The future of digital content consumption

Report by Accenture

A study from the Universitat Oberta de Catalunya

Universitat Oberta
de Catalunya

Intro

We live at a time when the exchange of reproaches between the younger generations and people with years of experience behind them are not unusual.

Differences in the way young people and adults consume content often results in the simplification of a reality that we do not understand by reducing it to value judgements based on emotion rather than reason.

Has there really been a decline in teenagers' ability to consume complex content? Will Generation Z put an end to the classic formats that we all used as students?

This study aims to provide answers to these and other questions. In it, we analyse how much truth there is in this possible clash of cultures and find out how current students consume study materials.

Focusing on the current moment will help us gain a better understanding of how teaching models will be shaped in the future.

A future in which standardization and customization will be forced to exist side by side.

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Goals and scope of the project

U1

This study has been carried out as part of the collaboration between the Universitat Oberta de Catalunya (hereinafter, "UOC") and Accenture to gain deeper knowledge and understanding of how young people behave in relation to the digital content provided by higher education institutions.

1.1. Subject matter of the study

The main focus of the study involved looking at how 14- to 35-year-olds consume complex digital content today and understanding the variables that determine their degree of success in terms of both interest and retention of knowledge.

These parameters were used to build various future scenarios showing how education and training may evolve and the success that can be expected in each case.

This report does not seek to establish the direction that should be taken by the UOC or any other university in its own future: it merely identifies possible ways of evolving and provides tools to analyse them.

1.2. Research questions

The study was designed to provide answers to the following research questions:

- **How do teenagers and young people consume complex digital content?**

- **What are the new macro-trends (drivers) in the field of digital content consumption?**

- **What signs of change can we see now that suggest a change in the future?**

- **How are digital content providers handling our target group's needs and behaviours right now?**

- **What opportunities to prepare for the future does the UOC have?**

Methodology

U2

The study's methodology is based on the foundations of the Future Foresight method coined by the Institute for the Future in Palo Alto, California. In order to adapt the analysis to the UOC and to the subject matter of this study, this methodology was adjusted to the following parameters:

2.1. Technical data sheet

2.1.1. Team

The study team included members of the UOC and consultants from Accenture.

UOC members with expertise in various fields:

- **Guillem Garcia** – Project manager at the eLearning Innovation Center (eLinC)

- **Mildred Guinart** – Director of educational model transfer at the eLinC

- **Quelic Berga** – Member of the Faculty of Computer Science, Multimedia and Telecommunications

- **Xavier Mas** – Digital education specialist at the eLinC

- **Laura Sorroche** – Teaching support and instructional design expert at the eLinC

- **Ana M. Recasens** – Director of Learning Resources Production at the UOC Library

- **Cristina López** – Director of Library for Learning at the UOC Library

Accenture team members with expertise in research on future scenarios:

- **Lluís Portabella** – Management consulting principal director at Accenture

- **Steffen Becker** – Head of research at Fjord, Part of Accenture Song

- **Guillem López Bonafont** – Design lead at Fjord, Part of Accenture Song

- **Helena Illera** – Design researcher at Fjord, Part of Accenture Song

Methodology

U2

2.1.2. Fieldwork dates

This project was carried out between 4 May and 17 June 2022.

2.2. Method

2.2.1. Secondary research

The first phase of the research project involved analysing leading publications on digital content consumption to identify environmental indicators that have any kind of impact on the consumption model. We consulted 111 sources to understand macro-trends, extract data on the way young people behave and understand the market logics behind training content. A great variety of sources from both the public and private spheres were used.

2.2.2. Primary research

This second phase involved qualitative research in the form of semi-structured interviews to understand concepts, opinions or experiences, as well as data on interviewees' emotions or behaviours. Semi-structured interviews were conducted with several education and psychology experts at the UOC and Accenture and with young students from Spain and Mexico.

2.2.2.1. Profiles

The following professionals were interviewed:

University experts:

- Daniel Aranda
- Mireia Montaña
- Carlos Gómez

Experts at **Accenture**:

- Patricia Leciñana
- Karina Ibarra
- Luis Navas

Methodology

A total of nine qualitative interviews with young people were then conducted. We spoke to students from two Spanish-speaking countries, seeking young people who were representative of a wide range of people in order to gather as much information as possible.

- **Country of study:**
    - 5 Spain
    - 4 Mexico

- **Gender:**
    - 5 females
    - 4 males

- **Current studies:**
    - Upper secondary school: 1 participant
    - Undergraduate studies, various years: 6 participants
    - Postgraduate studies / Alumni: 2 participants

- **Combination of different fields of study:** technological, social and scientific

- **Combination of private, public and government-subsidized institutions**

- **Format:**
    - On-site: 7 participants
    - Blended: 2 participants

2.2.3. Co-creation sessions

After analysing the data obtained from the primary and secondary research, the macro-trends and the experts' and students' points of view were shared, and their perspectives were compared in two separate co-creation sessions.

The workshops were held to share the research findings and reflect on how they affect the UOC's future.

