



LEPOLE

EVOLUTION OF EDTECH BUSINESS MODELS

PROSPECTIVE MONITORING
September 2019



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Summary of the September 2019 edition



**Edtech
definition**



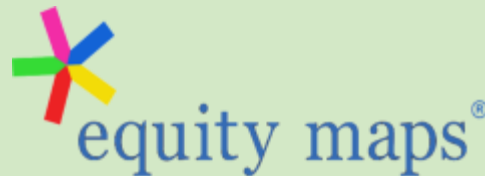
**Monitoring
Methodology**



**Analysis of
trends**



Novapad is a digital tablet that mainly supports teachers in the management of their class. The tablet provides textbooks from the largest publishers, additional educational resources (videos, audio, computer graphics, documents...), and educational applications.



Equity Maps is an application to evaluate, track and map student interaction, performance and involvement in a participatory discussion or workshop. Equity Maps provides statistics regarding the participation of each student in a group.

PocketCampus

PocketCampus creates "all-in-one applications" by centralizing different services offered by an educational institution in one place for increased visibility and accessibility. A similar solution (Appscho) was presented in the December 2018 edition.



Whaller is a platform for private and protected social networks. Users have the opportunity to create their own virtual discussion circles (family, work, association, friends) called spheres. Spheres are totally distinct and unconnected.



Unicheck is a cloud-based plagiarism detection software that finds similarities, citations and references in texts. The solution is used by individuals, academic institutions and companies.



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EXAMPLE OF PROSPECTIVE MONITORING



DEFINITION OF EDTECHS :

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

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

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

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

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

[DISCOVER MONITORING METHODOLOGY](#)



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DEFINITION OF PROSPECTIVE MONITORING



OVERVIEW

Prospective monitoring consists of implementing a systematic monitoring process of the environment in order to identify weak and mature signals which are indicators of change. It is a question of collecting strategic information to be able to anticipate changes in the ecosystem in order to respond as soon as possible and adequately. Prospective monitoring provides support for the implementation of a commercial and technological strategy.

METHODOLOGY

An effective method is to conduct products and service developments monitoring.

The below steps were taken to carry out the monitoring and illustrate the results:

- Research, analysis and comparison of a dozen innovative offers in the field of Edtech
- Identification and understanding of the commercial and technological benefits of these technologies
- Identification of Edtech trends and innovations. Trends represent market characteristics and developments.

OBJECTIVES

A company or an educational institution which wants to be sustainably competitive must constantly be aware of changes in its market in order to limit risks or benefit from these changes.

- Monitor competitive products and service developments
- Identify and distinguish innovative trends and strategies over the long term
- Analyse, critique and compare this information with the existing strategy of the reference organisation
- Evaluate competition and their business strategies through their innovations
- Carry out a self-evaluation and develop a strategy
- Find inspiration in the business and technological trends.

DISCOVER EDTECH TRENDS ANALYSIS



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Edtech Trends Analysis



More and more schools are using innovative technologies to improve their performance. Edtechs' technologies bring new ways of teaching and experiencing school for both students and parents as well as for teachers. **All of these technologies are committed to strengthening the pedagogical excellence, teaching and reputation of schools that host them.**

One way to make schools more attractive is to take into account and promote the physical and psychological well-being of students within and outside the school.

As such, the digital tablet **Novapad** fights against a **major public health issue: the weight of school bags**. By digitizing 100 school textbooks provided by more than 20 major publishers, the solution offers a **concrete and effective way** to fight against the **physical pathologies** involved in heavy school bags.

The application for iPad **Equity Maps** by evaluating, and mapping the interactions between students in a collaborative discussion or workshop **allows teachers to identify students with an unusual level of participation**. This tool could **help teachers identify students who have problems and unusual behaviours in classroom**.

Pocket Campus focuses its activities on "campus life" by offering schools the possibility of **centralizing in a single application all the services offered by the institution** (timetable, location of classrooms, printers, catering...). **The quality of life** on campus is a **key element in the attractiveness of higher education institutions** by contributing to the well-being of students.

Moreover, **Whaller**, a social networking platform, by offering **fully secure and customizable social networks** to schools, helps to combat **cyber harassment and cyber violence**, which can only **strengthen the reputation of the school using this type of solution**.

In another area, the start-up **Unicheck** will contribute to **maintaining and guaranteeing the pedagogical excellence and teaching of the school by preventing and combating plagiarism**, a real challenge concerning the **sustainability, quality and credibility of scientific research** which is a **decisive criterion in the attractiveness of educational institutions**.

DISCOVER EDTECH TRENDS



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EDTECH TRENDS



Collaborative course learning platform and soft skills

Online platforms allow information to be transmitted and facilitate access and learning processes.

- The accessibility of knowledge is the main advantage of these technologies for teaching across different media. They enable remote learning at the appropriate time for the individual.
- These platforms foster collaborative relationships between teachers and students. They facilitate group activities and communication.
- They enable the monitoring of the evolution of learning and the implementation of pedagogical procedures.



Artificial Intelligence and adaptive learning

Artificial intelligence (AI) in Edtech facilitates learning which is personalized. Edtechs learn themselves how to teach students better.

