available, such as a multiple-choice questionnaire during the video, incorporating a YouTube sequence, setting up a poll, and so on. This type of element makes the learner an active participant in the course, increasing his or her involvement. To further increase student involvement, the solution proposes that they produce the content themselves, improving their oral presentation skills by familiarizing themselves with a new tool. It's possible to imagine a subject where, for each lesson, a student makes a short video to explain a specific topic.
- One of the strengths of this tool is its **adaptability to all teaching methods.** Indeed, the use of in-class questionnaires or surveys makes the course more lively. This type of content is also beneficial for online courses, which were compulsory during the pandemic period. The solution is highly versatile for both teachers and schools. WeVideo can be used for all subjects.
- The various data are a valuable asset for the teacher, enabling him/her to better understand the evolution of his/her class in general and on an individual basis. It is possible to display learners' attempts, record answers and track the completion of any course, **offering the possibility of adjusting content or focusing on more complex aspects as required.**
- The solution's ability to integrate with almost any learning management system saves time and money for schools. This high level of flexibility is also reflected in the range of media available (smartphone, tablet or computer), **limiting the cost for students**.

Nevertheless, vigilance is essential:

• Using the cloud to store videos limits storage capacity for teachers and students. However, this can be **problematic for user data protection.** Moreover, if many courses are stored on this platform, it should not run into problems.





Showbie is an educational platform that facilitates workflow management while offering the ability to digitize a wide range of classroom organization tasks.

Type

Learning platform

Competitive advantage

Showbie digitizes many of a teacher's activities, making tasks quick and easy.

Price

The tool's price is quoted on request only. According to G2 media, the tool is freemium with a free but limited version. A paid version with full functionality is available for USD 199.99 (CHF 180) per year for teachers.

Number of users

According to the <u>Geareducation</u> website, the platform has over 3 million users in 182 countries and a total of 233,978 registered schools.

Level of development

Showbie was founded in 2012 by Colin Bramm and Roy Pombeiro and is headquartered in Edmonton, Canada. The startup raised CAD 7.5 million (CHF 4.94 million) in 2021 during the covid-19 pandemic. Today, the company employs between 50 and 100 people, and its evolution and presence in a large number of countries reflect a relatively high level of development.



How does it work?

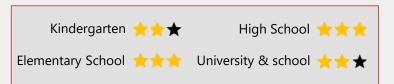
Showbie takes the form of a platform accessible via different media. Once logged in, teachers have access to their own work environment, which can be divided into different classes. Students also have their own digital workspaces.



Features:

- The solution **is available on several media**: web, smartphone and tablet versions, and on **several operating systems**, including Android and IOS.
- Different types of group can be created, according to the wishes of teachers.
 Within these, which are generally classes, different folders can be assigned, with documents and comments inside.
- A wide variety of documents can be uploaded, including photos, videos, voice notes, comments and more.
- Learners can download content directly from the platform.
- A variety of tools are available for directly modifying documents on the platform: adding text, highlighting a sentence, etc. It's even possible to pin an audio recording to part of a paragraph, photo, etc.
- Students are notified when work has been assigned and when deadlines are approaching. Teachers are kept informed when they ask questions or hand in work.
- Students' parents can also access the platform and be assigned to a group for live information.
- Showbie enables teachers to share lessons with other collaborators by adding coteachers to the class.







The daily life of a teacher is punctuated by a multitude of tasks, some more tedious than others. Among these, the management of documents and assignments, often carried out on paper, is a significant one. However, the Showbie application acts as a catalyst for change, offering an integrated digital solution. This platform centralizes and simplifies all these activities, offering teachers and students a single space where they can exchange homework, exercises and other teaching resources electronically. By digitizing these traditional tasks, Showbie is helping to modernize and streamline educational processes:

- The tool's ability to rationalize by digitizing almost all content saves a **considerable amount of time for both teachers and learners.** This limits the number of media and the risk of losing documents. Parents can connect directly to the platform with their own account or that of their children. What's more, thanks to the various tools made available directly on the platform, documents can be signed directly. Digitization is also good for the environment.
- The solution makes it possible to incorporate a variety of elements such as photos, videos, text, etc. **This creates a diversity of learning styles and a more dynamic learning environment, increasing student involvement and, in turn, results.** Beyond this diversity, it is possible to create different folders within a group or class to better structure a course and set up a chronological sequence as in a paper textbook.
- The **diversification of media is a real advantage for the tool,** offering the possibility of favoring the use of tablets for younger learners, due to their intuitive nature, and possibly switching to computers depending on the equipment available at the school. Smartphones can also be a useful tool for consulting messages, especially for students' parents.
- It is beneficial for parents to be able to monitor not only their children's academic progress, but also their overall development. This transparency encourages greater parental involvement in their children's educational journey. By being regularly informed about their children's academic performance, classroom behavior and other aspects of school life, parents can better understand their children's needs and offer appropriate support at home.
- Live editing of documents via the platform's functionalities should **increase interaction between learners and students.** The use of comments and recordings facilitates the understanding of exercises, particularly for homework, where it can be difficult to understand an exercise with only written instructions.
- The ability to share lessons with another teacher, coupled with the creation of a new class or specific group, can create synergy between different subjects and make the course more interesting. It's possible to imagine a duo between music and history, philosophy and mathematics, and so on.

Despite the advantages listed, there are two points to note:

- Unfortunately, the application doesn't go further with additional features such as a direct communication mode between parents and teachers or a diary function.
- It's important to pay attention to the exposure of the youngest children to screens, in order to limit problems of visual fatigue and development.

Socrative : Questioning ideas



Socrative is an interactive guiz application that offers an experience similar to that of game shows, allowing participants to answer guestions in real time.

Type

Application that makes it easy to create questionnaires.

Competitive advantage

The solution makes it easy to set up guiz-based games to stimulate the class.

Price

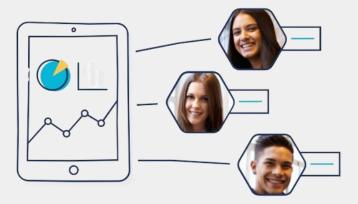
According to the website, the application has a freemium offer with a limit on features and 50 students for the free version. The "essential" version with more functionality is priced at USD 9.99 (CHF 9.10) per month per teacher, while the most complete version is priced at USD 16.99 (CHF 15.50) per month per teacher. The price decreases according to the number of teachers.

Number of users

According to the official website, Socrative currently has almost 3 million users worldwide, and is available in 14 languages.

Level of development

Socrative is an app that was designed by a group of graduate students in Boston, Massachusetts in 2010. The goal was to be able to assess the comprehension of a live class. The solution is now owned by Showbie Inc. headquartered in Edmonton, Canada. The application has been around for over 14 years and appears to be well developed.



How does it work?

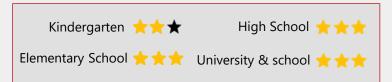
The teacher logs on to the platform and creates a class. Students can then log in without having an account. The teacher can set up questionnaires so that learners can respond live.





- Socrative allows you to set up several quizzes simultaneously. The number is limited to 5 for the free version, and there is no limit for the paid version.
- The platform can be organized into different classes and keep a record of the different quizzes and questions.
- Teachers are required to use an account to create documents, but this is not the case for students, who can log in directly even without a login.
- A variety of activities are available, including simple quizzes, "exit ticket" mode, "space race" mode and more.
- A scoring mode is available for assessments, with the option of weighting questions in the paid version, and incorporating rankings. Results can also be sent directly by e-mail.
- Integration via Google Drive is also available.
- To **restrict and identify learners** who log in, the teacher can limit log-in to those on the class list. They can use their student card to connect to the rooms.
- The application can be accessed from a variety of devices: Smartphone, tablet and web page.







