An Audiovisual Strategy to Raise Higher Education Students' Awareness about Digital Skills Development

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Abstract
In today's world, digital skills have become crucial and recognized as essential tools for citizens' personal fulfilment, employability, active citizenship, and social inclusion. Several initiatives have arisen to address this topic. This study focused on developing an audiovisual strategy to be disseminated in social media, to raise higher education students' awareness about digital skills development.
In the first stage, the study analysed the social media platforms used by higher education students and their preferences for audiovisual content consumption. The findings revealed that students gravitate towards short, impactful videos that evoke emotions and tell compelling stories. Five short videos were created incorporating these elements based on these insights and disseminated on Facebook, YouTube, Instagram, and TikTok. Despite some challenges, such as the absence of paid video promotion in a saturated digital landscape, the videos demonstrated effectiveness in raising awareness among academic students about the digital skills sought by the labour market.

Keywords *Audiovisual Strategy, Digital Skills, Higher Education Students, Short Videos, Social Media.*

1. Introduction

With the rise of the technological revolution, developing digital skills has become increasingly crucial for individuals' empowerment. Presently, it is impossible to discuss digital technologies without considering their correlation with professional practice competencies. As technology evolves, the demand for individuals with a strong understanding of digital tools and applications grows exponentially. Digital skills requirements are closely tied to job roles, yet basic digital skills are universally sought-after in all professions. Nearly all workplaces dictate employees to possess fundamental digital skills, and approximately 90% of employers assert that professionals should possess at least basic digital skills, as indicated by a study assessing the digital transformation of jobs in the European Union (Commission et al., 2017).

It is, therefore, essential that higher education institutions play a decisive role in the skills acquisition process that their students undertake before entering the labour market. These institutions need to be more attentive to labour market needs in this domain and better prepare their students, incorporating, for example, digital skills development into their curricula, seeking the needed digital literacy for effective technology use, particularly in professional contexts.

To enhance digital skills in young people who arrive at the labour market, the Erasmus+ project "Back2Basics" [1] aims to prepare HE professors and students and recent graduates to be more digitally proficient. This study is one of the outcomes of this project, focusing on raising awareness and improving digital skills among higher education students through the development of an audiovisual strategy. In particular, the study aimed to conceptualize, produce, and disseminate an audiovisual strategy for social media to raise awareness about digital competencies among higher education students.

2. The Importance of Digital Skills for Citizens and the Labour Market

In the European Framework for Key Competences for Lifelong Learning (Commission et al., 2019) presented by the European Commission, digital competence is identified as one of the eight key competencies for lifelong learning, defined as "the confident, critical, and responsible use of digital technologies for learning, at work, and for participation in society".

The Digital Competence Framework (DigComp) (Commission et al., 2017) has emerged as a tool to improve and support the acquisition of digital skills, and it is a reference when planning education and training initiatives to improve the digital competencies. Besides identifying and describing the key areas of digital competencies for European citizens, this tool describes the applicability of the different competencies to different contexts, such as learning and employment scenarios. The DigComp aggregates the competencies in five important areas: information and data literacy, communication and collaboration, digital content creation, safety, and problem-solving.

Information and data literacy involves searching and organizing information and data effectively. Communication and collaboration encompass digital interaction, information sharing, digital collaboration, and managing one's digital identity. Digital content creation involves integrating and reworking digital content while dealing with licenses and usage rights. Safety relates to protecting digital devices, personal data, and privacy. Problem-solving focuses on resolving technical issues, identifying technical needs, and creatively using digital technologies.

Acquiring these digital competences enables individuals to become more proficient in searching and organizing information, interacting and collaborating through digital means, creating and reshaping digital content, protecting devices and personal data, and solving technical problems while using digital technologies (Vuorikari et al., 2022). These skills are crucial to improve employability and employment. However, the level of digital competencies demanded by the labour market is generally higher than the average level of digital competencies among the population of the European Union (Kiss et al., 2017). This gap shows that as jobs become more reliant on technology, many people need to catch up with the digital skills required, emphasizing the need for more accessible and effective digital training.