- AI helps to understand the individual's reasoning, to take into account his/her knowledge and the best ways for him/her to learn.
- This technology facilitates understanding by using the most appropriate techniques at the right moment.
- Teachers can use the analysis made by these tools to better understand students and their processes.





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EDTECH TRENDS



Experiential learning platform

Edtechs link internship offers with teachers and students.

- These services provide a better understanding of the labor market and its opportunities.
- Students receive hands-on training with mentoring from experts.
- Companies can discover new talents whereas students can discover the job market.



Edmodo



MENTOR MIND



Tools for creating, marking and evaluating exams, as well as reviewing papers with an anti-cheat system.

These Edtechs provide access to a secure platform in order to set up an evaluation procedure.

- They allow the creation of exams (MCQ, gap text, essay, graphs...) in all subjects, including tools for marking and grading
- These platforms facilitate the monitoring of student results to visualise changes in grades per student and per class. These technologies are secure and prevent any cheating.



Game-based learning

By using fun and educational tools, Edtechs are using games as a way to facilitate learning and attract the attention of students of all ages.

- These technologies make it possible to reinvent learning methods by using neuroscience.
- They value collective interaction and intelligence as well as group experience and creativity.



Language learning

Language learning is easier and faster.

- Edtechs measure the individual's pace of learning and calculate the appropriate timing of teaching and adapt course content based on knowledge.
- These technologies are permanently accessible and enable more effective learning processes.





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EDTECHS TRENDS



Life at school in community

Edtechs promote the school community and the smooth running and functioning of the school.

- These technologies promote communication between teachers, students and parents.
- They facilitate administrative procedures such as tracking school records or absences, for example.
- They highlight new pedagogical techniques to support students, for example, with awards.



Tools or solutions to directly or indirectly improve the physical and psychological well-being of students and/or teachers.

These have a significant impact on academic performance, teaching quality, pedagogical excellence and the school's reputation.

- These technologies allow the teacher's administrative work to be reduced as much as possible so that he can concentrate on teaching and on student's well being.
- These platforms aim to guarantee the physical and psychological integrity of the students.

PocketCampus



NEWSCHOOL



Whaller



UNICHECK

PocketCampus





Monaco

Novapad: A digital school bag for teachers and students

Novapad is a digital tablet that mainly supports teachers in the management of their class. The tablet provides textbooks from the largest publishers, additional educational resources (videos, audio, computer graphics, documents...), and educational applications.



Type  

Collaborative course learning platform and soft skills.

Competitive advantage

This solution provides on key advantage which is to allow the teacher to focus on teaching by optimizing classroom management.

Price

Three commercial offers are available depending on the number of the tablets that will be used (one tablet per student or a few tablets per class). Prices are not publically available.

Stage of development

The solution is commercialized. However, many functionalities are currently under development (controlling Internet access, transfer of homework, monitoring student progress, student assessment...).

Number of users

The solution is currently being tested in four French academies to validate and test its pedagogical relevance. Approximately 1000 users in 7 facilities are using 250 tablets.



Monaco

Novapad: A digital schoolbag for teachers and students

Advantages

Novapad mainly helps teachers to manage their class:

- Centralization of all educational resources, materials and applications (textbooks, educational applications, audio, video, Internet, physical documents...) within the tablet.
- Possibility to connect all the tablets in the classroom to the teacher's tablet. The centralized management of the tablets by the teacher ensures that the course is well mastered and conducted.
- The tablets can be instantly turned off to get the students' attention.
- The contents of the tablets can be projected on any support: overhead projector, television, computer, connected objects, etc.
- An application can be opened for all or some of the students.
- Physical documents can be scanned and distributed in real time: Photocopies are no longer required.
- Access to about a hundred textbooks (20 publishers). The teacher can then ensure via one tablet that all students have the material and are on the correct page.
- The tablet can be used both at school and at home.
- The teacher can prepare his lessons from any location and computer or electronic equipment. Thanks to the cloud technology, all the tablets are updated in real time.



Suitable for :

Kindergarten



Elementary school



Secondary /High school



University



Novapad: A digital schoolbag for teachers and students

Analysis of the interests

The use of digital tablet in a classroom can be a useful tool to streamline classroom management, increase available materials into one device, reduces paperwork, and ultimately support the teacher in actually teaching. The use of this solution can also be beneficial to the school's reputation.

Indeed, the digitalisation of textbooks (around 100 from 20 publishers) and teaching resources into one device will save teachers a lot of time. For example, a teacher could remotely open specific textbook pages on all of the students' devices.

The centralization and digitization of resources will also reduce the weight of students' school bags, a real public health issue, and will positively strengthen the image of educational institutions that take care of the physical well-being of their students.