Socrative : Questioning ideas



In an ideal school setting, classrooms should encourage a dynamic exchange of ideas, rather than being limited to a simple transmission of knowledge by the teacher. Often, it's the same students, those who feel most at ease with the subject, who take the floor. This can make it difficult for the teacher to assess the class overall level of understanding. Socrative aims to remedy this problem by offering every student the opportunity to express themselves in a fun and interactive way:

- The main aim of this solution is to assess the overall level of understanding of a course or a notion by means of a questionnaire. Classically, it is often the students with the best results who take the floor in class and answer the questions, which can lead one to believe that all learners have understood the course. The questionnaire has two major advantages. Firstly, it puts the spotlight on every student in the class, especially the shy ones less accustomed to raising their hands and asking questions. The latter can answer anonymously. The second advantage is that quizzes, like game shows, can be used to involve the whole class. Teachers can see exactly which notions have been mastered, and where students are having the most difficulty. They can then adapt their teaching accordingly. This is particularly true at universities, where the number of students is excessively high, especially in lecture theaters, where it becomes difficult to allow everyone to express themselves.
- In addition to giving a voice to even the shyest students, this tool creates interaction between teachers and students, making the course much more dynamic, which should increase student involvement and thus improve exam results.
- The application offers games that can be played in teams or individually against the whole class. The time-trial mode is a speed game in which several questions follow on from each other, the aim being to be the fastest with the maximum number of correct answers. This type of feature is an asset for motivating a class based through friendly competition. At the beginning of the year, it would be a good idea to use this application to facilitate meetings or to promote mixing between different groups in the class.
- The use of a questionnaire for assessment is facilitated when students enter their names, enabling the teacher to quickly grade the whole class, generating **significant time savings.** However, this method must be used with care, as it does not necessarily encourage the development of in-depth argumentative skills, but rather the memorization of simple knowledge.
- A final point of interest is **how easy it is for teachers to use,** even those with little digital knowledge. This accessibility also applies to learners, who don't need to identify themselves.

However, this solution can be improved:

- Unfortunately, the community **aspect isn't more developed, in order to pool the work of the entire faculty.** Indeed, the procedure for sharing a questionnaire is quite tedious. A teacher has to create a questionnaire, publish it publicly in order to obtain a code, and then pass it on to the interested teacher who, thanks to the code, will be able to download the questionnaire. To transfer knowledge, you need to know who the teachers are. It would be much more efficient to set up an integrated page on the platform with royalty-free questionnaires referenced by keyword.
- Generally speaking, students use their smartphones to answer questionnaires, but this can pose a problem for those who don't own one, exacerbating digital inequalities and creating a form of exclusion.



Summary of the september 2024 edition





Definition of Edtechs



Methodology



Trends Analysis



EducateMe is a learning management system that emphasizes collaboration in lessons and also enables various aspects of the classroom to be digitized.



Plume is a writing application designed to help learners improve their written expression skills through a range of exercises.



Simulatory is an intelligent surgical simulation platform, equipped with specialized tools, designed to provide an immersive training environment.



Code.org is an educational platform that provides comprehensive courses, with an interactive component, to teach students computer skills.



Discovery Education is a learning platform that gamifies various subjects, from maths to social sciences, offering different methods to facilitate understanding.



Edtech trend analysis



Main technological trends

Represent **opportunities or threats** for the various players in the sector







Artificial intelligence







Virtual Reality (VR)



Publication of the report : "2024 State EdTech Trends"

The State Education Technology Directors Association (SETDA) has just published The 2024 State EdTech Trends. The survey and report provide an overview of the top EdTech priorities identified in SETDA's survey of state policymakers, including state ClOs, state superintendents and commissioners of education, and chief information officers.

Notable highlights



Corrsy, an EdTech startup of Finnish and Iraqi origin, has raised **USD 500'000 (CHF 425'540)** in pre-seed funding to transform education in the SWANA region.



The e-learning platform upGrad has decided to raise **USD 35 million (CHF 29.8 million)** in loan capital from the b2b e-commerce platform EvolutionX.



LoveHeart AI, an educational technology for early childhood, has raised **USD 2.3 million (CHF 19.5 million)** in a seed round for its 'superintelligent help for educators'.



Bengaluru-based Edtech startup ODA Class has raised **USD 500'000** (**CHF 425'540**) in a Series B funding round led by Singapore-based Skywalker Education Technology Co. Ltd.

EducateMe: A comprehensive platform



EducateMe is a learning management system that puts the emphasis on collaboration in the classroom and enables various aspects of the classroom to be digitized, such as course creation, reporting, etc.

Type

Learning management system.

Competitive advantage

The tool digitises many aspects of the classroom, saving teachers time.

Price

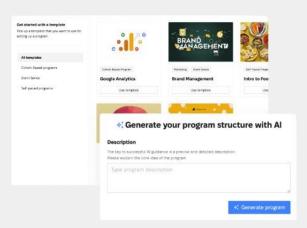
The solution offers an advanced version at USD 100 (CHF 84) per month and a pro version at USD 200 (CHF 168) per month. There's not much difference between the two, except that the advanced version is for 40 active users and the pro version for 80. An additional user costs USD 2.5. If the number of users exceeds 700, a personalized offer is required.

Number of users

According to its official website, EducateMe boasts over 100'000 users with various partners.

Level of development

EducateMe is supported by the <u>Google for Startups</u> Ukraine Support Fund, which provides non-equity cash rewards and development support to startups based in Ukraine. It is also part of Tinyseed, a start-up accelerator. According to LinkedIn, EducateMe employs around ten people and is based in the USA, but most of its employees are Ukrainian.



How does it work?

The platform takes the form of a dashboard with different functionalities. Teachers and learners have their own logins. The teacher can digitize various functions such as attendance during lessons, assigning lessons, etc.

Y EducateMe **(a >)**

- The solution makes it possible to create a complete course on the platform, with support for a variety of media such as text, images, videos, links, etc.
- The basic elements of the courses can be automated using intelligent algorithms, in particular to generate course titles and even certain content.
- The tool offers an automatic grading system and explanations of the various exercises.
- Instant messaging is available between teachers and students.
- The calendar function synchronizes lessons and assignments in the diaries
 of students and teachers.
- Many elements of the platform can be customized, including logos, themes and other user interface elements.
- The platform offers real-time reports on learner engagement and course effectiveness.
- Quizzes and polls can be set up so that students can be asked questions live.
- Many other tools can be used, such as the Google calendar function, Slack, Zoom, etc.







EducateMe: A comprehensive platform



Some tasks carried out by teachers add little value, such as distributing paper versions of lessons or calling students. Others, although useful, are tedious, such as setting up learner surveys and collecting their feedback. Setting up a digital platform simplifies these types of tasks, saving a considerable amount of time. EducateMe goes even further: beyond simple digitization, the tool aims to automate certain processes and use artificial intelligence to maximize the time saved by teachers.

