# TRENDS IN THE E-LEARNING SECTOR

E-learning is a way of teaching that includes communication and information technologies as a key to the teaching and learning process. One of its great competitive advantages is that it makes training compatible with the time needed for other occupational and personal responsibilities.

E-learning is advancing and growing at a mind-blowing pace: it is no longer a thing we talk about as the future of learning – it's the present.  It comes in different forms: **online, blended learning, and face-to-face classroom learning**. As new technologies are evolving, e-learning is changing and meeting new user needs – adapting to market demands.

E-learning provides a series of variables that other types of learning cannot, such as: **flexibility, personalization, interaction, and cooperation**. It covers a wide range of subject matters like languages, computers, business management and administration, marketing, sales, education, etc.
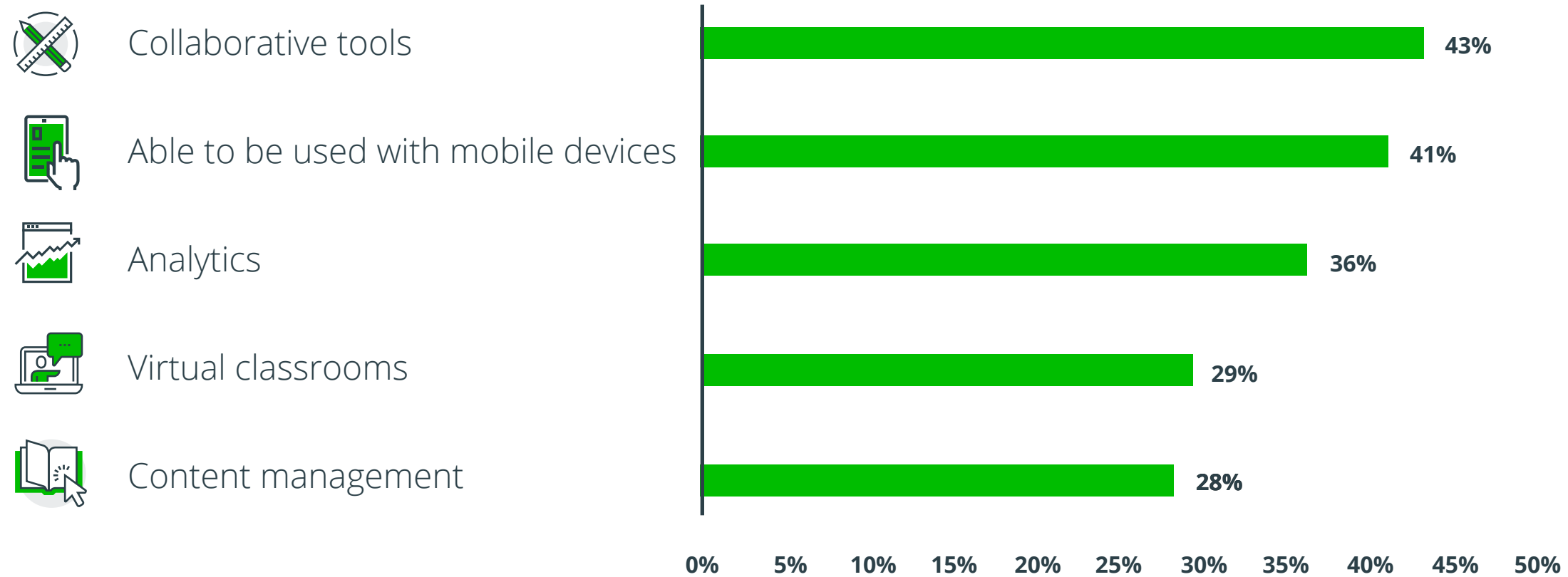
The market for global learning management systems (LMS) will undergo a sharp increase over the next few years and it is calculated that its growth will be around 24% until 2020.