Research framework

In order to find an answer to the research questions, the analysis was split into three levels and various areas of analysis. These were:

3.1. Levels

Each level covered a particular sign of change identified in the current context, expressed in the form of numerical indicators that make the analysis less subjective.

These levels were:

- **A new context**

- **A new student**

- **A new teaching model**

A new context
A new student
A new teaching model
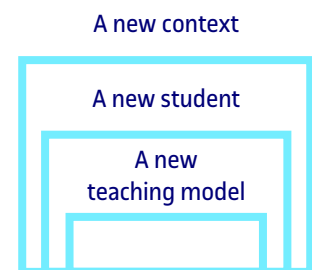
3.2. Areas of analysis

The areas of analysis provided a structure for the aspects being analysed in order to establish future scenarios based on the results that can be expected from all the different forces at play. These were:

- **Context**

- **Relational model**

- **Organizational model**

- **Production model**

- **Content**

- **Formats**

Context
Relational model
Organizational model
Production model
Content
Formats

Secondary research
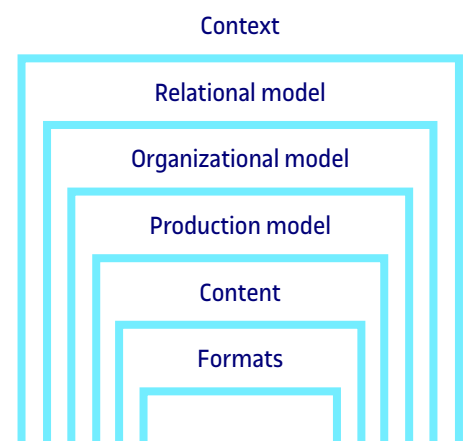
4.1. Global trends

The aim of the secondary research was to summarize all the **signs of change** that could affect the subject matter of the study in any way and group them together by area of influence for easier understanding.

The method used focused on giving indicators priority over the subjective interpretation of trends. This would reduce bias in the co-creation sessions to be held later on in the study.

The document is divided into three sections, enabling us to predict the direction that digital content consumption may take based on:

- The new context

- The new student

- The new teaching model

This study, which was carried out over **two weeks** in May 2022, includes up to **111 indicators** from over **60 different sources**.

4.1.1. Macro-trends relating to the new context

Context macro-trends help us understand the structural factors that are currently shaping the dynamics of young people's digital content consumption. These relate mainly to economic, business and psychological matters that, whether consciously or subconsciously, are shaping young people's mindsets and laying the foundations to encourage certain types of consumption. The following trends were identified:

The attention economy wins:	In a digital world with information overload, users' main filter when selecting information is their own attention.
Online presence and influence have become commodities:	Surveillance capitalism fosters the hyper-connection, virtualization and monetization of digital relationships.
Digital consumption affects young people's mental health:	Marketing strategies take advantage of young people's growing mental health problems caused by exposure to technology.

Secondary research

4.1.1.1. The attention economy wins

In a digital world with information overload, users' main filter when selecting information is their own attention. In the attention economy, attention is the new currency. Only those organizations that can successfully attract users' interest will be able to stay in the market.

In this scenario, supply increases manyfold while everything focuses on how to facilitate access to that supply. Below are some of the figures substantiating this trend:

User data

- Humans' attention span has dropped from 12 seconds (in 2000) to 8.25 seconds (in 2015). ➤

- 25% of young people forget important details about their friends and family. ➤

- 7% of people occasionally forget their own birthday.

- The average office worker checks their email 30 times per hour. ➤

- Mobile phone users check their phones over 150 times a day (Mary Meeker). ➤

Market data

- The average length of TED Talks has dropped from 20 to 10 minutes. ➤

- During the pandemic, streaming platform consumption rose 108% in Spain and 32% in Mexico. ➤

- Spain has 400,000 paid subscribers (1% of the population) across 2,874 digital media. Only 10-15% of these are sustainable. ➤

- 1,760 bachelor's degrees have been added in the last decade, and 629 have been discontinued. This is equal to a net growth of 1,131 bachelor's degrees, 44% more than in 2010. ➤

- 62% of marketers say they will invest more of their budget in generating new content, particularly evergreen content, than last year (72% in video and 51% in paid media). ➤

Secondary research

4.1.1.2. Online presence and influence have become commodities

Surveillance capitalism fosters the hyper-connection, virtualization and monetization of digital relationships. Tech giants encourage people to become more digitalized in order to feed their own business model, using influencer marketing as the perfect excuse to encourage consumption on their platforms by users who have been thinking in terms of profitability from a very young age. Providing models that make it possible to exploit young people's public personas has become a guarantee of success. Below are some of the figures substantiating this trend:

User data

- 1 in 3 young people want to be influencers when they grow up. ❯

- 21.9% of young people think they could be professional gamers. ❯

- Young people spend 7 hours a day online. ❯

- 1 out of every 5 young people wake up in the early hours to check social media. ❯

- The 'Like' Generation can add up to 20 likes per minute to boost their own profile's visibility. ❯