- The ability to bring together different types of media on a single platform is an undeniable advantage. In a traditional course, students and teachers have to juggle paper formats, PDFs, Word documents for lectures, slideshows and potentially videos. This scattering of elements gives the impression of a disjointed course, which can make it difficult for students to follow. Centralizing all the documents on a single platform makes the course more coherent and readable for learners, while simplifying the management of materials for teachers, who can host them in a single location.
- The use of artificial intelligence **makes it easier to create content, freeing up teachers' time.** One positive aspect is that the tool does not rely exclusively on this functionality. Rather, it is designed as a support for course creation, capable of generating summaries or suggesting chapter headings. This technology can also **simplify the creation of automatically corrected quizzes,** making it possible to check students' knowledge or carry out assessments.
- As well as centralizing documents, the introduction of a common calendar for both learners and teachers greatly simplifies the monitoring of courses and the management of assignments. This reduces the risk of students forgetting and improves the organization of teachers, particularly in the event of potential collaboration. In addition, instant messaging makes communication between teachers and students much more fluid, helping to clarify certain issues and prevent students from dropping out. This feature is particularly useful during the transition from secondary to higher education, reassuring students who are moving into a completely new environment.
- The personalization of the platform can be an advantage for institutions wishing to develop their brand image and reinforce the feeling of belonging to a group or institution. This type of solution is often sought after by business schools, but it can also be of interest to all universities or schools.
- The ability to set up reports on the effectiveness of courses, to obtain feedback from students and to facilitate the creation of surveys means that students' opinions can be taken into account and the course can evolve according to the needs of the class, leading to greater involvement and better results.

However, this type of tool must be used with care:

Instant messaging can be oppressive for teachers and should be used sparingly, particularly in large classes.





Simulatory is an intelligent surgical simulation platform, equipped with specialized tools, designed to provide an immersive training environment for future doctors.

Type

Surgical simulation platform.

Competitive advantage

The tool allows you to train in complete safety in a discipline that is difficult to master.

Price

No price is given by the site and no data has been found in open sources. Given the technology used, this type of tool would appear to be fairly expensive to set up.

Number of users

No relevant information was found on this subject.

Level of development

Simulatory was founded in May 2021 by Gayatri Venkat, Dr. Ralf Wagner and Gourishankar Venkat with the aim of revolutionizing surgical training. The company has a number of renowned partners, including Innosuissse and ATOM. In August 2023, the start-up <u>received</u> a EUR 0.5 million grant from EIT Health for its patented surgical simulation system based on synthetic patient data. In October 2023, it became one of the 'elite start-ups' supported by NVIDIA. These factors lend this technology credibility.



How does it work?

The future practitioner stands in front of a device in the form of two 'pens', connected to a computer which in turn is connected to a screen. The device is equipped with advanced technology that captures the movements made by the user, reproducing them in real time on the screen to simulate a surgical operation.



- The tool imitates a real operation thanks to dedicated hardware and specific technology that links the movements performed by the user on the machine and the imitated operation displayed on the screen in real time.
- The experience can be made even more immersive with a virtual reality headset.
- The hardware platform can simulate several types of tools: the dilator, the endoscopic camera, rigid instruments such as scissors, and electrodes.
- The solution uses artificial intelligence with machine learning that learns the surgeon's playing habits each time they use the system and adjusts the simulation scenario and level of difficulty accordingly.
- Advanced sensors and visual computing provide structured measures of the surgeon's performance during training.
- The simulation engine has been developed to be displayed on different screens, but above all to represent patient cases and anatomy as closely as possible to real procedures.









On the one hand, studying medicine is very long and difficult, but it is also the most expensive. According to an article on RTS, the average cost to a medical student is CHF 120'000 per year, or CHF 720'000 for a full six-year course. Moreover, these costs are limited to teaching and research at universities. They do not take into account the costs of practical placements in hospitals or doctors' surgeries. Apart from the financial aspect, it is difficult to carry out certain procedures, particularly operations. In this context, Simulatory responds to concrete needs to help train future surgeons.

- The main advantage of this tool is that it can simulate an operation using instruments similar to those used in a real operation. The simulation displayed on the screen is both extremely realistic and faithful to human anatomy. Future doctors, and in particular future surgeons, can therefore **train virtually in complete** safety. This approach can improve training and accelerate the learning curve for students, making them operational more quickly for future operations. What's more, using a virtual reality headset makes the experience even more immersive. It might even be possible to recreate situations that are even closer to reality, involving nurses handing out instruments, for example, to simulate real operating theatre conditions.
- The sensors, which measure the performance of students during operations, are a real asset, as they enable them to track their progress over time, which in turn motivates users to improve. What's more, these sensors make it possible to identify areas for improvement that the human eye might not have detected.
- The use of artificial intelligence, which adapts to the habits and level of the user, **means that progress can continue over time**, and above all avoids boredom, **which could lead to a loss of interest.** It would be interesting to know whether this tool is also capable of simulating scenarios where an operation goes wrong, to better prepare future surgeons for all eventualities.
- As the device is fairly mobile, it can be carried with a computer and connected to a screen, making it usable in a number of situations. It would be conceivable to make it available in different classrooms so that students can see for themselves the work that is being done: this **could open up new vocations for young people**, bearing in mind that many countries, and Switzerland in particular, are currently experiencing a shortage of doctors.
- With the development of telesurgery (remote surgery), it seems appropriate to develop this type of technology. Future doctors would already be **familiar with these technological tools.**

This solution can still be improved:

• Simulatory currently specialises in lumbar spine surgery, so it would be useful to **know whether a development for other operations is easily reproducible.** On the official website, a new module is reportedly being developed for bi-portal endoscopy.

Plume: Training budding writers



Plume is a writing application designed to help learners improve their written expression skills through a range of exercises.

Type

Written production application.

Competitive advantage

The tool promotes writing among learners in a fun way that takes into account the level of each student.

Price

The free version includes the creation of activity paths for all pupils and reading aids. The premium version is priced at EUR 69 (CHF 65) for one year and includes printable materials, use in the classroom and at home, and correction aids. The final offer is aimed at schools and costs EUR 399 (CHF 375), giving you an unlimited number of licences.

Number of users

According to information provided on the official website, more than 31'000 teachers have adopted the application.

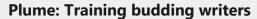
Level of development

Plume is a French startup founded in 2018 by Aude Guéneau, then a teacher of modern literature. She was soon joined by an educational and scientific committee made up of educational psychologists, speech therapists and researchers. Plume benefits from a number of recognized partnerships, including the French Ministry of Education, the Canopé network and the CNRS, among others. In 2021, the start-up raised EUR 2.2 million (CHF 2.07 million) from players such as Evolem, the MAIF impact fund, and Founders Future.



How does it work?

The teacher logs on to the application with his or her login details, and can then create a class by entering the names of the students and generating identification numbers. Learners can then log in using these numbers, without having to create an account, and complete the exercises assigned by the teacher.







- Plume allows teachers to divide the class into several level groups, but also to define a specific activity for each group or each student.
- A writing assistant is available to make it easier for learners to correct and learn, and offers feedback to help them make progress.
- The students' essays are centralized in the application and directly visible on the teacher's dashboard, who can add comments that can be accessed instantly by the students.
- Several media are available for the activities: computers, tablets and paper. However, some activities can only be completed using a digital medium
- The solution **offers a large number of different documents** and activities, with over 500 activities in the library.
- It's **easy to create or remove students from a class,** and it's not compulsory for students to create an account.
- Teachers can provide parents with logins so that they can monitor their children's progress and even print out the stories they have written, either in the form of a small book or simply on paper using a printer.