**GLOBAL LMS MARKET**

**2016**
**3 BILLION $**

**2022**
**INCREASE 24%**

*Source: Technavio*
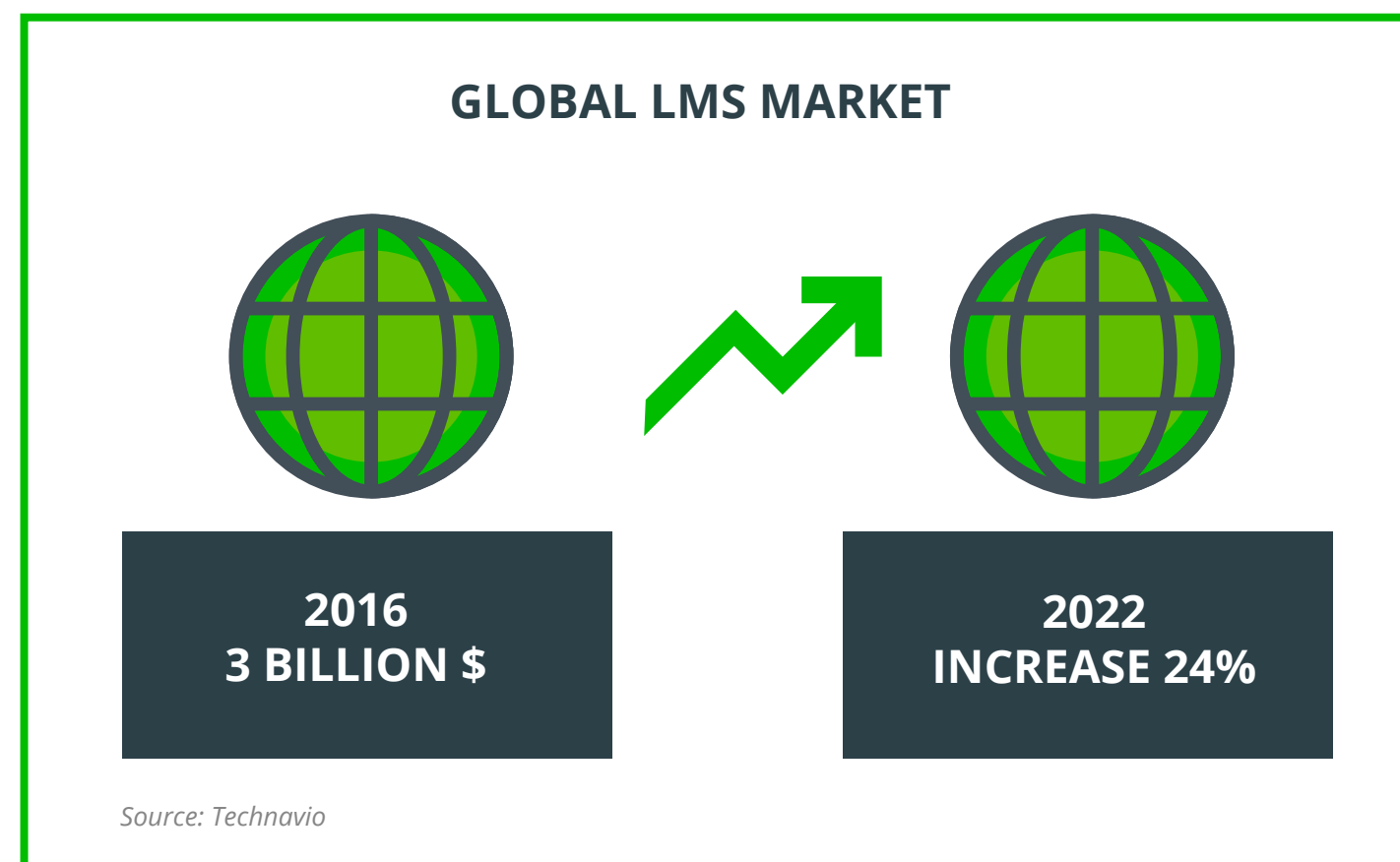
E-learning technologies should include the following features:

**TOP 5 LEARNING TECHNOLOGY PRIORITIES**

Collaborative tools — 43%

Able to be used with mobile devices — 41%

Analytics — 36%

Virtual classrooms — 29%

Content management — 28%

0%  5%  10%  15%  20%  25%  30%  35%  40%  45%  50%

*Source: 2016 Brandon Hall Group Learning Technology Study (n=302)*

The future of online training is a topic of great interest; therefore, at CAE and Dexway, our main goal is to help professionals in education companies and educational institutions to take full advantage of specialized technology.

We are proud of the status we have in the e-learning sector, thanks to our work and track record in terms of the research and development of the best technological solutions for the training sector.

As a leading company, we include all of the latest trends and most advanced technologies in our products once they have been tested for **maximum efficiency and efficacy in terms of online training**.

The key to the success of our products is that all of our efforts are aimed at meeting the needs of every user and guaranteeing their evolution in the learning process -- no matter what the subject matter is.

We wanted to share our experience and dedicate this e-book to showing you the **advantages of, and the latest trends in, e-learning** . These can be divided into four large groups:

Trends in technology

Trends in the way of learning

Trends in platform content

Trends in analysis

# 1. MAIN ADVANTAGES OF E-LEARNING

## Greater flexibility

E-learning offers greater flexibility when compared with the conventional way of learning in a traditional classroom setting.  This is because a set schedule is not necessary. Once the course has been configured, students can receive it at any time of the day and they can set their own pace in learning in accordance with the time they have and the goals they have set for themselves.