- On average, Spanish children spend 44 minutes a day on WhatsApp and 84 on social media. ❯

- Over 7,500 people in Spain make a living by creating social media content. ❯

- 5% to 25% of internet users are addicted to social media. ❯

Market data

- TikTok, Instagram, WeChat, WhatsApp, YouTube and Facebook have over 1 billion users worldwide. ❯

- 84% of companies intend to work with a social media star in the coming year. ❯

- A nano-influencer (an influencer with 1,000 to 10,000 followers) earns an average of USD 90 per post, which rises to over USD 6,500 when they pass the threshold of half a million followers. ❯

- The most lucrative platform is YouTube (with an average of USD 4,491 per post), followed by TikTok, with an average of USD 3,514. ❯

- Influencer marketing has grown by 14% in the last three years. ❯

- Gig economy models are making an impression on young people and transforming the culture of sex through OnlyFans. ❯

4.1.1.3. Digital consumption affects young people's mental health

Marketing strategies take advantage of young people's growing mental health problems caused by exposure to technology. All kinds of illnesses have emerged in recent years as a result of constant exposure to digital media. Organizations of all types have exploited this vulnerability to attract more young users by employing persuasion techniques based on the "curiosity gap". Below are some of the figures substantiating this trend:

User data

- 4 out of every 10 students between 14 and 18 have had at least one energy drink in the last month. ⊙

- 20.8% of people have symptoms of insomnia. ⊙

- 81% of young people in Spain have nomophobia. ⊙

- The so-called "Google effect" is limiting our memory. ⊙

- Cyberchondria: 69% of adults in Spain go to Google for health advice (up 31% since 2011). ⊙

- According to experts, there is a correlation between compulsive internet use and increased rates of depression. ⊙

- 1 out of every 5 people are online after midnight, which has an impact on their rest and hygiene habits. ⊙

- The risk of compulsive internet use by teenagers has risen 10% since 2014. ⊙

- 4 out of every 10 teenagers go online to fight feelings of loneliness. ⊙

- 81.6% have felt calmed down by going online. ⊙

- 61.5% of teenagers have more than one profile on the same social media platform. ⊙

Market data

- TikTok takes advantage of mental illness, with misleading videos accounting for 52% of the total. ⊙

- 56% of Facebook posts by the newspaper El País are considered clickbait. ⊙

- 70% of soft news posts by El Confidencial, El Español, eldiario.es and OK Diario are considered clickbait. ⊙

Secondary research

4.1.2. Macro-trends relating to the new student

New student macro-trends show which consumption logics are most widespread among young people, with a focus on the factors that lead to internal differences. The following trends were identified:

The consumption model is determined by the socio-cultural environment	The ability to absorb knowledge is determined by age, social class and leisure habits.
Gen Z prefers devirtualization	The differences between Gen Z and Millennials show that digital autonomy requires experience.
The key is in how people are taught to consume	Digital formats result in mind wandering, while reading on paper boosts concentration.
Immediacy is more important than quality	The Now generation confuses "doing things well" with "doing things quickly".

4.1.2.1. The consumption model is determined by the socio-cultural environment

The ability to absorb knowledge is determined by age, social class and leisure habits.

The ways young people consume digital content vary greatly, and the factors behind this cannot be understood without knowledge of their lifestyles.

Young people with better reading comprehension have more academic qualifications and a better socio-economic environment and do more leisure activities outside their homes. These factors also help them develop delayed gratification.

Secondary research

Below are some of the figures substantiating this trend:

User data

- Young people who say they want to leave home are those in a stable relationship (67.9%, compared to 43.3%), those born abroad (58%, compared to 49%) and older ones. ⟩

- 65% of them do sport on a regular basis, 50% enjoy reading and cultural activities, 40% meet others to drink on the streets, and 20% do volunteering work. ⟩

- 69% of young people with a degree do physical exercise on a regular basis, compared to 62% of those who only finished primary school. ⟩

- As for outdoor group drinking, this is more common in male students, but also among unemployed people and those with a high educational background, suggesting that this behaviour attracts a broader cross-section of society. ⟩

- Young people whose mothers are unemployed are 8% less likely to have acquired educational knowledge during the pandemic. ⟩

- On average, students from families that claimed to love reading scored 6.5 points higher on the reading comprehension test than other students. ⟩

Market data

- Young people read more than over-34s. ⟩

- The proportion who read for work or as part of their studies (3.1%) has fallen for the third consecutive year. ⟩

- More industrialized and densely populated communities have higher reading levels. ⟩

- The most commonly used device for digital reading is still the mobile phone (70.3%). ⟩

- Those who read only in digital formats are younger and have a higher level of education, and they read more than the rest. ⟩

- In Spain there is a high correlation between reading performance and socio-economic environment. ⟩