Kindergarten ★★★ High School ★★★

Elementary School ★★★

University & school ★★★



Plume: Training budding writers



The academic level of students, particularly younger ones, has been falling for many years, as the Pisa studies show. This phenomenon is also evident in Switzerland, with problems in learning to read. According to an article in the RTS referring to these same studies (Pisa), half of young people have difficulty understanding simple texts. And according to the latest figures, only 20% of young people read regularly. Even if various causes are pointed out, digital tools are an important factor, on the one hand because they influence cognitive development, but on the other because they use up free time, limiting other activities such as sport, reading, written expression and so on. It is in this context that Plume seems to be relevant, offering a digital tool that can reinforce writing and, more generally, written expression and comprehension.

- One of the main strengths of this tool is its ability to offer exercises adapted to the level of each student. Combined with the ability to form different groups, this feature makes it possible to support students who are struggling while offering more advanced exercises to those who are making rapid progress. In this way, students with difficulties can progress at their own pace, without slowing down those who are more advanced. This encourages more effective and harmonious learning, ultimately making the class more homogenous and balanced in terms of progress.
- Offering a variety of media is a real advantage, particularly for schools, which can use existing equipment such as computers, thereby **limiting the financial cost**. If they wish, they can also invest in tablets, which are quicker and more intuitive to use. What's more, the option of printing documents in hard copy **offers an alternative to the intensive use of screens,** limiting the potential risks of harmful effects, particularly for younger pupils, who are often more sensitive to prolonged screen exposure.
- Centralizing written work on a single platform saves teachers a significant amount of time. What's more, students no longer risk losing or damaging their work, allowing teachers to concentrate on more qualitative tasks. The inclusion of direct feedback from teachers encourages greater interaction and can even lead to flipped classroom approaches, where learners explain their stories in front of the class using a projection on the whiteboard. This method is likely to stimulate students' motivation and involvement, while improving their written expression and comprehension skills.
- The application, which does not require individual accounts to be created for each pupil, makes it much simpler to set up in schools. This approach also has the advantage of **strengthening the protection of pupils' personal data**, by limiting the amount of sensitive information collected and stored.
- Keeping track of students with learning difficulties can be complicated for teachers, especially when they have a large number of students to manage. This is particularly true for learners with dyslexia. **Plume offers specific activities adapted to this type of situation,** helping students to regain their self-confidence and progress at their own pace.

Nevertheless, vigilance is needed:

• As well as limiting screen time, particularly for younger pupils, it is important to **pay attention to the digital divide if tablets or computers are introduced.** Some pupils may not be used to using a keyboard, which **could cause additional difficulties.**





Code.org is an educational platform that provides comprehensive courses, with an interactive component, to teach students computer skills.

Type

Educational platform.

Competitive advantage

Code.org offers comprehensive courses on computing, with interactive experiments to stimulate learners' curiosity.

Price

The platform is run by a not-for-profit association, so all services are free. You can make donations or buy products from the online shop.

Number of users

According to the official website, over 80 million pupils and 2 million teachers use the tool

Level of development

Code.org is a non-profit organization supported by companies such as Facebook, Microsoft, Google and Amazon, among others. Its main objective is to promote learning to code throughout the world. Founded in 2023 by twin brothers Hadi and Ali Partovi, the association aims to democratize computing through educational videos. Today, it has won a number of prestigious awards, including the 'Best of STEM 2024', the 'Gold Transparency 2023', and the 'Student Privacy Pledge', among others. The platform is also recognized by numerous institutions around the world.



How does it work?

The platform offers a range of ready-to-use courses for teachers, with no need to log in to access the various modules. However, a login may be required to save progress and certain exercises.





- The platform does not require a connection, except in rare cases, for example if you want to save your progress or access certain specific modules.
- The courses are classified according to the level of the class, but also by different themes: learning to code, creating an application, learning more about artificial intelligence, etc.
- Code.org is available on any interface, all you need is a web browser.
- The courses are ready to use, with videos and interactive exercises.
 According to our research, you don't need any special equipment to carry out the various experiments.
- The courses are available in over 67 languages and have been studied in over 180 countries
- It is possible to **set up an evaluation system** that can take several forms: evaluation grids, post-project tests, checklists, etc.
- The tool allows you to create a dashboard with a view of learners' progress to monitor work and provide information on completion status, time spent and more.









Although we are still in the early days of artificial intelligence, at least as we know it today with the emergence of conversational agents such as ChatGPT, Gemini, Bing Al, etc., the impact of these technologies on society and individuals is already noticeable. This is particularly true for digital tools such as smartphones and computers, which are an integral part of our daily lives. Academic education provides only basic computer skills, and this is even more obvious when it comes to understanding models such as those used to develop artificial intelligence. It is therefore becoming essential to strengthen young learners' computer skills, not only to better understand digital tools, but also to protect themselves against them. Code.org is responding to this need by offering free computer courses to pupils:

- The platform offers turnkey courses for teachers, verified before publication, which saves a considerable amount of time. The modules are classified by school level and take into account the level of the pupils, as well as their cognitive abilities. The lessons are also grouped by subject, saving teachers extra time. The modules are simple to implement, with detailed instructions in one document, enabling teachers who do not specialize in IT to teach courses in this area. This means that schools do not have to recruit specialist teachers, thereby limiting costs.
- Code.org offers interactive exercises based on games to help learners understand complex IT mechanisms. These exercises are adapted to the level of the learners, stimulating them and increasing **their motivation and involvement.** What's more, the platform requires no specific hardware and can be used from any web browser, whether on a tablet or a computer. **The investment required from institutions is therefore reduced,** and even relatively old IT equipment can be used.
- The platform makes it possible to cover a wide range of subjects related to computing, which on the one hand can arouse new passions in pupils and steer them towards more scientific subjects, and on the other hand enables them to acquire solid skills in this area, training them better than other pupils. This is a valuable aspect for schools.
- No login is required to complete the exercises, making the platform more flexible and **more secure in terms of data protection.** Parents can also have their children work at home without having to take out a subscription or ask the school or teacher for login details.
- Many assessment systems are available immediately after the end of a lesson and can take a variety of forms, such as quizzes, MCQs or checkpoints. This makes
 it possible to assess student understanding while saving teachers time. This feature is coupled with a dashboard mode for observing the progress of
 learners, making it possible to identify areas of focus as well as potential students in difficulty.
- Courses on artificial intelligence and new technologies already exist, but it seems essential to include prevention in relation to digital tools, whether it's data protection, the use of artificial intelligence such as deepfakes, or addiction to social networks. It's vital to understand the risks associated with these technologies, particularly for young people.

Despite the advantages listed, there is one point to note:

• It's hard to find fault with a tool that's so free and so accessible, which no doubt explains why Code.org is supported by so many major companies. Nevertheless, care must be taken not to accentuate the digital divide among learners.

Discovery Education: Gamification and simplicity







Discovery Education is a learning platform that gamifies various subjects, from maths to social sciences, offering different methods to help students understand.

Type

Learning platform.

Competitive advantage

The solution uses a variety of methods to stimulate learners and facilitate comprehension.

Price

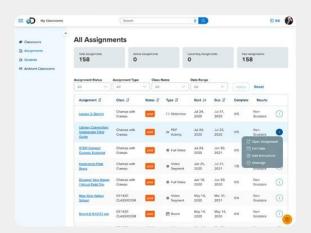
The price depends on the number of students at the school, but also on the number of modules selected. According to ESC 20, one of the regional education service agencies in Texas, the annual cost per student is USD 1.89 (CHF 1.59) and decreases with the number of students enrolled. For a school with 0-198 students, the cost would be around USD 350 (CHF 295) and for one with more than 530 students, it would be USD 1'150 (CHF 970).