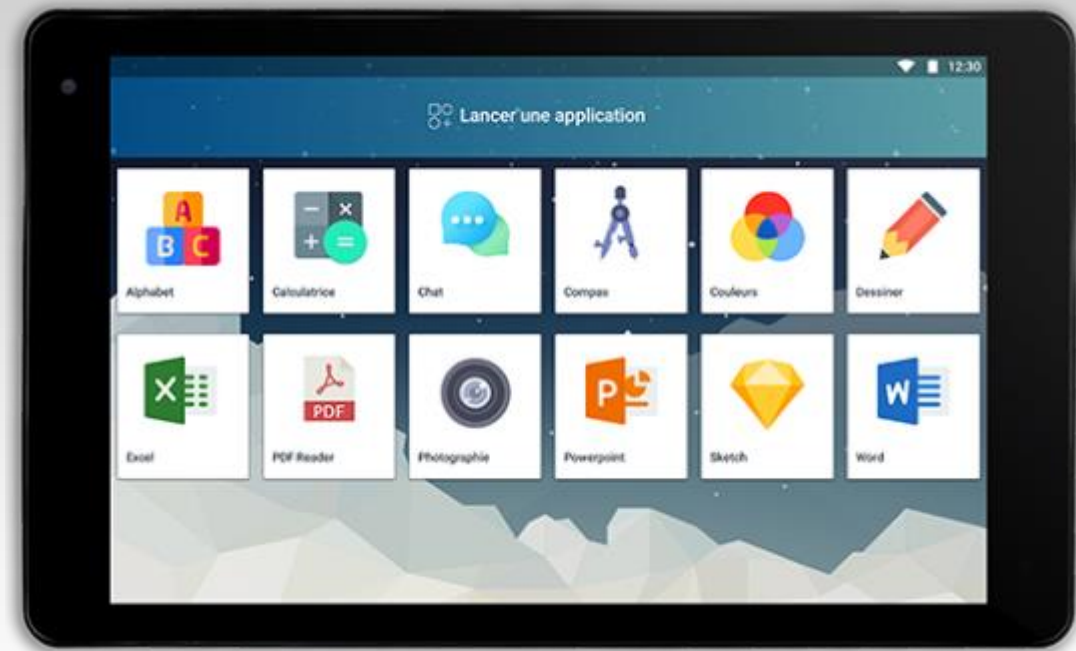
Novapads are also timesavers when it comes to scanning documents. A document can be scanned and sent to the entire class. Photocopying is therefore no longer necessary and makes it possible to reduce printing costs while taking into account the ecological issue, which can certainly improve the image of schools.

In addition, there is no constraint to use certain resources or pre-selected applications. Teachers are free to choose the teacher material they feel is most appropriate for their class.

The use of Novapad promotes a personalized teaching experience for students by reinforcing their engagement (application open to certain students, group work, sharing tablet content on external devices such as televisions, overhead projectors, etc.). This could improve student learning and achievement and thus strengthen the school's reputation for teaching and pedagogy.

Finally, through cloud technology, teachers can work on lesson plans and materials from any location or device. Students' tablets will be automatically updated and can be used in their homes. By accompanying teachers in the management of their classes, the tablet is a pedagogical tool reinforcing their teaching. It also provides flexibility to teachers and support in their daily tasks.

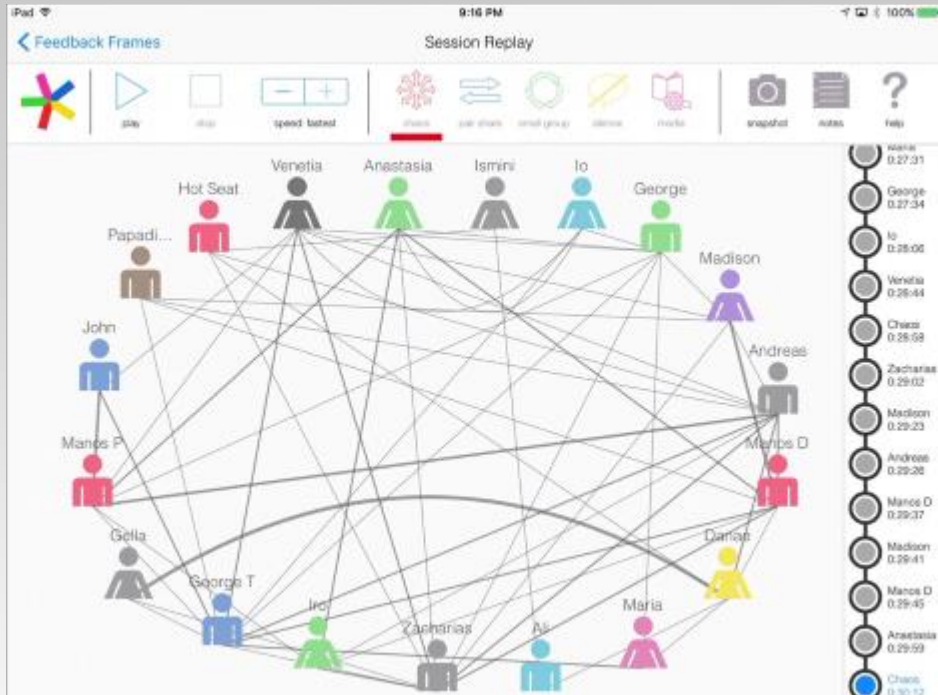
Although the product was designed mainly for secondary and high schools, Novapads can be used at university, particularly for the distribution of digitized documents or presentation projections.