Secondary research

4.1.2.2. Gen Z prefers devirtualization

The differences between Gen Z and Millennials show that digital autonomy requires experience. Although YouTube is quickly becoming a significant educational resource, young people prefer teacher-assisted face-to-face learning. It is Millennials who have been studying for years who want the flexibility of fully digital and self-directed learning. Below are some of the figures substantiating this trend:

User data

- Older young people are 5% more likely to prefer online studying. ⊙

- 77.7% of young people prefer face-to-face learning. ⊙

- Gen Zs feel more "themselves" when they are online than offline. ⊙

- 78% of Gen Zs (compared to 80% of Millennials) see their teacher as very important for their learning and development. ⊙

- 39% of Gen Zs (compared to 25% of Millennials) prefer to study with a teacher who leads the teaching. ⊙

- 57% of Gen Zs (compared to 47% of Millennials) prefer face-to-face activities. ⊙

- Only 22% of Gen Zs (compared to 36% of Millennials) prefer self-directed study. ⊙

- YouTube is Gen Z's learning method of choice (59% of Gen Zs, compared to 55% of Millennials). ⊙

- 47% of Gen Zs enjoy learning with interactive games or apps (compared to 41% of Millennials). ⊙

- YouTube plays a disproportionate role in learning for Gen Zs, although Millennials also appreciate its value. 55% of Gen Zs claim that YouTube has contributed to their education in the last 12 months (compared to 40% of Millennials). ⊙

- Gen Zs spend a significant amount of time on YouTube, with Millennials lagging significantly behind (in the digital world). 47% of Gen Zs spend at least three hours on YouTube every day (compared to 22% of Millennials). ⊙

Secondary research

Market data

- 79% of Gen Zs report that their daily activities rely on technology (compared to 80% of Millennials). ⟩

- 56% assert that their creativity relies on technology, a percentage that rises to 64% if the topic is their social life. ⟩

4.1.2.3. The key is in how people are taught to consume

Digital formats result in mind wandering, while reading on paper boosts concentration. In a world in which people are less effective due to digital technology-fuelled multitasking, the key to content consumption lies in people's habits. Good education at home and at school in time and information management is a guarantee of success. Below are some of the figures substantiating this trend:

User data

- Teenagers who read on paper achieve better comprehension than those who read on a screen. ⟩

- Students who had to read longer texts to do their homework (101 pages or more) scored 31 points higher on their reading test than those who reported reading shorter texts (10 pages or less). ⟩

- Those who read on paper are interrupted by fewer thoughts unrelated to their reading than those who do so on a computer screen. ⟩

- 61.3% of teenagers who have had online lessons since the pandemic rate the experience as "Not Great or Bad". ⟩

Secondary research

Market data

- 46% of Spain's schoolchildren are taught at school how to judge the reliability of information. ❯

- One out of every four students in Spain (24%) used strictly focused browsing or actively explored single- and multiple-source items of information. These browsing behaviours were strongly correlated with knowledge of effective reading strategies and reading performance. ❯

- In Spain, there was an 8% difference in favour of students from advantaged backgrounds compared to those from disadvantaged backgrounds who were taught how to identify biased information. ❯

- People in education systems with a higher proportion of students who had been taught to identify biased information in schools and had internet access at home were more likely to know the difference between fact and opinion in their reading. ❯

4.1.2.4. Immediacy is more important than quality

The Now generation confuses "doing things well" with "doing things quickly". Millennials and Gen Zs are surrounded by constant change (in relation to both work and social matters) and use the same logics for the things they do.

They see durability as less valuable, and they therefore view tasks requiring sustained work and effort as not being worthwhile. Below are some of the figures substantiating this trend:

User data

- Parents fund most of the cost of young people's durable assets (such as education and housing). ❯

- 41% of young people think they will change jobs in six months. ❯

- 42% of Argentina's Gen Z tried to change the discriminatory views of someone in their environment. ❯

- More Gen Zs than Millennials and Gen X-ers at a similar age are enrolling at university. ❯

Secondary research

Market data

- 37% of consumers expect a same-day response on social media, and 28% expect it in under an hour. ⊙

- Most customers (60%) define "immediate" as within 10 minutes. ⊙

- 66% of adults believe that the best thing a brand can do for them in terms of customer experience is respect their time. ⊙

4.1.3. Macro-trends relating to the new teaching model

New teaching model macro-trends show signs of change worldwide that are causing the teaching model to evolve. Although these signs may continue in the same direction, the aim of the study was to provide objective indicators to foster discussion in co-creation sessions. The following trends were identified:

Teachers take on a new role in teaching ecosystems	Young people prefer the deinstitutionalization, reintermediation and socialization of education
The end of spontaneity in learning models	The fragmented contents and atomized market caused by digitalization lead to a loss of branching and reflection.
Infotainment and gamification increase engagement	Newsjacking, realism and local examples as ways to attract consumers.

