MONTESALTI
EDUCATIONAL FOUNDATION
SWITZERLAND

LEPOLE

EVOLUTION OF EDTECH BUSINESS MODELS

Prospective monitoring
June 2024

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

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

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 physical attendance. 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

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 AI learning platform for kids.*

*SecureMyScholarship, a Dubai-based 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.

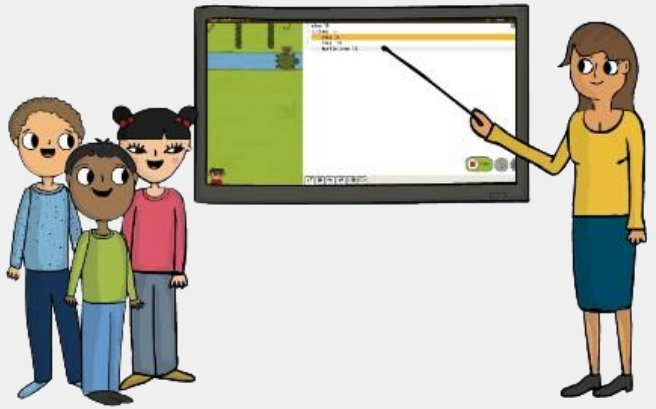
Type
Educational platform.

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 74 Millions 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 LinkedIn 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.

Kindergarten ★★★	High School ★★★
Elementary School ★★★	University & school ★★★

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: Gamification for better speaking

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.

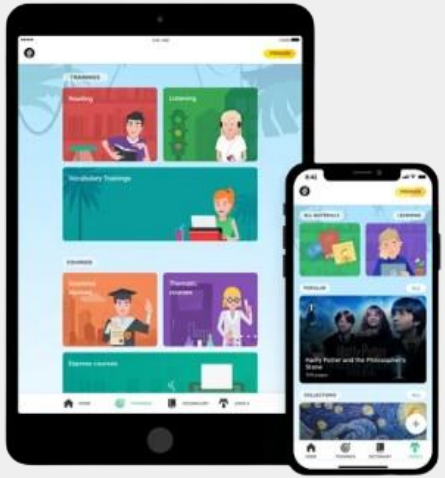
Level of development
LinguaLeo was launched as a web application in March 2010 by Russian entrepreneur Aynur Abdulnasurov and his four-strong development team. The start-up subsequently won a number of competitions and received several investments. Today, it appears to be a well-developed and recognized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

Link https://lingualeo.com/fr

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 ★★★

Lingualeo: Gamification for better speaking

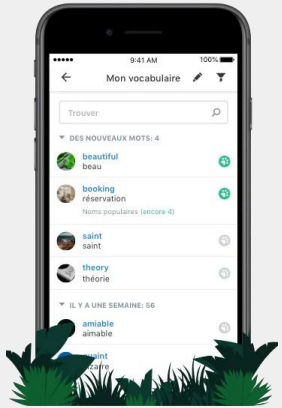
Learning a new language, especially English, is a must for the world of work on the one hand, and to be able to understand and be understood in many countries around the world on the other. Unfortunately, assimilating a new language is complicated for many learners, which is why it seems essential to 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.

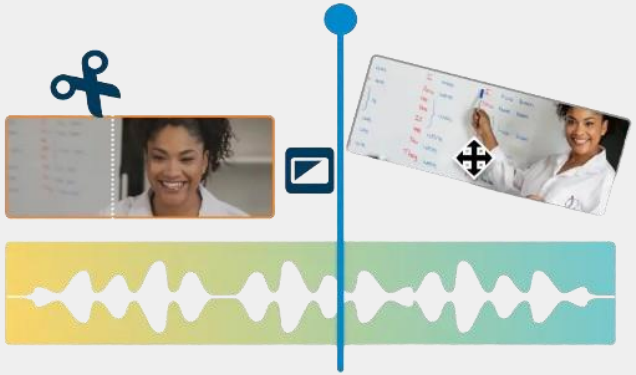
Type
Video creation software.

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.