Equity Maps: The graphic illustration of the level of student participation

Equity Maps is an application to evaluate, track and map student interaction, performance and involvement in a participatory discussion or workshop. Equity Maps provides statistics regarding the participation of each student in a group.



Advantages

- Trace and assess students' interaction.
- Provides statistics on the contribution of each participants (speaking time, equity, silence, frequency, etc.) and on the whole group.
- Possibility for the teacher to instantly give feedback on student involvement (after the session).
- The nature of the exchanges held can be characterized.
- Up to 40 participants per group.
- Ability to view and replay the session that took place.
- Export of possible results in Excel format.

Type Collaborative course learning platform and soft skills.

Price CHF 10 for the premium version.

Competitive advantage

The main advantage of this application is to provide the teacher with a tool to accurately and objectively measure student participation in a discussion.



USA

Equity Maps: The graphic illustration of the level of student participation

Analysis of the interests of this offer

Equity Maps retraces student interactions during a class discussion or participatory workshop. This tool can be a valuable tool for teachers to promote greater student participation and engagement.

First of all, the application on iPad allows the teacher to characterize student participation in a neutral and objective way. The larger the group, the more difficult it is for a teacher to define which students have spoken and to what extent. Thanks to statistics, Equity Maps makes it possible to accurately quantify the speaking time and frequency of each participant and the group as a whole.

Similarly, the application promotes gender equity during discussions. The application is able to provide statistics on this subject.

By using this application, the school or teacher will strengthen the cohesion of his or her class. Indeed, no student will be put aside and the most shy individuals will be inclined to express themselves in response to the teacher's encouragement after each discussion. The tool allows the teacher to identify a student with an unusual level of participation and who could have a physical or psychological issue that needs to be attended to.

In addition, the possibility of exporting the statistics to an Excel file will allow teachers to make comparisons over time regarding the progress of their students.

Moreover, the application allows teachers to define the types of contributions issued by students. During the discussion, the teacher characterizes the student's purpose by checking off a type of reflection or remark that he has previously recorded in a template.

This is the main limitation of this tool. Substantial preparation is necessary during the debate and a further person must be present in addition to the facilitator to ensure that the interactions are properly mapped (each time a student speaks, a person must notify the application, which remains very simple to do, however).

Furthermore, it should be noted that the interactions are not mapped in real time. The information collected during a session can be used at the end of the session and in following sessions.

Equity Maps is a particularly interesting tool for secondary and high schools, which are one of the main places for learning public speaking. However, this application is still relevant for use at university during tutorials which takes place in small groups and where there are many exchanges between students.



Suitable for :

Kindergarten	★	Elementary school	★★★
Secondary, high school	★★★★★	University studies	★★★★★



Switzerland

PocketCampus: the digital Swiss army knife for educational institutions

PocketCampus creates "all-in-one applications" by centralizing different services offered by an educational institution in one place for increased visibility and accessibility. A similar solution (Appscho) was presented in the December 2018 edition.



This app promotes the school's community and its proper management.

Competitive advantage

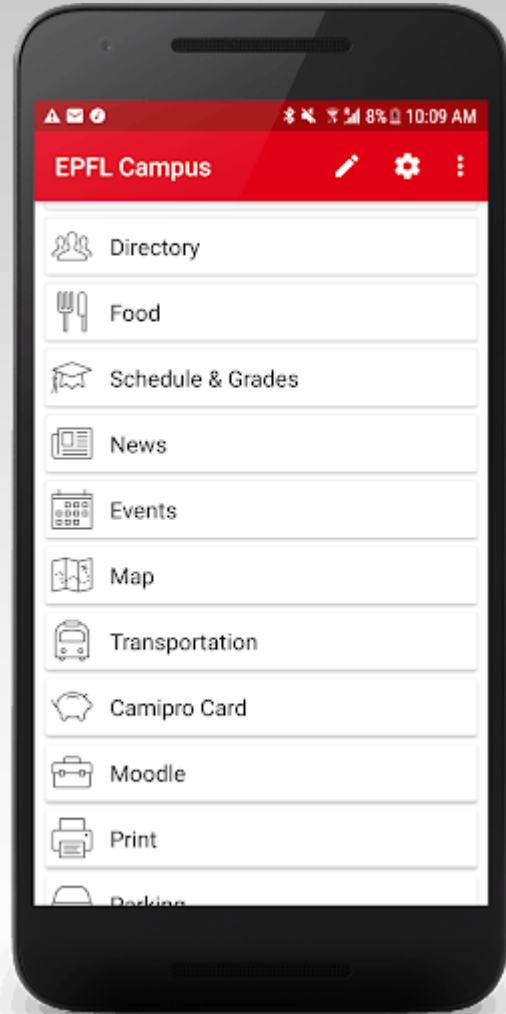
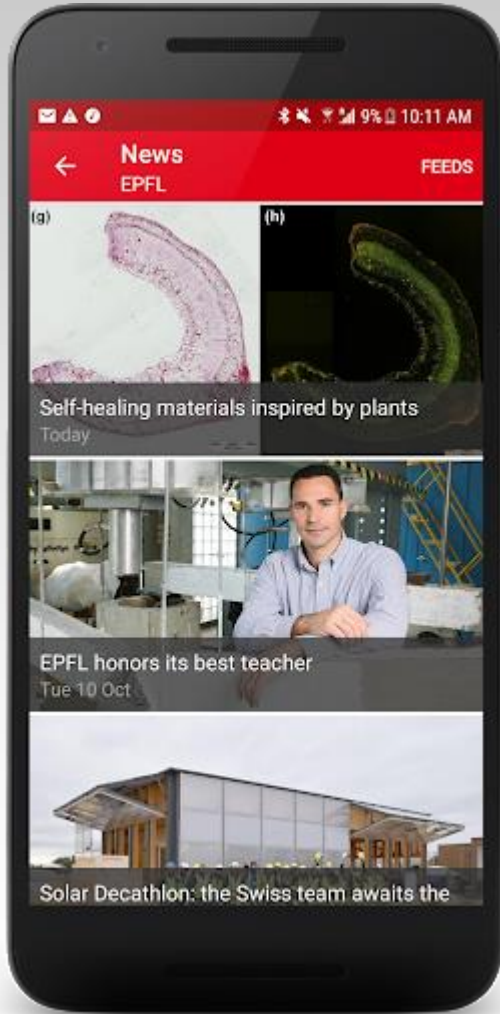
Pocket Campus centralizes in a single application all the different services offered by an educational institution (timetable, note, directories, location of classrooms...) necessary for the proper functioning of the campus.