Secondary research

4.1.3.1. Teachers take on a new role in teaching ecosystems

Young people prefer the deinstitutionalization, reintermediation and socialization of education. When problems arise, support is sought from classmates and open forums. Teenagers target their rebellious instincts at educational institutions. Their perception of each teacher changes depending on whether the latter is acting as a spokesperson or intermediary. The ability to use factors from outside the institution and weave synergies into other realities is a differentiating factor. Below are some of the figures substantiating this trend:

User data

- Over 90% of students are in digital chat groups with classmates, but only 18% respond to messages sent by other students through institutional chat facilities. ⊙

- Although the importance of the tutor's role in the provision of support and the promotion of communication is an ongoing issue, it was also found that tutors' efforts do not generally have the intended result. ⊙

- 58.33% of students say that digital discussion forums are the activity they found hardest to use, a percentage that drops to 25% for the interactive platform. ⊙

- 35.71% of students would remove institutional chat facilities from online courses, more than those who would remove forums (7.14%). ⊙

Market data

- Students feel that working on case studies as part of a team is important to their studies (97.2% of Gen Zs and 81.7% of Millennials). ⊙

- Students are increasingly using YouTube to study for exams, learn about new matters relating to school and understand content covered in class. ⊙

- The difference in the use of YouTube based on social class would explain the increase in the number of users who are unable to afford private lessons or extracurricular training. ⊙

Secondary research

4.1.3.2. The end of spontaneity in learning models

The fragmented contents and atomized market caused by digitalization result in a loss of branching and reflection. In order to ensure that students are able to follow the course and assess themselves, contents are becoming shorter and focusing on a single concept, and opportunities for discussion are disappearing. The lack of depth not only results in a loss of status in relation to the tech giants but also discourages students from taking formal courses. Below are some of the figures substantiating this trend:

User data

- YouTube users prefer short videos (around 42 seconds). ⊙

- Users prefer videos that can be watched without sound. 85% of videos on Facebook are played with the sound off. ⊙

- Searches for videos with educational content have seen 70% year-over-year growth. ⊙

- Seeing relevant pictures together with informative visual or sound content helps users remember 65% of the information several days later (compared to a retention of only 10% from text only). ⊙

- Users want big news and practical contents that they can then apply. ⊙

- When looking for online training, easy-to-use lessons with well-defined learning objectives are the main criteria. ⊙

Market data

- 80% of web traffic will consist of videos. ⊙

- When it comes to covering superficial topics, short contents are preferred because they require fewer resources and can be viewed on mobile devices. ⊙

- A page's conversion rate increased by over 30% when the landing page was 20 times longer. ⊙

- Pages with over 3,000 words get 3.5 times more links than those with between 901 and 1,200 words. ⊙

4.1.3.3. Infotainment and gamification increase engagement

Newsjacking, realism and local examples as ways to attract consumers. In addition to strategies that take advantage of the curiosity gap to get clicks, students are increasingly obtaining their information in formats that combine entertainment with educational content. Young people particularly value contents with a combination of current information, case studies and local examples they can recognize. Below are some of the figures substantiating this trend:

User data

- "Schoolchildren have found that television can provide an opportunity for education, thanks to the programmes included in its schedule."

- Almost 70% of young people use the internet for school work, and 50% use it for video games. ›

- "In terms of parents' educational background, children watch less television the more educated the mother is." ›

- 83% of students receiving gamified training feel motivated, while 61% of those receiving non-gamified training feel bored and unproductive. ›

- 70% of podcast users have increased the amount of time they spend listening to podcasts in the last two years. ›

- Over 40% of young people learn about current affairs through Twitch, social media or instant messaging. ›

- 57.5% of young people take their mobile phones into class almost every day. ›

Secondary research

Market data

- "The greater the engagement through gamification, the greater the virality." ▶

- 70% of professionals actively invest in content marketing, as it results in three times more leads than traditional strategies; and 72% of companies consider it an effective way to increase the number of leads. ▶

- 25% of the internet's most shared articles are scary, 17% are funny, 15% are fun, and 6% are provoking. ▶

- The click-through rate of AdWords in educational searches on the Google Search Network is 2.20. ▶

- People who listen to podcasts do so mainly on Spotify (75%) and YouTube (25%). ▶

- "Moodle and MOOCs are useful tools for applying transmedia storytelling to educational processes, especially in the university arena."

- "Unlike Moodle, which is used by teachers to supplement class contents, MOOCs are not used as another part of the transmedia environment."

- The stories used in transmedia storytelling are puzzling and forge emotional connections. ▶

Secondary research

4.2. Digital content consumption trends

1. Context trends

Summary of secondary research: What do the trends tell us?

The attention economy is taking over

In a digital world that contains too much information, **attention is the user's main filter** when selecting information.

Digital presence and influence are commodified

Surveillance capitalism **fosters hyperconnection**, virtualization and the monetization of digital

Digital consumption affects young people's mental health

Marketing strategies **take advantage of the increasing pathologie**s among young people resulting from technological exposure.

2. Trends among new students

Sociocultural environments determine consumption models

Age, social class and leisure habits **influence the ability to absorb knowledge**.

Generation Z prefers devirtualization

The differences between Generation Z and Generation Y show that **without experience there is no digital autonomy**.