Number of users

According to its official website, Discovery Education serves around 4.5 million educators and 45 million students worldwide, and its resources are accessible in more than 100 countries and territories.

Level of development

Discovery Education was founded in the United States in 2001 and is headquartered in Charlotte, North Carolina. According to its LinkedIn page, it employs between 500 and 1,000 people in various countries. The company's level of development is highly advanced and it is one of the benchmarks in the sector.



How does it work?

Each student must have their own user account to be able to connect. The various accounts are linked to a virtual classroom which is administered by a teacher who can then give exercises and observe the results.

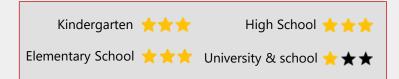






- The "dreambox Math" module introduces mathematics in the form of games. It uses an adaptive learning system based on the learner's level to adjust and readjust in real time.
- Teachers can **observe the progress** of the class and individual students in real time .
- **Daily updated reports** provide an end-to-end view of student progress, performance and trends throughout the year.
- The "experience" module offers cross-curricular content that does not address a specific issue or theme. The aim is to stimulate the students. This content generally takes the form of explanatory videos.
- The "science module" is based on traditional knowledge learning, but above all uses
 virtual laboratories or simulations that can be manipulated using the digital
 interface. Some of the activities are even designed to be carried out in the classroom
 with everyday supplies.
- Discovery Education is compatible with several types of media, including tablets and computers.
- The "DreamBox Reading" module has an assessment system to determine the level of each learner, and then different readings are suggested according to difficulty.
- For social sciences, **interactive textbooks with illustrations** show the different periods in history, with recent events also incorporated, interviews with different personalities, etc.







Discovery Education: Gamification and simplicity





Lessons can sometimes seem monotonous, both for students and for teachers, who are obliged to follow a rigid syllabus. Introducing more stimulating questions or methods, while strictly adhering to the syllabus, can be time-consuming, especially as the time available is precious, considering the number of hours spent per student. That's why Discovery Education offers more dynamic courses in many compulsory subjects:

- The use of real-time dashboards, whether for the whole class or for each individual pupil, enables teachers to monitor both the overall progress of the class and to identify pupils who are having difficulty, enabling them to **better grasp concepts that require more time,** by adjusting exercises or providing additional clarification. While the pupils are working on the tool, the teacher can concentrate on those who are experiencing difficulties and offer them personalized support. In this way, **no student will feel left behind.** These dashboards are supplemented by regular reports throughout the year, enabling the understanding and progress of the class to be monitored. Teachers can draw conclusions about the effectiveness of their lessons and decide to adjust or **maintain them from one year to the next to continually improve teaching.**
- The majority of the modules, whether they concern one or a group of subjects, are based on the principle of gamification, i.e. learning takes place through games. Mathematics games, combined with an adaptive and intelligent learning method, offer learners a dynamic experience by adjusting the level of difficulty according to their abilities. In this way, each student **can progress at their own pace**, without ever stagnating. A similar concept applies to virtual laboratories and simulations in the sciences, where the aim is to explore everyday phenomena and understand their mechanisms in a scientific way. Doing the experiment directly, even digitally, often has more impact than simply reading equations in a book. For the social sciences, digital books are enriched with illustrations and interviews, making them easier to understand. All these learning methods aim to **stimulate students' interest, encouraging them to become more involved** in completing exercises rather than focusing solely on passing an assignment. By stimulating this interest, drop-out rates will **be reduced and exam success rates improved.**
- It is often difficult to accurately assess a learner's reading level, as it depends on many parameters, such as their lexicon, reading speed, understanding of the meaning of words and of the text as a whole, etc. The tool offers an assessment system that allows you to pinpoint the learner's level. In addition, it offers texts adapted to each level, selected by a committee to ensure that they meet the requirements of the school curriculum. This allows teachers to devote more time to explaining the content and message of the text in more depth.
- The platform's exploratory content makes it possible to rethink the rigid frameworks of school curricula, while being validated by a teaching team, providing an **excellent source of content for requesting presentations from students** or diversifying the subjects covered.
- As the tool can be used in a wide range of subjects, its financial cost is also advantageous. Indeed, if several teachers want to set up this type of tool, and the school has to invest in tablets or computers, it will also be possible to pool the costs over several subjects and several years.

However, this solution represents a risk:

• While there are cost advantages to using Discovery Education for a number of subjects, there are also risks associated with excessive screen use, particularly among younger children. If all teachers use it, the amount of time spent in front of a screen can quickly reach 4 to 5 hours a day, not counting use at home. It is regrettable that a function for managing 'screen time' has not been integrated.



Summary of the December 2024 edition





Definition of Edtechs



Methodology



Trends Analysis



BRIM is a digital platform designed to report and prevent bullying behaviour, often associated with harassment, while enabling ongoing monitoring of these situations.



Atorika is a start-up offering workshops to be carried out in class to discover the world of art and science in a practical way.



NoRedInk is a digital writing platform designed for classrooms based on a gamification system and various methodologies to increase student involvement.



Prodigy is an educational platform that aims to make learning mathematics more attractive to learners by integrating gamification elements into the exercises.

@ ellucian

Ellucian is an all-in-one software package, hosted in the cloud, designed to digitise and automate all the administrative and academic functions of a school.



EdTech trends analysis



Main technological trends

Represent **opportunities or threats** for the various players in the sector



Gamification



Intelligence artificielle



Big Data



Réalité Virtuelle



Publication of the report: EdTech Market Forecast Report 2024-2029 Learning Management Systems (LMS)

Research And Market has published the EdTech Market Forecast Report 2024-2029, which shows that the market, valued at USD 334.29 billion in 2023, is expected to reach USD 738.60 billion by 2029. This highly competitive sector is seeing increasing competition between established companies and start-ups aiming to transform education with innovative technologies. Learning management platforms such as Canvas, Moodle, Blackboard and Schoology dominate, offering tools for course creation, content management and progress tracking.

News highlights

Perlego

Perlego, a subscription-based digital library offering unlimited access to academic titles, raised USD 20 million (CHF 17.9 million) in its latest financing round.

emerge

London-based venture capital firm Emerge has **raised GBP 56 million** (CHF 68.7 million) for its second fund, which will invest in 25 to 27 start-ups working on learning and the future of work.



Physics Wallah, an Indian start-up specialising in educational technologies, has secured new funding of USD 210 million (CHF 188.2 million).

REIMAGINED

Outsmart Education, a start-up founded by former Duolingo executives, recently raised **USD 13** million (CHF 11.65 million) in its latest round of financing.

BRIM: reducing harassment



BRIM is a digital platform designed to report and prevent bullying behaviour, often associated with harassment, while enabling ongoing monitoring of these situations within schools.

Type

Platform for reporting and monitoring bullying behaviour.

Competitive advantage

The tool digitises the entire process to keep a record, and aims to eliminate the fear and stigma that often prevent students from reporting bullying in person.

Price

No pricing is given by the site and no data has been found in open sources. Pricing is specific to the size of the establishment.

Number of users

According to the LinkedIn page, the tool is used by more than 200 schools in Canada, the United States and Australia.