Potential services

- Studies :
- Course material (documents, assignments, notes, forums).
 - Course schedule (What, When and Where).
 - Mobile printing.
 - Exam results.
 - Directories (contact teachers).
 - Study rooms, libraries (places available).

- Information about campus life:
- Restaurants, coffee shop (location).
 - Campus card (Balance, Expenses, refills...).
 - Plan.
 - Messaging from the school institution.
 - News and events.
 - Useful information (Emergencies...).

All applications can be customized according to the services offered by the school.





Switzerland

PocketCampus: the digital Swiss army knife for educational institutions

Suitable for :

Kindergarten



Elementary school



University studies



Secondary and High school



Advantages

- The all-in-one application is fully customizable with the institution's name, logo and colors.
- All the services offered by a school can be integrated into the application.
- An all-in-one application makes it possible to enhance the value of the services offered by a school.
- The application is very flexible in terms of authenticating users who use it and Pocket Campus adapts to the IT security system already in place.
- The costs of developing an all-in-one application are much lower (flat-rate updates) than creating an application for each new service you want.
- Credible technology partners.

Analysis of the interests

First of all, the centralization of various services offered enhances the school's value. A complicated multiplication of platforms can discourage students to fully take advantage of all services. Indeed, for each service, the student must connect to a different address with different passwords and login.

Campus life is as important as the quality of education provided by a school. Making life on campus as easy as possible for students will significantly enhance the attractiveness of an educational institution and, in general, its ability to attract new students and faculty members.

Registrations and inductions are streamlined and simplified, saving significant time for the institution. The application doesn't remove the actual physical welcome of new students.

Pocket campus is clearly a service for universities with a campus. Nevertheless, It could be adapt for a school that offers many services to its students and has dispersed premises.

Partners



Clients





France

Whaller: the 100% secure private social network

Whaller is a platform for private and protected social networks. Users have the opportunity to create their own virtual discussion circles (family, work, association, friends) called spheres. Spheres are totally distinct and unconnected.

Type



Whaller promotes the school community and the proper functioning of the school.

Competitive advantage

This solution guarantees all the functionalities offered by social networks (resource sharing) without suffering the inconveniences such as advertising, data exploitation, etc.