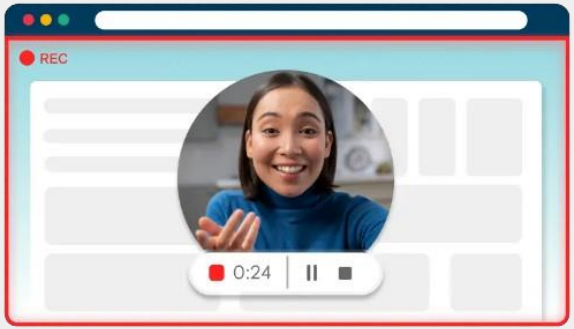
How does it work?
The teacher logs onto the platform to create a video that records both the face and the computer screen. The tool then offers a number of features to make the video more interactive and stimulate learners.

Link https://www.wevideo.com/interactivity

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.



Kindergarten ★★★	High School ★★★
Elementary School ★★★	University & school ★★★

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.

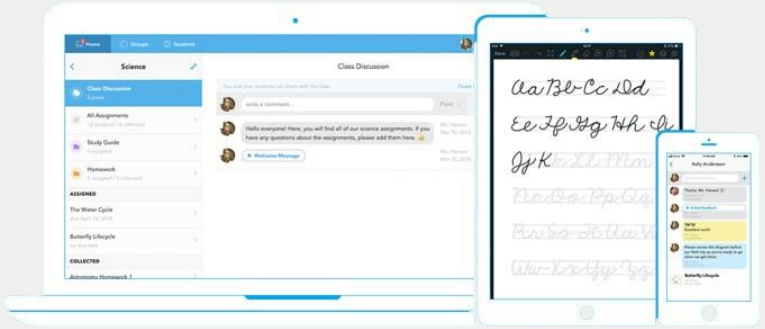
Type
Learning platform

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 Geareducation 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.

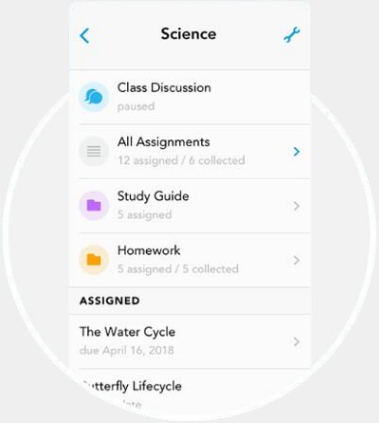


How does it work?
Showbie takes the form of a platform accessible via different media. Once logged in, teachers have access to their own work environment, which can be divided into different classes. Students also have their own digital workspaces.

Link https://www.showbie.com/

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 co-teachers to the class.



Kindergarten ★★★	High School ★★★
Elementary School ★★★	University & school ★★★

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

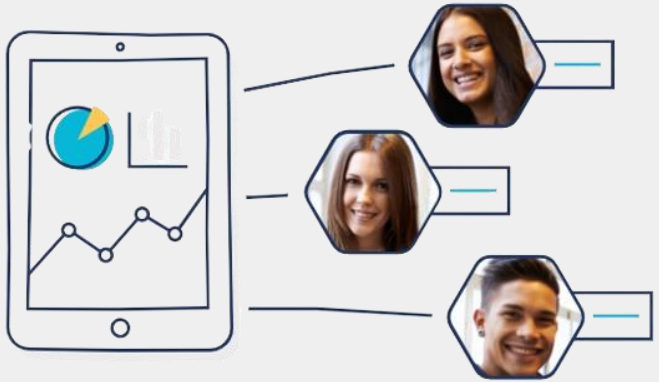
Type
Application that makes it easy to create questionnaires.

Competitive advantage
The solution makes it easy to set up quiz-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.



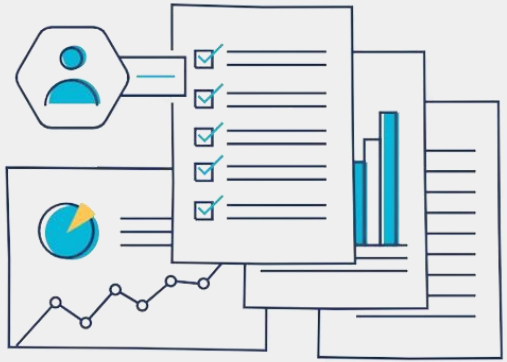
How does it work?
The teacher logs on to the platform and creates a class. Students can then log in without having an account. The teacher can set up questionnaires so that learners can respond live.

Link https://www.socrative.com/

Socrative : Questioning ideas

Features:

- 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.



Kindergarten ★★★	High School ★★★
Elementary School ★★★	University & school ★★★

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.**