The way people are taught to consume is crucial

Digital formats **lead to mind wandering, while paper facilitates concentration**.

Immediacy takes priority over quality

The instant generation **confuses "doing it well" with "doing it quickly"**

3. Trends in the new teaching model

The teacher takes on a new role in educational ecosystems

Young people prefer **deinstitutionalization, reintermediation and socialization** in teaching.

The end of spontaneity in learning models

The division of content and the fragmentation of the range of teaching created by digitalization **ends ramifications and reflection**.

Infotainment and gamification increase engagement

Newsjacking, **realism** and **proximity** as a means of attraction.

Primary research

5.1. Main lessons learned

The aim of the primary research was to explore the macro-trends identified from a different angle. We therefore interviewed nine students of various ages and in different fields of study from Spain and Mexico, as well as six experts, in order to understand their perspective from the point of view of different fields of education and technology. We have grouped what we learned from this based on the different macro-trends identified in the secondary research.

5.1.1. Macro-trends relating to the new context

5.1.1.1. The attention economy wins

What do students say?

They mentioned that they often feel unstimulated and get bored in class, and that most teachers make little effort to present contents in a way that is appealing, arouses their curiosity or makes them take part in classroom dynamics.

What generally motivates students to learn is the use of case studies and examples that bring them closer to real life and current affairs, as well as anything that helps them imagine themselves in the future.

> *"I'm studying on site. [...] It's easier to concentrate. Human interaction is much better: I can talk, chat and check things with my classmates"*
> (P6, 3rd-year undergraduate student, 22 years old, Mexico)

> *"The best option is a combination of every format so that students don't get burnt out"*
> (P10, 4th-year undergraduate student, 21 years old, Spain)

The experts' opinion

In general, even if they really like the subject, having too many inputs encourages students to follow the path of least resistance.

To get their attention, it is necessary to find their emotional link to the subject. Today's students are much more rational and calculating, so we need to use narratives that cause empathy based on their own personal situations.

They really appreciate the constant updating of contents, but this is not possible with Catalan universities' current business model. Validating and editing contents is expensive and usually takes a year, so it is currently more time- and cost-effective, for example, to give talks and upload them.

5.1.1.2. Online presence and influence have become commodities

What do students say?

They value visibility and easy access to additional training on specific topics that can usually be found in MOOCS (massive open online courses).

- Some mentioned that the certificates they obtained from such courses should be recognized by the government's institutions and schools imparting formal education.

- More experienced and independent students usually use MOOCs (Coursera, Udacity, Domestika, etc.) because they realize that investing a bit more money and effort to access their contents is worth it, because they are very aware of the benefit they will get out of them.

Meanwhile, they do not trust sources such as blogs and social media influencers (due to the likelihood of content being sponsored) and Wikis (because they are collaborative platforms) to provide true information.

"It's important to give more publicity to the alternatives available to supplement studies. The certificates obtained in these courses (MOOCs) should be valued"

(P5, alumnus, 26 years old, Mexico)

"I don't like influencers. I don't trust what they have to say, because they may be paid to promote ideas and opinions rather than fact and truth"

(P6, 3rd-year undergraduate student, 22 years old, Mexico)

The experts' opinion

There are many sources of information available and they often provide contradictory information. This causes confusion and makes it hard to choose which sources to use.

For some, MOOCs are, and will always be, an additional tool used by more able students with greater motivation to learn (those who would previously have done additional reading).

5.1.1.3. Digital consumption affects young people's mental health

What do students say?

Video content (primarily on YouTube) is the preferred option both for finding out about a new topic and to clarify concepts for students who find it harder to concentrate, who usually have more trouble reading articles, whether long or short.

According to some, the format in which contents are presented affects their stress level. For example, they feel more relaxed if they can consume contents while lying down.

> *"Learning about new topics in books is great, but I can't ignore the YouTube algorithm that recommends things that may be of interest to me. I find the videos really interesting, and I've gained new skills with its recommendations"*
> (P6, 3rd-year undergraduate student, 22 years old, Mexico)

> *"I've got a bit of ADHD when it comes to reading text. I always read the outline before starting on the text. [...] Videos are always better than text for me. They're very easy for me to take in. If there are two options, I automatically click on the video. It helps me absorb it"*
> (P1, postgraduate student, 26 years old, Spain)

The experts' opinion

"The training on offer cannot compete in terms of entertainment"

"Universities needs a new type of storytelling to help them connect with students"

"Learning must be emotional, convey passion and engender empathy. Content is the least important part"

"People's attention depends on the degree of interest. You must work on motivation"

5.1.2. Macro-trends relating to the new student

5.1.2.1. The consumption model is determined by the socio-cultural environment

What do students say?

They really value the ability to tailor their programme of study to their own interests (for example, by taking elective courses at other universities, taking MOOCs, and so on), and they need everything to be very flexible so they can fit it all in.