3. Young Adults Use of Social Media and Audiovisual Content Consumption

Generation Z is often referred to as the largest user of digital technologies, as they were born immersed in this context from birth (Díaz et al., 2017). This generation includes those born after 1995 and up to 2010 (Francis & Hoefel, 2018), and has been heavily influenced by the significant impact of the widespread integration of digital technologies into everyday life. For students of this generation, mobile phones, social media, and instant messaging services are seen as common elements and used daily as a means of communication and collaboration, even for educational purposes. This generation is often associated with being 'digital natives,' however, although they have skills in using technology, they do not always use it critically and wisely, especially in the educational context (Almenara et al., 2020; Identidad Digital: El Nuevo Usuario En El Mundo Digital, 2013). The main problem with this widespread technology use among young students is the misleading feeling that they have about mastering the technology and its technical details (Pérez-Escoda et al., 2016).

When it comes to "Young Adults Use of Social Media and Audiovisual Content Consumption", this generation takes the centre stage. They are the main users of social media and are highly engaged in consuming audiovisual content, making a profound impact on trends and patterns in these areas. According to Kemp (2022), in Portugal, there were 8.53 million YouTube users at the beginning of 2022, with 5.95 million on Meta platforms. The age group of 18 to 34 dominates, and 89.7% of users consume online videos. Instagram, Facebook, and TikTok, which are among their top 5 favourite social media platforms, although WhatsApp and other messaging apps are the most widely used networks. In Western Europe, Instagram currently has around 294 million users, making it the second most popular platform behind Facebook. However, it is projected to gradually increase to 321 million users by 2027. This platform continues to attract users due to its ease of sharing photos and videos, as well as following and interacting with other users, particularly among younger users. (Jo Dixon, 2023a) However, globally, the social network that has stood out the most in recent years is TikTok which has emerged as a prominent social network in recent years. With its focus on short videos, ranging in length from 15 to 60 seconds, TikTok quickly gained popularity by capturing users' attention from the start. Within just five years, it reached one billion users, surpassing Google as the most visited site on the Internet. (Lua, 2022). These short videos are valued for their ability to quickly capture audience attention and convey important messages in a concise, engaging, and fast-paced manner. They are easily shareable and have the potential to go viral, increasing brand visibility and reaching a broader audience (Khan, 2023).

Despite the reduced attention span, according to the website "Influencer Marketing Hub" (Geyser, 2022), TikTok users typically spend over 850 minutes per month on the social media platform. Short videos have greatly influenced the consumption habits of young audiences. Various institutions and initiatives, like DigitalEU[2], have embraced this format to reach and inform younger users. The characteristics of short videos, such as brevity and dynamic visuals, make them particularly appealing and effective in engaging younger viewers. Preceding the following discussion on one of the primary influences for this project, it is essential to highlight the pivotal role of DigitalEU.

DigitalEU holds significance for this project due to several key reasons, as a European initiative, it offers valuable insights into technology and digital endeavours within the European context, shedding

light on the region's technological landscape and policy developments. Secondly, DigitalEU employs a language and format characterized by short, engaging videos, which effectively resonate with younger audiences. This makes it an effective tool for reaching and communicating with students and young people, especially those in higher education. Additionally, DigitalEU's presence spans various platforms, including YouTube and Instagram, enabling it to reach a broader audience and tailor its content to suit different user demographics' preferences. The dynamic and visually appealing nature of DigitalEU's short videos, coupled with contemporary music trends, enhances user engagement and facilitates understanding of important technology topics in Europe.

4. "Five Stories" - Creating an Audiovisual Strategy to Promote Awareness of Key Digital Competencies for Higher Education Students

4.1 Methodology

The methodological approach used in the development of this project was Design-Based Research (DBR). DBR distinguishes itself from other research approaches by its commitment to developing theoretical knowledge and practical solutions simultaneously, in real contexts, and in collaboration with its stakeholders (McKenney & Reeves, 2012). The project's planning phase involved several steps, as proposed by Matthew Armstrong, Cade Dopp, and Jesse Welsh (2020). This planning phase began with a detailed analysis and careful exploration of the project's context. Initial preparations included reviewing relevant literature related to frameworks for digital skills development, young adults' preferences regarding audiovisual content consumption and technical characteristics of these contents and understanding the state of the art in similar projects, establishing a solid knowledge base for subsequent phases. Focus groups and questionnaires were then conducted with the target audience in the initial phase. These methods gathered representative individuals to discuss and explore ideas and opinions about the project (Kamberelis, 2014).