## 24-hour access

This advantage is closely related to the aforementioned, as the student can easily access the course content at any time.  The only thing needed is a connection to the internet to be able to gain access to the course content, contact tutors, or do exams.

## Adaptation to learning pace

Online courses have a term that is broad enough for students to be able to finish training at whatever pace they like.

## Unlimited virtual resources

The majority of online courses have a virtual platform, also known as a virtual campus, where students have access to all learning content, where they can get in touch with tutors and mates, where they can upload their work, etc.

## Up-to-date content

The course content can be immediately updated. In e-learning courses, any change can be made at any time so that students access information that is always up to date.  This is practically unthinkable in the conventional form of learning.

### Personalized training

E-learning courses have the great advantage of being able to be personalized in such a way that all students are able to have a different view on their educational platform, where they can see their progress, the activities they have completed and those still pending, etc.

### Activity compatibility

E-learning is compatible with any other activity.  For example, it allows work and studies to be combined; as we said before, access can be at any time from any computer and the student chooses how much time to dedicate to training.

### Reduction of learning times

Studies have proven that, if e-learning solutions are offered, learning times can be reduced between 40% and 60% when compared with traditional classroom learning.

### Reduction of costs

The previous advantages bring about this last one: reduction of costs for both the school and for the student.  This reduction can reach up to 30% less when compared with traditional, face-to-face instruction.

# 2. TRENDS IN TECHNOLOGY

## 1. WEARABLE LEARNING

Wearables are greatly increasing on the technological scene. Pieces of equipment such as Apple Watch, Google Glass, and Oculus Rift are a new trend.  Wearables are **accessories** that include **technological elements**. This portable technology is **intuitive** and creates the perfect environment for **continuous learning**.

The advantage of these devices is to help the user to access content in a dynamic, multi-dimensional way.  Thus, they transform e-learning into an attractive, interactive, and adaptive tool.

The advantages of this technology are that it allows for:

An immediate, effective response.

Real-time support materials.

Instant access to manuals.

Responses anywhere.

## 2. MOBILE LEARNING, OR M-LEARNING

A statistical reality is the decline of the use of computers and the **increase** of the use of **cell phones** and **tablets**. Mobile learning, also known as m-learning, consists of creating e-learning content that is specially designed for mobile devices – and this type of learning is on the rise. There is a growing trend of designing materials which are more geared towards mobile devices.
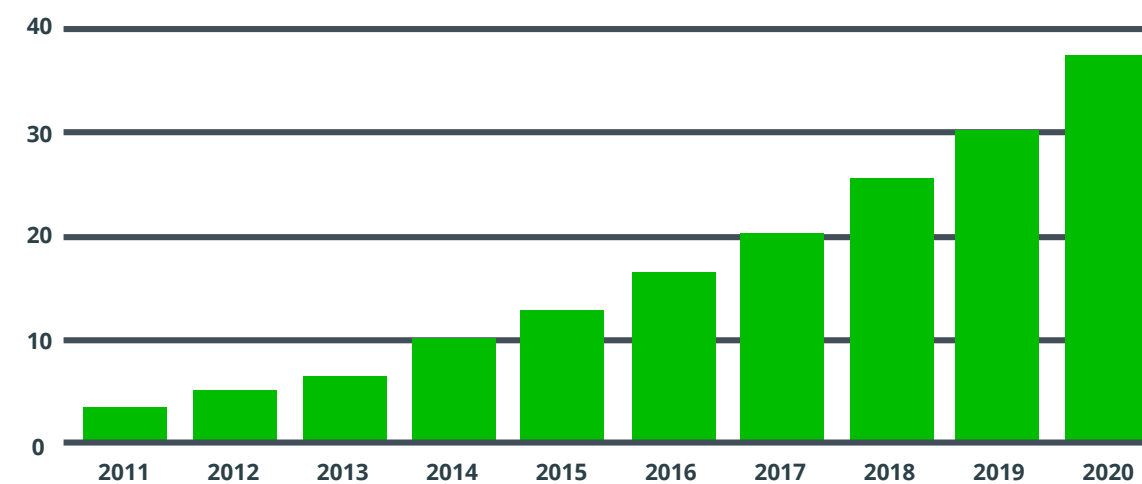
E-learning **content** evolves at the pace of the mobile phone, and it adapts to the users' lifestyles.