"I'm taking all my courses on campus, except for one, which I'm taking online through the IOC'"
(P7, upper secondary school student, 16 years old, Spain)

"I'd happily swap a 1-hour lecture for a 15-minute tutoring session"
(P10, 4th-year undergraduate student, 21 years old, Spain)

The experts' opinion

Students' ideas of what they expect from university are polarized: while some do the bare minimum to get their degree (learning only what is likely to come up in the exam), others are very motivated and expect more of an exchange with teachers.

Students should be split into groups based on their needs or goals: those who want to find a job immediately, those who want to feel fulfilled, and so on. In the latter case, universities must focus on developing people with high analytical, reflection, research and transformation skills (compared to other training resources, such as MOOCs, which help students acquire very specific practical knowledge).

The pandemic is having a rebound effect. Content streaming companies such as Netflix have lost users because people want to meet in person again, and this is also happening in education.

Some people believe that traditional contents will survive because they are timeless, and they feel that hyper-customization is not the right way to go.

5.1.2.2. Gen Z prefers devirtualization

What do students say?

Although all students greatly value the ability to learn with a teacher, it is the youngest who demand closer support, ideally in person. More experienced students, on the other hand, are more independent. They use more additional training resources such as MOOCs, learn by watching videos and occasionally use other formats such as podcasts or video conferencing.

"At the beginning, you really appreciate everything being on campus, and then you can start adding in other types of materials that make the experience more enriching, such as videos or podcasts"

(P10, 4th-year undergraduate student, 21 years old, Spain)

"I used to use Domestika courses a lot, because I sometimes found that the master's degree had little content, and this way I could supplement the syllabus with specific topics"

(P5, alumnus, 26 years old, Mexico)

"The most important aspect for me is the personal interaction with classmates and the contact with teaching staff who can advise you on a more personal level regardless of the course you are studying"

(P5, alumnus, 26 years old, Mexico)

The experts' opinion

People disagree on the role of teaching staff: whether they should be there to help or support students based on their changing needs and different stages of maturity and motivation, or whether their role should remain restricted to giving lectures.

5.1.2.3. The key is in how people are taught to consume

What do students say?

They miss having resources to work on their soft skills to manage the huge amounts of information being offered, time and project management, concentration skills, oral communication, etc.

Younger students find it harder to choose the most suitable source and format in each case, and they have less discipline when it comes to managing distractions and temptations.

They all mentioned struggling to concentrate due to the arrival of messages and notifications on their electronic devices (mobile phones are the most disruptive, but computers provide almost the same distractions).

"Teaching staff should also cover more interdisciplinary aspects, such as time and project management and soft skills"

(P10, 4th-year undergraduate student, 21 years old, Spain)

"Half the people in my class who use a computer in class aren't taking notes: they're on social media"

(P7, upper secondary school student, 16 years old, Spain)

"During lockdown, I found it hard to follow lessons and I had less concentration. Having the teacher in front of you forces you to work, and the change of environment also helps you get into the right mindset"

 (P2, undergraduate student, 18 years old, Spain)

The experts' opinion

The problem is not technology itself but a lack of education in time management. They need to understand that they need time to focus. Students need help to create effective study and work habits.

Just now, they tend to use multiple screens at the same time, they get a lot less out of lesson time, and they have a lower attention span.

In addition, we should use behavioural economics to increase students' personal motivation (teenagers tend to overemphasize the current moment, seeking immediate gratification and rewards).

5.1.2.4. Immediacy is more important than quality

What do students say?

Teaching staff members are seen as the last resort because they do not respond immediately.

The learning model ends up being determined by the exam model.

The only contents seen as essential are those that can also be applied in practice. If they cannot be put into real exercises and applications, they are of no interest.

"I like Wikipedia because it's very quick. It's the fast food of information"
(P1, postgraduate student, 26 years old, Spain)

"Contents that can't be applied in practice are dispensable"
(P10, 4th-year undergraduate student, 21 years old, Spain)

The experts' opinion

If we want more engagement from students, we must get them to do something with the content, a task with a tangible impact, using their need for immediate gratification.

The majority of students think that teachers' main role is to assess them.

Most of them only want to understand the concepts on which they will be assessed.

5.1.3. Macro-trends relating to the new teaching model

5.1.3.1. Teachers take on a new role in teaching ecosystems

What do students say?

Despite having channels for contacting teaching staff remotely, they almost always prefer to resolve issues with their classmates.

Many of them are in daily contact with each other through messaging apps (such as WhatsApp and Telegram). This is one of the main ways they access knowledge and resolve queries, and they particularly value its immediacy.

"I ask my friends a lot of things: the WhatsApp and Telegram group chats are always blowing up"
(P1, postgraduate student, 26 years old, Spain)

"If I have a question, I ask my classmates first, followed by the teacher, and then I look online"
(P8, undergraduate student, 21 years old, Mexico)

The experts' opinion

In general, younger people have no problem connecting with each other, but they do lack critical skills, such as the ability to identify fake profiles, sponsored content or viral and clickbait content, verified sources of information, and so on.