The next phase of this project development involved designing and producing audiovisual content – short videos, based on previous analysis and insights. Strategies for content dissemination, including suitable social media platforms and optimal posting schedules, were analysed, and defined. Elements, such as video length and cinematographic and visual language styles, were specified based on the project's objectives and the researched preferences of higher education students. The goal was to develop engaging short video scripts aligned with the project's objectives and concerns. Based on the decisions made and the produced scripts, short videos were created.

The third and last phase focused on evaluating the audiovisual strategy and its short videos impacts. Data from social media platforms where they were disseminated, like views and interactions, were collected and analysed.

4.2. Initial Questionary

The initial questionnaire, conducted in two countries where the Back2Basics project operates, aimed to investigate the preferences of young adults regarding audiovisual content consumption and their

desired technical specifications. Both in Portugal and Greece, the survey targeted a range of participants, including higher education students and recent graduates. In Portugal, the questionnaire was administered in person and received responses from 7 individuals, while in Greece, an online version of the survey attracted participation from 26 respondents.
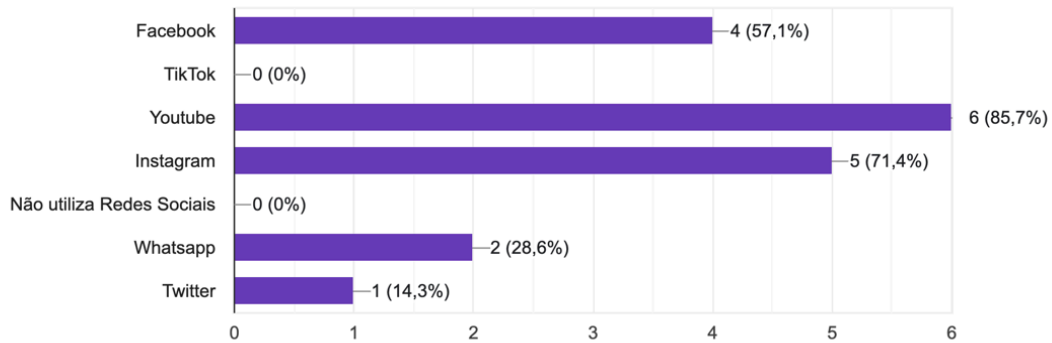

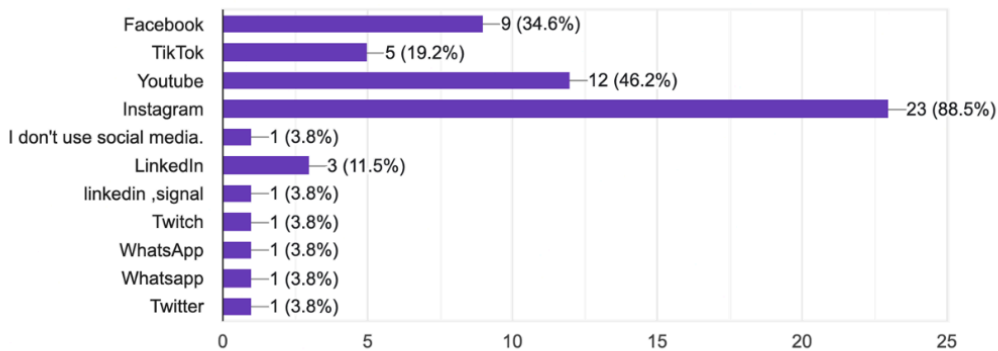**Figure 1 - "Which social media platforms do you use the most?" - Portugal**

Figure 2 - "Which social media platforms do you use the most?" - Greece

In the first question "Which social media platforms do you use the most?", in Portugal (Figure 1) respondents mentioned Facebook, YouTube, and Instagram as their most used social media platforms. TikTok was not mentioned. In Greece (Figure 2), Facebook, Instagram, and YouTube were also popular, with TikTok being mentioned by some participants.
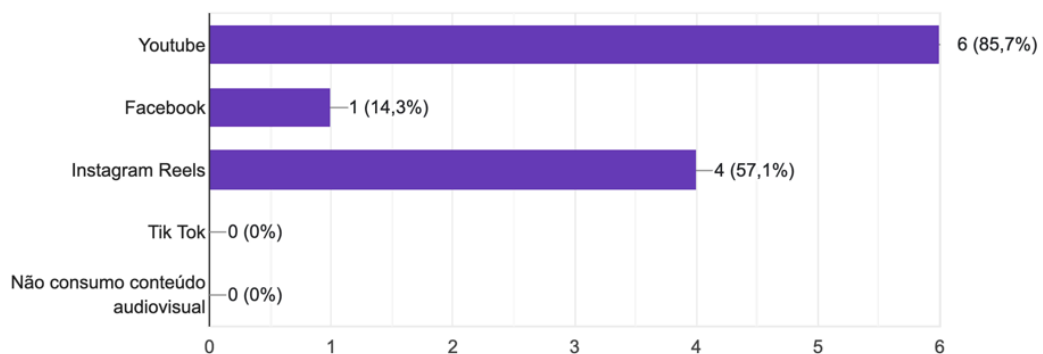