E-learning is **adaptive learning** and changes with the needs and experiences of those who use it.

The **cell phone** is a **key device** for **learning** because it allows for **mobility** and **accessibility** at any time and from any place.

**MOBILE LEARNING MARKET BY 2020**



*Source: Transforming learning through m Education. McKinsey*

## 3. GAMIFICATION

One concept that is not going to stop growing is the development of e-learning content in the form of **video games** and **online games** as a tool for reinforcing learning.

This is a powerful tool that encourages user interaction in e-learning, promoting innovation, skills, and abilities to solve problems and conflicts.

Gamification is the use of the mechanics of a game in environments and applications which are not meant for leisure in order to promote motivation, concentration, effort, and loyalty.

The training sector has seen that the benefits and capabilities of games for acquiring knowledge are immense, as games bring about the commitment and continued improvement of their users.

This is not to trivialize educational content; instead, it is aimed at getting students to feel the need to go "above and beyond" through small motivational aspects such as challenges, exclusive content, rankings, etc.

# 3. TRENDS IN THE WAY OF LEARNING

## 1. RAPID LEARNING

The future demands **rapid, efficient**, and **effective** learning. Current demands do not allow us to focus full time on learning; therefore, it is necessary to change the **methodology of e-learning** in order to create e-learning courses that are short and intense and which allow learning to take place in less time.

The aim of this methodology is to accelerate employees' learning process through the development of multimedia content that can be implemented with animations, texts, or videos in order to capture the attention of the user.

"Knowledge pills" will be used more frequently by decreasing the duration of courses and making them more agile. In this way, the time used is reduced and the new needs of users who seek training at any place and which is both fast and in constant evolution are met.

## 2. ADAPTATIVE LEARNING

Adaptive learning is one of the great challenges of education in terms of the future. Thanks to e-learning, **learning is progressive**, it goes at the pace of the user and thus provides a better, more personal experience, giving students the chance to properly absorb information before going on to the next course module or unit.

This is the ability to adapt the pace, the goals, and the content depending upon the students' skills and motivations.
This will be possible thanks to the progress of technology. In section 4 on "Analysis Trends for E-learning," we will delve deeper into how analysis allows e-learning processes to be adapted to all users.

## 3. BLENDED LEARNING

Migration from face-to-face classroom instruction to e-learning and blending learning (online learning that combines face-to-face instruction and online training) shall continue to increase.
Thanks to the added value offered by LMS/LCMS educational platforms, this type of learning provides flexibility to training centers and to their students and teachers.

Blended learning offers more chances to interact with the course materials and resources, brining about **greater participation** and **better opportunities** for student success.  This is a format that provides students with greater autonomy, thus increasing the achievement of goals.

## 4. FLIPPED CLASSROOM O AULAS INVERTIDAS

The flipped classroom approach is a pedagogical method that transforms certain processes that were, in the past, commonly linked exclusively to the classroom so as to take them to the extra-curricular context.

Flipped classes aim to **keep face-to-face instruction** but free up time in class for problem solving by leaving tasks such as information transference (memorizing and understanding) for home.  This allows us to be present in the most important moments of learning: application and practice in class. That is to say, the traditional way in which a class is understood is "flipped:" activities which are connected mainly to presenting and explaining content are taken outside of the classroom through technological tools such as videos, podcasts, or simply the internet.

In this way, class time is primarily dedicated to the undertaking of the activities that truly matter for learning, such as practical exercises, solving doubts and answering questions, debates, work in small or large groups, discovery learning, peer-assessment and self-assessment.

## 5. INSTANT LEARNING O MICROLEARNING

The "MicroLearning" trend is hastily on the rise. This type of learning implies the use of e-learning content that users can include in their daily routines and which will not occupy much space on their daily agendas.

MicroLearning uses short 5-minute or 10-minute videos, documents ranging from 300 to 500 words, specific articles or lessons, and other innovative and concise learning resources that do not represent a high volume of cognitive content for the user.

This trend is applicable to the business sector because it can easily be adapted to any device (cell phone, PC, tablet, etc.) and because of its flexibility in terms of time.

This type of learning can be undertaken through LMS platforms by dividing t**raining into small modules that are easily digestible and through which advancement is swift**.

# 4. TRENDS IN PLATFORM CONTENT

## 1. LCMS EDUCATIONAL PLATFORMS

Learning content management systems (LCMS) come with an impressive range of digital tools designed so that schools and other related administrative and educational processes may function seamlessly.

If this type of educational platform is used effectively, it can **revolutionize the way learning is undertaken** and be quite beneficial for students, teachers, and administrative staff.