Level of development

BRIM is a company founded in 2012 in response to a worrying reality: in the United States, more than 160,000 pupils miss school every day because of bullying. Its aim is to reduce this phenomenon. The solution has now been adopted by more than 200 schools and has a head office based in the United States, where around ten people work. It is also recognised by the Ontario Ministry of Education's Safe Schools Resource Registry, attesting to its credibility in the field.



How does it work?

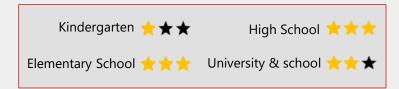
Students can report bullying behaviour using their smartphones via a form. The incident is then reported on the platform to the appropriate people, who can resolve the problem with BRIM's advice.

Link https://antibullyingsoftware.com/



- Students, whether they are victims of harassment or witnesses of such behaviour, can report it using an application available on their smartphone.
- Reports are centralised and stored in BRIM, enabling the appropriate people to intervene quickly and deal with the situation effectively.
- The tool offers one-touch sending of standard letters and commonly used responses.
- Keyword-based alerts immediately alert advisers to serious situations.
- It is possible to plan and allocate interventions to be carried out by staff.
- The school creates and sends notifications to parents and other stakeholders from BRIM.
- The tool can identify sensitive areas, repeat offenders and a detailed overview of bullying incidents in schools, sorted by date, location and level.
 This data can then be used to generate accurate and actionable reports.
- BRIM offers a communication programme and launch kit for successful implementation in a school.





BRIM: reducing harassment



Bullying at school is a problem that many children experience or observe during their school years. According to an RTS article, one in ten children in Switzerland are affected. The consequences of this violence can be serious and long-lasting, with some professionals going so far as to talk of post-traumatic stress. This can take the form of high levels of stress, school phobia, or even, in the most serious cases, dropping out of school altogether. One of the main challenges associated with harassment is the silence of pupils: victims are reluctant to talk about it for fear of being stigmatised, while witnesses avoid reporting it for fear of becoming targets themselves. In response to these challenges, BRIM offers a digital solution that makes it easier to manage and reduce cases of bullying at school, by providing a safe and discreet way of reporting incidents.

- Pupils in the schools have access to an application installed on their phones, which allows them to quickly and easily report any inappropriate or worrying behaviour. This system guarantees anonymity, **giving students a sense of security to report harassment or bullying without fear of reprisal or stigmatisation.** By facilitating this process, the application makes reporting more effective and encourages proactive communication. It also serves as a prevention **tool by deterring harassers**, who will know that their actions can be reported by anyone within the school. **This solution makes schools safer**, **which can make a real difference to school selection**.
- The platform not only makes it possible to report cases, but also to centralise them in a structured way. School leaders and other relevant staff can access a real-time dashboard of all reported cases. When a student makes a report, he or she fills in a concise form, which makes it possible to **categorise and prioritise problems** according to their seriousness or frequency. Digital storage of bullying behaviour ensures traceability, making it easier to take decisions. In particular, this feature makes it possible to determine whether a harasser's behaviour is isolated or recurrent, leading to appropriate and relevant sanctions. By centralising and organising this information, the platform helps to establish rigorous monitoring, more effective management of cases of bullying and significant time savings for the academic team.
- You can attach screenshots, audio clips or videos to use as evidence. Cases of cyberbullying are becoming increasingly frequent in schools, and this type of system can be a real asset in reducing this phenomenon.
- By gathering numerical information such as location, date and time, detailed reports can be generated, highlighting areas of risk and types of behaviour of concern. This data not only **makes it easier to put preventive measures in place,** but also to **reduce risky behaviour**, in particular by deploying guards in strategic locations identified thanks to these analyses. **This proactive approach helps to improve safety in schools.**

This type of tool must be used with care:

Pupils must be trained beforehand to ensure that the tool is used effectively and to avoid an overload of reports that would mask the real cases of harassment.







NoRedInk is a digital writing platform designed for classrooms based on a gamification system and various methodologies to increase student involvement.

Type

Digital writing platform.

Competitive advantage

The solution offers a range of methodological tools to get students more involved, as well as tracking their progress, offering personalised content, etc.

Price

A free version is available, but is limited in scope. A paid version offers full functionality, but pricing is only available on request. According to a Reddit post, the price varies between USD 16 and USD 19 per student per year, with a sliding scale depending on the number of students (the higher the number, the lower the price per student).

Number of users

According to the official website, the tool is used in 60% of American school districts.

Level of development

NoRedInk, an American company set up in 2012 by a secondary school English teacher, is enjoying real success. The tool, which is widely mentioned in many media, currently employs 155 people according to its LinkedIn page. Its adoption by a large number of school districts testifies to the maturity and effectiveness of the application.



How does it work?

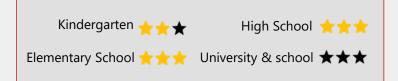
The teacher must create an account and then different groups on the platform corresponding to the classrooms. The teacher then transmits a code directly to the students, who enter it into the platform to connect. The students complete a short questionnaire to communicate their interests and the teacher can give them exercises.





- Learners can connect to a classroom using a simple code provided by the teacher, without having to create an account with an email address.
- Teachers can create several groups representing different classes.
- The solution analyses the reading level of each learner, giving a better idea of which students are having difficulty. It can also identify areas for improvement and therefore the concepts to be developed as a priority during the lesson.
- NoRedInk detects copy/paste rather than plagiarism, using a percentage.
 When the latter exceeds 40%, a purple dot is displayed. It is also possible to see which part of the text has been copied and pasted.
- For exercises or exams, the tool offers the option of centralising work, as well as observing the time spent based on keystrokes on the keyboard and mouse clicks.
- The practical exercises on offer are varied and can be adapted to suit the level of the student.
- Guided drafts provide support for students throughout the writing cycle, helping them to keep key concepts in mind.









With the advent of digital tools, and more specifically tablets, smartphones and computers, people's habits are changing. This is also true of the youngest readers, who have had connected devices practically since birth. This high level of use can lead to a decline in interest in books, which can have an impact on their ability to read and write. NoRedInk proposes to use digital tools to improve pupils' written expression.

- The tool stands out for its **ease of use,** both for teachers, who may not be very comfortable with computers, and for learners, who just need to enter a code to access the platform and the exercises. It also makes it easy to divide groups by class.
- The reading level analysis function is a major asset. It makes it possible to assess not only the overall level of the class, but also that of each individual pupil. **Teachers can therefore adapt their lessons to the needs** of the class as a whole, while providing personalised support for students experiencing difficulties, without stigmatising them. Learners who have difficulty reading or writing are often reluctant to participate for fear of being judged by others. This feature also makes it **easier to monitor progress through repeated assessments over time.**
- Copy and paste detection, combined with analysis of the time spent on exercises, saves teachers valuable time while limiting the risk of cheating. Although this system cannot prevent manual cheating without copying and pasting, it is still useful for identifying the effort made by students and better understanding their strengths and weaknesses.
- NoRedInk offers a range of exercises that transform learning by adding a fun dimension, such as fill-in-the-blank texts, error correction and a highlighting system. The
 tool adapts to learners' interests by personalising content according to the themes they choose themselves, whether it's about their favourite celebrities, characters or
 historical figures. This personalisation, combined with a level-based progression system, stimulates motivation, reinforces commitment and improves academic
 results.
- Finally, the self- and peer-assessment activities highlight the importance of revision in the writing process. By answering a series of questions about the content of their essays, students are encouraged to reflect and make adjustments based on their responses, accompanied by examples and advice. This practice enhances their ability to think critically and evaluate themselves, skills that are increasingly in demand in a digital world where algorithms tend to reinforce bias and limit openmindedness.