Figure 3 - "Which social media do you use the most to consume audiovisual content?" - Portugal
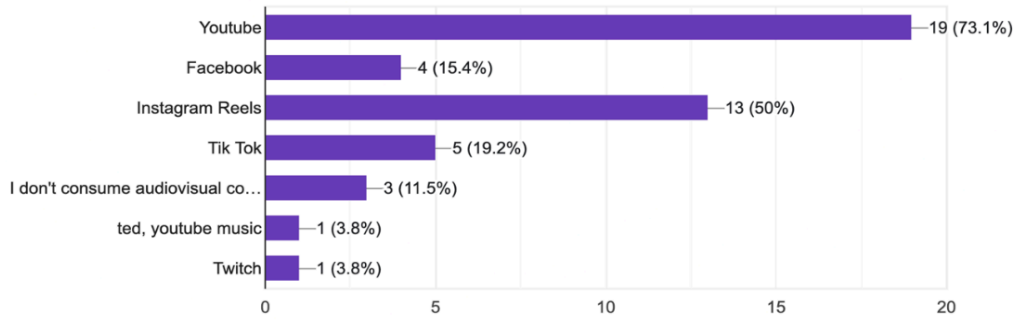
Figure 4 - "Which social media do you use the most to consume audiovisual content?" - Greece

In the following question, "Which social media do you use the most to consume audiovisual content?" in both Portugal and Greece (Figures 3 and 4), YouTube was the most popular platform for consuming audiovisual content. Instagram Reels also showed popularity in both groups. TikTok was only mentioned in the Greek questionnaire. Facebook had a smaller role compared to YouTube and Instagram Reels in consuming audiovisual content in both countries.
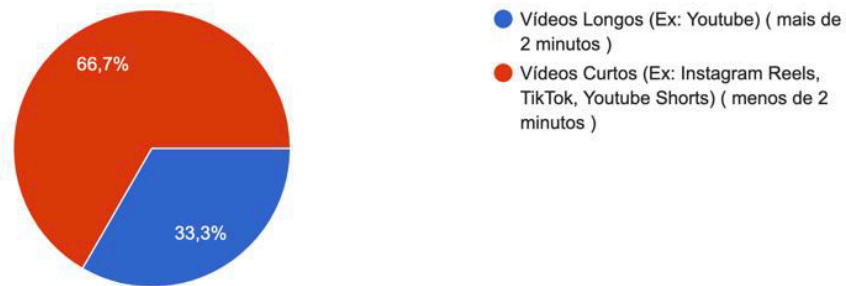

Figure 5 - "What is the video length of the videos you consume the most on social networks?" - Portugal
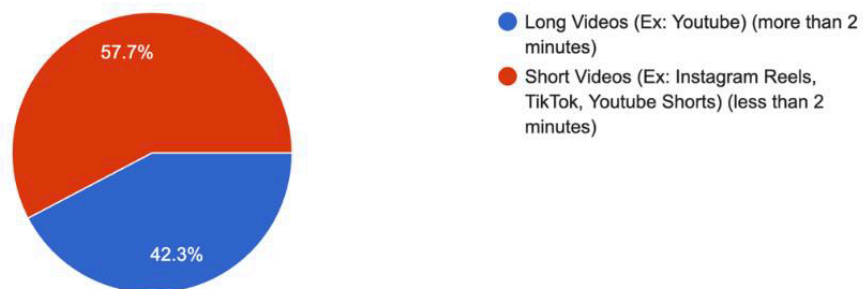

Figure 6 - "What is the video length of the videos you consume the most on social networks?" - Greece

In the third question, "What is the video length of the videos you consume the most on social networks?" In Portugal (Figure 5), most respondents prefer consuming short videos on social media, while in Greece (Figure 6), there is a split preference between short and long videos. Short videos are popular due to their quick consumption and easy accessibility. However, many respondents in both countries still appreciate longer videos.