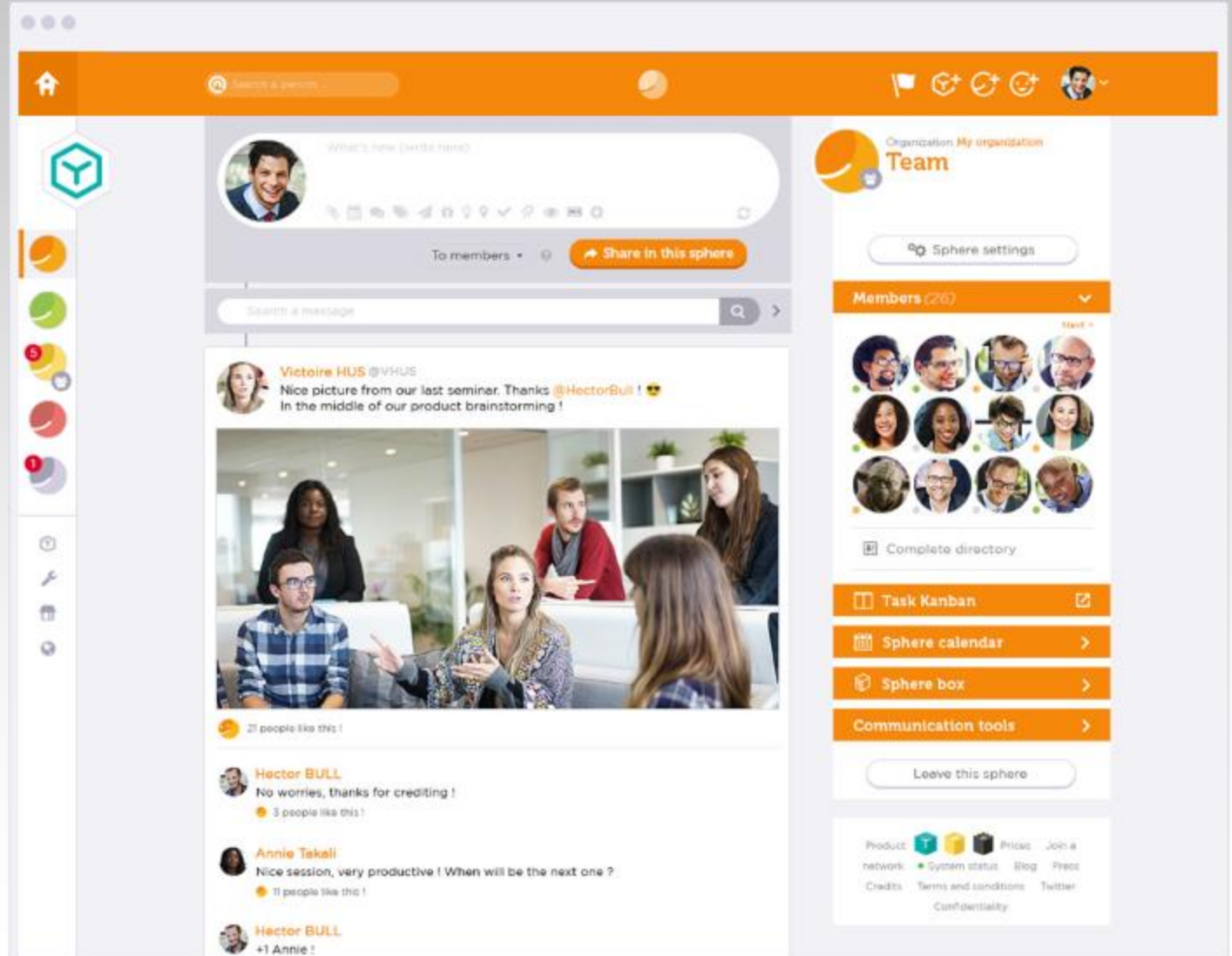
Price

Whaller offers an attractive commercial offer for educational institutions. The price for all the features of the tool is CHF 1.84 per month per user.

Stage of development

Created in 2013, the start-up will achieve structural profitability in 2019 while seeking to raise funds to expand internationally. The platform boasts 350,000 registered users.

Link <https://whaller.com/en>





France

Whaller: the 100% secure private social network



Advantages

- Possibility to create spheres (virtual discussion circles for different uses (family, friends, school, work...)) if user wants to segregate personal activities from professional ones.
- Each sphere is distinct and independent from others. This can be changed however by the user.
- No data collection and use.
- No advertising.
- Privacy and visibility of publications are defined by the user within his sphere.
- Possibility to share documents, links, videos, surveys, etc.
- For institutions, a portal allows them to manage and configure all spheres.
- Total customization of the social network (color, logo, graphic charter, etc.).
- Possibility to add agendas for each sphere.
- Possibility to add a document repository (like Sharepoint or Dropbox) for each sphere.
- Presence of analytics (activity statistics on the social network) to monitor the activity of the different spheres.
- Question and Answer Forum.
- Video conferencing tool integrated into the solution.

The many possible integrations



Suitable for :

Kindergarten	★	Elementary school	★★★
Secondary High school	★★★★★	University	★★★★★



France

Whaller: the 100% secure private social network



Analysis of the interests

Whaller is a private social network that allows educational institutions to secure a space for communication and exchange between students.

In a context where the protection of data of users is becoming paramount, the use of a solution that guarantees respect for data privacy and use will enable schools to highlight their commitment on this topic.

Moreover, the app allows schools to securely create and administer a private social network. The school manages its members and its privacy policies and conditions of use. The creation of such a private social network makes it possible to a certain extent to combat cyber violence and cyber harassment within schools and educational establishments.

In addition, the establishment of such a social network within a school could also be an opportunity to raise students' awareness of the digital reputation and dangers of the Internet.

The use of such a solution allows a school institution to strengthen its commitment to the fight against such phenomena.

In addition, Whaller can also be a tool used for communication for students and parents with the teachers. The possibility of being able to share many types of content (links, videos, presentations, documents...) encourages the use of whaller as an educational tool while presenting the same functionalities as a social network.

The simplicity and ergonomics of the tool, similar to that of traditional social networks, facilitate its appropriation by different users and will reinforce the innovative character of the school institution.

Whaller is a relevant tool for secondary and high schools. Students discover social networks and are not aware of the dangers they can induce. Nevertheless, Whaller will be suitable for any school institution wishing to have a personalized and secure social network and Intranet.



Unicheck: an easy to use, difficult to deceive anti-plagiarism tool

Unicheck is a cloud-based plagiarism detection software that finds similarities, citations and references in texts. The solution is used by individuals, academic institutions and companies.