A good LCMS will allow **for new courses to be created** under the SCORM/AICC standards, likewise allowing for educational programs to be established instantly and without specialized knowledge. Thus, the creation of materials and resources is made easier for teachers and time is saved in terms of class preparation.

## 2. VIDEO LEARNING

**Audiovisual content** is more and more in demand, as well as new methodologies which are linked to videos and multimedia content. Video content is immediately available and that's what makes this type of content a priority in terms of complementing skills that are lacking.

The use of video content has many advantages in terms of online training as this type of resource is much appreciated by students – it is visual in nature and offers a break when theoretical content is intense.

Interactive videos are a means for teaching that presents content in a pleasant, entertaining way in order to **help with understanding and assimilation**.  This is because videos do not require as much effort as readings do and, thus, they increase student motivation.

### 3. SMART TUTOR

In terms of online training projects, tutors will become more and more important as guides throughout the entire learning process. The so-called **"smart tutor" will appear in the form of a learning manager** to provide support based upon student profiles, making the learning experience much more personal and tailored.

A smart tutor **is a computerized system** able to monitor the learning environment, process said monitoring, and respond in a rational way; that is to say, to provide the right response in order to maximize the desired results.

These computerized systems are able to learn based on prior experiences and knowledge and can guide the learning process, give suggests in the even that a student has a doubt, and solving some problems. Their aim is to provide one-on-one attention (tutor/student).

### 4. INCREASED ROLE OF THE COMMUNITY, AND INTEGRATION IN SOCIAL NETWORKS

Learning communities shall continue to be perfected, acquiring great importance within the online learning process. The trend to share and post comments on social networks will extend to more academic contexts.

Online learning, in addition to allowing for individuality in terms of studies, also allows for the inclusion of collaborative and social learning elements. Sharing, debating, and collaborating are activities whose inclusion as practical activities will be of utmost importance.

Social networks are one of the main challenges to be faced for virtual classrooms as they provide a great opportunity to disseminate knowledge and learning to young people in an environment that is attractive for them (especially in the educational sector). One of the main aims of e-learning is (and will be) the creation of activities that encourage **cooperative and collaborative learning**.

# 5. ANALYSIS TRENDS FOR E-LEARNING

## 1. MACHINE LEARNING

The machine learning method is a way to analyze data that deals with automatically creating analytical models. Generally speaking, we can say that machine learning is a type of artificial intelligence aimed at **developing techniques so that machines can learn and make decisions for themselves**.

These methods learn from data and searches, allowing computers and other devices to provide smart search results depending upon user preferences and search histories.

Thanks to these advances, the development of the adaptive learning that we spoke about in point 2 is possible, as these technologies make it easier to adapt to the user and help in searching for content quickly and efficiently.

## 2. BIG DATA

The application of big data to the education industry will also bring about a great revolution. This is a feedback-based trend that represents the collection of data obtained through users who constantly interact with e-learning content.  Said data is collected through LMS (Learning Management Systems) and other means to **help developers to optimize and improve content, materials, and courses**.

Behavioral patterns can be identified in terms of learning styles, thus providing the learning process with better adaptability and making it more personalized.

Thanks to this application of learning to machines, as well as the machine learning aspect that we spoke about in the previous point, learning models evolve based upon the true behavior of the user and allow content levels to be adjusted for the skills and motivations of all students.

These are some of the main trends for the education and e-learning sector.  As you have probably noticed, the majority of these trends focus on **providing much more personalization in terms of learning, as well as seeking to motivate the student.**

All of these trends pose an adaptational challenge for educational institutions and businesses that wish to put this type of learning into practice.

E-learning has come to stay and it is becoming more and more accessible and feasible; therefore, **it is necessary to stay up to date with new methods, trends, and tools** as they appear in order to make learning simpler and more effective for users.

If you want to know more about the trends and news of the e-learning sector, **visit our blog to find articles, tips, and content of interest on** learning platforms, LMS, LCMS, course content, e-learning courses, training trends, language and computer labs, etc.

## ABOUT CAE

At CAE, we offer **e-learning solutions** that use innovative methodology which includes the latest technological trends applied to face-to-face instruction, blended learning, and online learning.

We have the know-how of more than **35 years** developing **technology** and **multimedia content that is tailored to the educational sector** in order to offer training solutions and services of utmost quality.

Our way of being and doing has brought us to the forefront of the e-learning sector. The key: to look at things from the student's perspective so as to adapt our methodology to their academic or professional context. To learn more about us, check out some of the factors that set us apart.

If you need **advising** on the **educational solution** that is right for you, do not hesitate to get in touch with us

**MAKE A REQUEST**