This solution can still be improved:

- It is regrettable, and even surprising, that NoRedInk only offers a web platform without a dedicated application. An application would make it easier to set up restrictions and would be more intuitive to use, especially on tablets.
- Setting up this tool requires investment in digital equipment, which can be an obstacle for some schools with limited budgets.

Atorika: Art and science through experience



Atorika is a start-up offering workshops for the classroom to discover the world of art and science in a practical way.

Type

Practical workshops.

Competitive advantage

The solution is delivered in the form of a box with all the equipment needed to set up a practical workshop to turn certain concepts into reality.

Price

The price of a workshop is EUR 35.99 (CHF 33.45) and includes Atorika challenge cards, materials and a tutorial. For an order of 9 monthly boxes, the price is reduced to EUR 27.99 (CHF 26). Finally, the price drops to EUR 24.99 for orders of 12 boxes. A school version has been introduced with an annual price of EUR 50 (CHF 46.45) and EUR 9.90 (CHF 9.20) per activity and per pair.

Number of users

No relevant information was found on this subject.

Level of development

Atorika is a concept born during the confinement in 2020. The founders were parents who realised what theoretical education at school was like, and decided in 2021 to set up a company with the aim of making lessons more practical. The company is headquartered in Mallemort, France, and currently has just under 10 employees. The company has a number of partners, including Edtech France, the CCI Aix Marseille Provence and French Tech. It plans to have more than 600 activities by 2030, and more than 50 indoor activities.



How does it work?

The teacher or school orders the number of boxes required, depending on the learning method and theme. The teacher then gives the lesson with the instructions contained in the box.

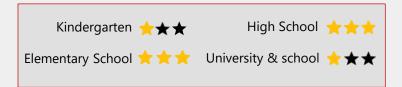
Atorika: Art and science through experience





- Each box ordered contains different elements to set up the experiment.
 The box also contains access to the tutorial in digital format only.
- The boxes are classified according to the different themes of art (sculpture) and science (chemistry, robotics, physics, etc.). The workshops are also classified by age and duration.
- 6 Atorika challenge cards are included in each box to make the workshop even more fun.
- In the version for schools, assistance is available, but there is also the
 possibility of video conferencing with members and even inter-class
 exchanges.
- A digital platform is available to explain the theory with animations, quizzes and videos.
- It is possible for schools to request tailor-made workshops and boxes, although the price of this service is not communicated on the Atorika website.
- A project called 'indoor parks' is in preparation. Its aim is to offer experiences in a dedicated setting outside schools.





Atorika : Art and science through experience





Since 2009, Switzerland, like many other countries, has seen a marked decline in school results, a phenomenon confirmed by the PISA surveys and reported by the media outlet <u>Le Temps</u>. A slight improvement was noted in 2022, but this improvement is particular in that it comes in the context of the post-COVID-19 recovery, after a period marked by disruption to education. Despite this, the overall trend remains worrying, with a continuing deterioration in student performance, particularly in reading and science. To meet this challenge, Atorika proposes to reinvent learning by making lessons more attractive. Through interactive workshops focusing on art and science, the aim is to help pupils gain a better understanding of complex concepts while rekindling their curiosity and enjoyment of learning. These initiatives use fun, innovative approaches to meet the expectations of the younger generation and offer practical solutions to the challenges facing the education system.

- The main added value of this tool lies in its **ability to animate a class through engaging workshops**, making lessons both more dynamic and practical. This change in teaching method is designed not only to energise the class, but also to facilitate the acquisition of knowledge by putting concepts into practice. This interactive approach offers students a generally **more accessible way of understanding and assimilating different concepts**, while at the same time stimulating their interest.
- The fact that the experiments are not limited to the sciences, but also include art, **means that solutions can be shared and made more accessible.** Certain activities combining several themes, such as chemistry and painting, create synergy between disciplines and encourage collaboration between teachers, a result that would be difficult to achieve without this type of tool. This pooling is made possible by a wide range of experiments adapted to different age groups, so that the specific needs of different class levels can be met.
- The digital platform, accompanied by dedicated support, is a valuable tool that **offers a new approach to teaching.** It makes it easier to prepare and manage lessons, while **saving teachers a significant amount of time.**
- Tailor-made workshops can be particularly relevant. You could imagine a school developing programmes based on practical lessons, **enabling pupils to better grasp certain complex concepts.** Once the teaching packs have been designed, they can simply be ordered each year, considerably **reducing costs in the long term.** However, it is regrettable that no indication is given of the cost of developing this type of activity, although this will naturally vary depending on the materials used.
- Although still at the planning stage, the creation of "indoor parks" represents a real asset for this type of solution. These spaces would offer an open-plan setting with supervised workshops, a room dedicated to collaborative group experiments, and an interactive innovation lounge, enabling everyone to explore and understand the technologies of tomorrow. Such an initiative would take learners out of traditional classroom environments, fostering their creativity and engagement.

However, one point could be reviewed:

• The main disadvantage of this **solution is its financial cost.** Most of the workshops are not reusable, which means that new boxes have to be purchased each time they are used, not to mention the environmental aspect. This can be a real obstacle for many establishments.



Prodigy is an educational platform that aims to make learning mathematics more attractive to learners by integrating gamification elements into the exercises.

Type

Educational platform.

Competitive advantage

Prodigy uses game-based exercises to get students more involved.

Price

The tool offers a freemium mode for free use by teachers. Three paying packages are also available for parents to support the project and obtain additional content: the first, limited to mathematical content, is available for USD 6.25 per month (CHF 5.60). The second, including science content, is available for USD 11.25 (CHF 10). Finally, the most comprehensive package is available for USD 14.95 (CHF 13.35).

Number of users

According to Google Play, the application is used by more than one million teachers and 50 million students worldwide.

Level of development

Prodigy is one of the world leaders in game-based learning. It was founded in 2011 in Toronto (Canada) to make learning maths more engaging. The company now has a very large number of users and over 200 employees. It is at a very advanced stage of development.

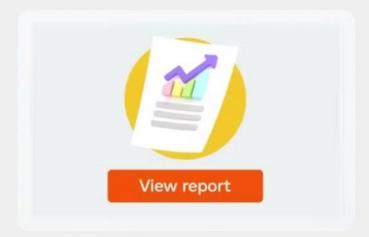


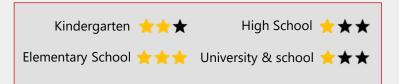
How does it work?

The tool takes the form of an open game in which pupils play the role of a magician. It seems that children are obliged to create an account to keep track of their progress. The teacher, for their part, provides the various exercises and monitors the learners' progress.



- The platform gives students the chance to create their characters, with different outfits and customisations.
- Students answer questions to progress through the story. The content of the questions can be developed by the teacher and is transmitted via an adaptive algorithm.
- Learner data appears in the form of dashboards for teachers.
- To simplify connection for the whole class, it is possible to use LMSs such as Clever, ClassLink and Google Classroom while obtaining an overview of student activity and performance.
- The tool is **available in several formats**: a web version and an application available on Google Play and the App Store.
- After a few sessions of playing with Prodigy Math, a placement test is automatically run to determine each student's baseline levels and areas of growth.
- Class objectives can be set with class rewards (such as accessories for the characters).
- The solution offers a collaborative module to simplify the sharing and coordination of work between teachers.