Type



Tool for evaluation, creation of exams, marking and review of copies with an anti-cheat system.

Competitive advantage

The main advantage of this tool is to prevent plagiarism and to fight it in order to maintain the pedagogical reputation of the school.

Price

Three commercial offers are available for schools and educational institutions (different functionalities are offered in each ones).

Prices are not publically available for these three offers.

For a non educational use, the 10 000 pages checked are invoiced at approximately CHF 600.

Number of users

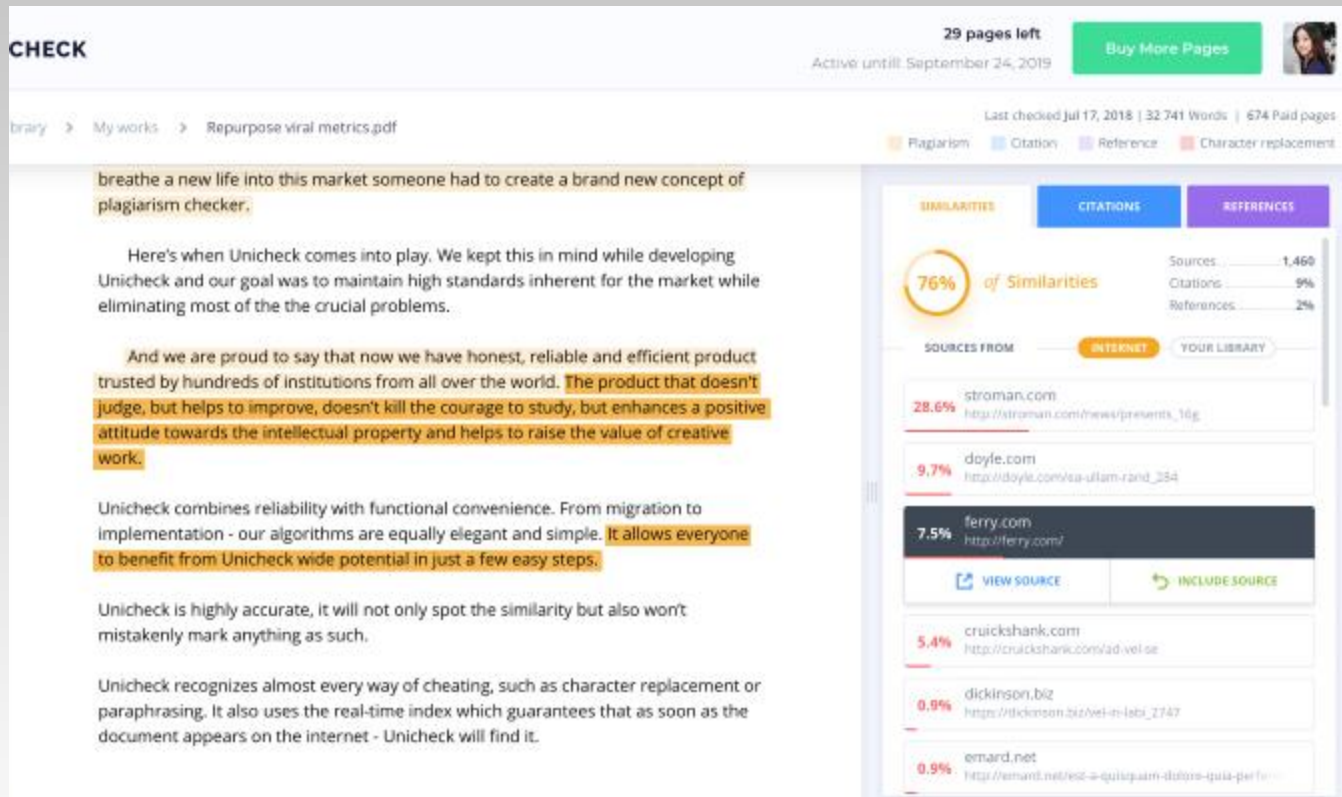
The solution is currently used by more than 1,100 institutions worldwide, in 69 countries, at the benefit of 10,000 educators and 1,300,000 students.

Link <https://unicheck.com/>

The screenshot displays the Unicheck Plagiarism Checker interface. On the left, a document titled "Should Plagiarism Become A Separate Subject Included Into Curriculum?" is shown. The document contains several paragraphs of text, including a quote from Weston (1988) and a reference to Derwing, Rossiter, & Munro (2002). On the right, the Unicheck interface shows a 53% similarity score and a list of sources with their respective similarity percentages. The sources include 21k12blog.net (19.40%), connectedprincipals.com (19.40%), rochereau.wordpress.com (17.61%), en.wikipedia.org (17.61%), en.wikipedia.org (17.61%), en.wikipedia.org (17.61%), capesmeeef1.wordpress.com (17.61%), and www.youtube.com (17.01%).