"MOOCs are, and will always be, an additional tool for people such as those more able students who would previously have done additional reading"

"This country is still obsessed with certificates, and blockchain should help us ensure that validation processes do not require such restricted education"

5.1.3.2. The end of spontaneity in learning models

What do students say?

Students are aware that they have access to huge amounts of educational resources that can help them understand concepts, but they face a number of problems in this regard:

Some of them find that, due to the way syllabuses and assessments are structured (based on very defined concepts), they often avoid using such resources in order to avoid conflicts with teachers' opinions.

Others explain that they often struggle to find specific information on what they are looking for: the information they find tends to be more generic, and they try not to spend time learning about concepts outside the syllabus that they will not be assessed on.

They also expect to have all core contents available in a very structured way.

> *"Ideally, we would have the contents summarized in the form of text, with drawings and a video every now and then. All of it properly structured and accessible separately"*
>
> (P4, undergraduate student, 18 years old, Mexico)

The experts' opinion

There is debate on whether students should be given 2–3-minute clips to help them understand the content of specific topics or if spoon-feeding them so much would be counterproductive for them in the long run.

One side believes that concepts should be explained through micro-topics, linking them to each other in a logical and natural way and creating an experience that is easy to follow.

"You can't learn to do open-heart surgery by watching TikTok videos"

5.1.3.3. Infotainment and gamification increase engagement

What do students say?

They like it when teachers make an effort to connect theoretical concepts to real-life examples. Connecting theory to "real life" increases their attention and curiosity. When concepts are more tangible and connected to their own lives, they can understand them better, they see them as more valuable, and they are able to remember them more easily.

Students create groups for sharing information on shared interests. Teaching staff, on the other hand, often fail to capture their interest because they use out-of-date examples.

"The ideal option is a combination of every format so that students don't get burnt out. (...) When teachers surprise you, you remember everything better"
(P10, 4th-year undergraduate student, 21 years old, Spain)

"We're the first generation in a new educational model. Projects involve solving current and future problems from an engineering point of view. Teachers provide us with the tools, and we decide how to use them"
(P6, 3rd-year undergraduate student, 22 years old, Mexico)

"Using current topics is very enriching. In Mexico, a year ago an underground train collapsed onto a road. Linking this to the topic we're studying helps us gain a better understanding of its importance"
(P5, undergraduate student, 21 years old, Mexico)

The experts' opinion

There are polarized opinions of entertainment-based teaching.

• Some believe that training can be categorized based on accuracy, high standards, excellence or good judgement, but not on how fun it is. For example, you cannot learn how to do surgery from resources such as Kahoot or 3D.

• Others feel that it is what young people expect and there is no reason why it should be at the expense of quality. We must be open to the use of different methods, such as audiobooks, podcasts with interviews and so on.

Primary research

5.2. Summary table of devices and formats

Another aspect we analysed in our primary research was young people's preferred formats for studying. The first aspect that stands out from our research was students' great ability to decide which device and format to use based on their aims and the results they hoped to achieve. This analysis shows that young people are very aware of the distraction factors they're most susceptible to.

It should also be noted that this degree of self-awareness is higher among young people who consider themselves more studious than average for their peers. These are the ones who have shown the greatest ability to discern between uses, as well as greater control when it comes to choosing the device for consumption and the study model.

Finally, before looking at the table of devices and formats, we would like to stress that, although most students have great control and ability to choose, the channel on which they receive content still plays a vital role. Thus, although all young people prefer to consume any content on a large screen, they also admit that, when they receive class materials on WhatsApp, they will probably look at it on their mobile first.

Primary research

5.2. Summary table of devices and formats

Although there is nothing unexpected in the summary table of devices and formats, here is a review of the most recurring aspects among the young people we interviewed:

	Primary device	Favourite formats	Usual channels
For searching for content for the first time	Computer	Search engine / Ask classmates	Google / WhatsApp
For an introduction to new content	Computer	Video	Youtube / Wikipedia
For structuring the content linked to a topic	Computer	Infographics	Google Images / Virtual Campus
For understanding how to apply the content	Computer	Short texts / Videos / Case studies	Academic material Youtube MOOCs Blogs Drive
For studying a topic in depth	Paper	Long texts	Bibliography / Academic material
For keeping abreast of a topic	Mobile phone	Social media posts / Podcasts	Youtube / Spotify / TikTok / Twitter
For studying and reviewing concepts	Paper	Notes	Virtual Campus Instant messaging channels Online portals

5.3. What do young people and experts want?

More variety of formats

More mobility of formats and channels

More socialization

More entertainment

More immediate responses

More guidance and structure

More proximity
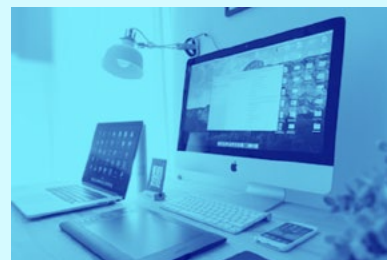
More practica appliability

More personalization

More freedom of choice

More news and reality

More flexibility of certification

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