It can be difficult to generate real interest in learning, especially among the youngest members of society, because the applicability of knowledge, particularly in mathematics, is not always obvious in everyday life. Yet mathematics plays an essential role in the development of logical reasoning and the management of complex situations, skills that are increasingly important in our society. In response to this challenge, Prodigy is offering an interactive game designed to capture students' attention and instill in them a taste for mathematics.

- The solution gives students the opportunity to create and personalise their character, just like in classic video games, which boosts their motivation. By allowing learners to use their imagination, they become more involved, particularly if rewards are offered as an incentive. This game mechanic is an effective tool for teachers to stimulate interest in the classroom. For example, there may be a collective reward for solving a complex problem, which encourages cooperation between students and stimulates class discussion. More generally, gamification, combined with the introduction of new learning methods, helps to stimulate student interest. This provides a more engaging environment and can help to significantly improve academic results.
- After a few sessions with Prodigy, it becomes possible to organise placement tests to assess the level of individual students, as well as that of the class as a whole. These assessments, which are not graded, **make it possible to monitor students' progress and identify concepts that have not yet been assimilated.** With this information, teachers can adjust their lessons according to the real needs of the class and **provide better support for pupils experiencing difficulties,** without risking stigmatization. The platform also offers assignments that act as homework, enabling specific skills to be assessed from among the more than 1,000 listed. In addition, teachers can create their own exercises by writing customised questions tailored to their teaching objectives.
- The tool offers various monitoring reports for each student, providing precise data such as the number of questions answered, the time spent on each exercise and the completion of homework assignments. This information is invaluable for teachers, enabling them to identify the concepts that students are having difficulty with. It also makes it much more difficult for students to claim that they have completed an exercise when they haven't, which saves teachers time in monitoring and managing the class.
- -The fact that the solution is available on several media thanks to the applications is an advantage for schools, as it allows them to limit costs by using the equipment
 already available to them, whether tablets, computers or smartphones. This flexibility makes the tool accessible without requiring new investment in equipment.
 Similarly, parents can use the equipment they already own.

Despite the advantages listed, there are two points to note:

- According to several comments left by parents on various blogs, the solution seems to offer little theoretical content and focuses mainly on practice. So it's vital that pupils don't just play the game for fun, without grasping how it works and the concepts behind it.
- Even if Prodigy can be used in a number of ways, it is important **not to reinforce the digital divides** that may already exist within a class.

Ellucian: digitising schooling





Ellucian is an all-in-one, cloud-hosted software solution designed to digitise and automate all the administrative, academic and operational functions of a higher education institution.

Type

Saas solution (Software as a Service)

Competitive advantage

The solution makes it possible to digitise all the activities of a school by centralising them in a cloud.

Price

Prices are given upon request only and depend on the features required and the number of students.

Number of users

According to the official website, Ellucian is used by more than 20 million students worldwide and the solution is used by more than 2,000 institutions.

Level of development

Datatel, Inc. was a privately held company that provided fully integrated software and professional services to create platforms for higher education until it joined forces with competitor SunGard Higher Education to form Ellucian in 2012. According to its LinkedIn page, it employs more than 4,000 people in various countries. The company has won numerous awards, most recently the Stratut Awards 2024, and works with a number of well-known partners, including Amazon Web Service and Ferrilli. It also distributes prizes such as the Ellucian Impact Award, which rewards 'visionaries in higher education'.



How does it work?

Depending on the products selected, it is possible to digitise a wide range of processes within a school, such as the admissions process, fundraising, dashboard management, invoice management and so on.









- The solution digitises and simplifies the financial aspects for students, improving
 communication and introducing a more intelligent university cost calculator. It makes
 it easier to award grants and generate reports on student profiles, among other
 things.
- Ellucian offers various modules to **optimise the financial ecosystem,** including a unified and dematerialised payment system, making it easier to understand transactions with suppliers and all expenditure.
- Human resources solutions aim to improve the employee experience while helping
 to retain the best teachers and talent. This is achieved through process automation
 and greater transparency in recruitment practices, such as direct sharing of job
 vacancies.
- The platform **modernises all student administrative processes,** starting with simplifying and standardising admissions, and enables students to digitise academic advising and graduation procedures.
- The tool centralises a vast amount of data, enabling various dashboards to be created.
- Ellucian **runs on a cloud infrastructure**, which means that the institution does not have to physically manage the system.
- An artificial intelligence system is used as a chatbot to answer questions, but also to develop predictive models and recommendations.



Kindergarten $\bigstar \bigstar \bigstar$ High School $\bigstar \bigstar \bigstar$ Elementary School $\bigstar \bigstar \bigstar$ University & school $\bigstar \bigstar \bigstar$







In many educational institutions, the use of digital tools has not yet reached its full potential. This can be explained by the wide variety of departments within these institutions, each with their own priorities and concerns, which vary according to the needs of the different individuals involved. For example, the requirements of professors differ from those of students and administrators. Given this diversity of needs, Ellucian's ambition is to digitise all academic and administrative processes in order to simplify and improve the daily lives of all stakeholders. The aim is to create a more integrated and efficient environment through the use of digital tools.

- In the United States, university funding is a real issue because of the high cost of enrolment and ancillary fees. According to RTS, the average annual cost of a university education is USD 80,000. This is why a digitised and transparent funding system seems particularly relevant, especially when it comes to scholarships. However, a digitised process could also be advantageous for Swiss and, more broadly, European institutions. Although the costs are lower compared to American institutions, they are not negligible. Digitisation and centralisation of payment methods can represent significant time savings for both the administration and students. This aspect can also be coupled with a complete ecosystem from a financial point of view, enabling a better understanding of all the institution's costs, particularly with suppliers, in order to make savings.
- Standardising and digitising the student 'lifecycle' represents a considerable asset for both institutions and the students themselves. At present, in many universities and schools, administrative procedures, particularly admissions, are still carried out via the institution's web pages, which are often not very well optimised, and are then passed on to the heads of course, who then make a decision. Similarly, communication for graduation ceremonies may take place via personal mailboxes, as the addresses provided by the institution are deactivated after a certain date. Often, the school's various departments do not communicate effectively with each other and do not keep a consistent record of interactions. These malfunctions represent a significant loss of efficiency for institutions, generate additional costs and generate frustration among students. By centralising data, these problems can be avoided and overall productivity improved.
- Using cloud-based technology, rather than physical computers within the institution, offers **greater flexibility and is also financially advantageous for institutions**, which do not need to invest in new hardware.
- Using a chatbot available 24/7 enables schools and the administration to **delegate some of the work.** Requests that go beyond the chatbot's 'barriers' therefore become a priority, allowing educational staff to **concentrate on more qualitative tasks.** For students, the constant availability of answers is reassuring and theoretically enables **urgent requests to be dealt with more quickly.** Thanks to the data collected, artificial intelligence can proactively predict and identify atrisk students, thereby limiting the number of drop-outs and potentially increasing the success rate. Generative AI is also used to create intelligent forms that simplify repetitive administrative tasks, **saving considerable time.**

However, this solution represents a danger:

• This solution offers a number of advantages, but increases the **facility's dependence on Ellucian**. If the institution decides to change its tool, this could prove complex. What's more, a failure of the platform could paralyse its operations. Centralising data on a single platform also poses **challenges in terms of data protection management**.