Similarity	Source
19.40%	21k12blog.net
19.40%	connectedprincipals.com
17.61%	rochereau.wordpress.com
17.61%	en.wikipedia.org
17.61%	en.wikipedia.org
17.61%	en.wikipedia.org
17.61%	capesmeeef1.wordpress.com
17.01%	www.youtube.com

Unicheck: an easy to use, difficult to deceive anti-plagiarism tool



Advantages

- Real-time web searches on more than 40 billion web pages, scientific journals, open sources, the institution's library etc.
- Anti-cheat technologies. Styles and formatting are removed to identify cheating (put blank characters between words, use letters from the Cyrillic or Greek alphabet etc.).
- Similarity report produced in real time and automatically (between 4 and 10 seconds per page).
- The similarity report is fully interactive with clickable sources, color reflections (one color for quotations, another for plagiarism, etc.).
- The report presents a similarity score characterizing the extent of plagiarism.
- 20 languages available.
- Self exclusion of quotations and references.
- Integration of the main learning management systems (Canvas, Moodle, Google Classroom, Schoology...).
- 99% of text formats are supported by the solution.
- Possibility to aggregate plagiarism statistics to analyze the practice of plagiarism at the level of an institution.
- Importing paper databases.
- Possibility for students to test their work with the tool.
- Data protection is a feature of the solution. Files downloaded for control are not stored on the solution's servers.

Suitable for :

Kindergarten



Secondary and High school



Elementary school



University studies





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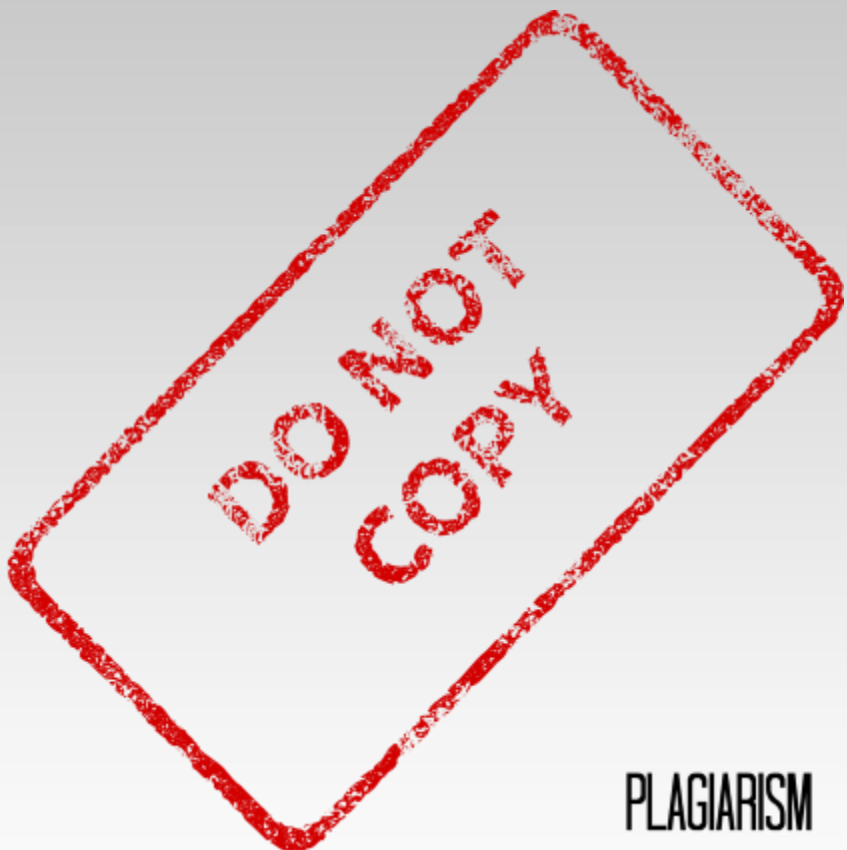


PRECEDENT



USA

Unicheck: an easy to use, difficult to deceive anti-plagiarism tool



Analysis of the interests

Unicheck is a tool that allows teachers and educational institutions to prevent and fight plagiarism.

In a context where the practice of plagiarism tends to develop with regard to the ease of access to information allowed by the Internet in particular, Unicheck offers a solution to teachers to accurately assess the extent an academic work is the result of students' work and reflection.

The use of this solution offers significant time savings to professors who wish to verify the work provided by their students.

Moreover, Unicheck prevents teachers from losing their credibility if they do not notice that papers submitted are plagiarism.

Beyond its ease of use (automatically generated similarity report), the is able to crawl more than 40 billion web pages.

In addition, the integration of multiple educational materials and resources such as Moco platforms or databases with restricted access is an important added value and allows for an exhaustive scanning of the latter to evaluate possible plagiarism.

What distinguishes Unicheck's offer is that students can use the tool before submitting their academic work. Making this tool open access makes students aware of their responsibility on this matter. It also reduces the possible repressive nature of this solution.

The use of such a tool will make it possible both to raise awareness among students and to characterize possible plagiarism in an objective and impartial manner. The use of such a tool guarantees the credibility of an institution's rating and the value of its diplomas.

Plagiarism is a particularly widespread practice at the university. The tool is therefore primarily intended for this type of institution. Nevertheless, this tool is totally suitable for secondary and high schools wishing to make students aware of plagiarism and check homeworks they do at home.