When asked about "What type of audiovisual content do they consume the most on social media", participants in both countries have diverse preferences for the type of audiovisual content consumed

on social media. Common interests include music, entertainment, and news. However, there are variations in other preferences, reflecting the wide range of content available and the ability to cater to individual interests and needs.

When asked specifically about the type of educational content most interesting, we can identify a variety of topics mentioned by the participants.

In Portugal, respondents find educational audiovisual content from channels like Kurzgesagt - In a Nutshell and Ted-Ed interesting. Tutorials, DIY content, online lectures, and informative videos were also mentioned.

In Greece, participants expressed interest in educational content on topics like psychology, philosophy, economics, and programming. They mentioned conferences, documentaries, short videos, podcasts, and specific YouTube channels. As in the previous question, both groups showed a diverse range of interests and preferences for educational content.

4.3. Focus group

In a next stage, a focus group session took place with the aim of gathering more information about students' preferences about audiovisual content in a context of raising awareness, during which a second questionnaire was administered to gather feedback.

This session occurred during one of the activities of the project where students from Portugal and Greece got together during a training course in Greece. Four carefully chosen videos were presented to 20 participants, each addressing the same purpose of raising awareness among young people about a specific issue.

At the beginning of the session, all participants signed the informed consent, where it was explained in detail the objectives of the session, duration, and methods and all the tasks of the session, and that the participation voluntary, that they could quit anytime, and no sensitive personal data would be collected. The informed consent also authorized the audio recording.

Video 1^3 featured Commissioner Mariya Gabriel launching the "Back2School" campaign for a safer internet in 2018. Video 2^4 depicted a young graduate being bullied by the audience, highlighting the negative impact of cyberbullying. Video 3^5 showcased a text animation emphasizing the European strategy for a better internet for kids. Video 4^6 presented actors providing useful tips to combat cyberbullying.

After watching the videos, the participants filled out a questionnaire to assess engagement, storytelling effectiveness, audio quality, and the likelihood of sharing each video, and were asked to justify their answers to the group.

Which video best promotes engagement with its theme?
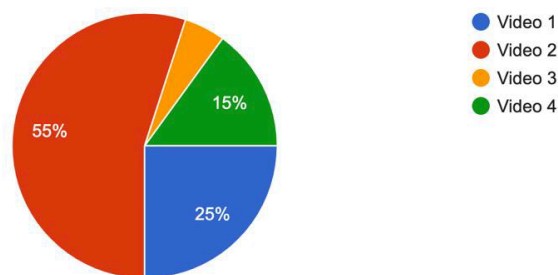20 responses

Figure 7 – Opinions about video engagement.

Participants in the first question (Figure 7) agreed that Video 2 was the most engaging, evoking emotions and promoting empathy. Some preferred Video 4 for its child perspective, while others appreciated the direct speech and eye contact in Video 1. Emotional appeals, real-life examples, and personal connections were effective techniques for engagement. Video duration was less important than the actual content in it. Over half of the participants chose Video 2 as it realistically portrayed the consequences of bullying and encouraged empathy, making it more immersive than typical informative videos.

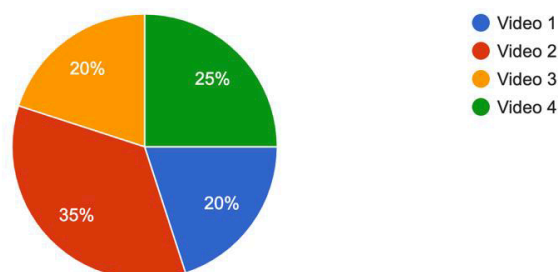Which vídeo has told the story in the most effective way?
20 responses

Figure 8 – Opinions about the story's effectiveness.

In the second question (Figure 8), participants had diverse opinions on the most effective story. Video 2 was considered the most impactful for evoking emotions and emphasizing the importance of relatability. Some preferred Video 1 for providing more information, Video 3 for combining information with music, and Video 4 for having victims explain solutions. Overall, the story of Video 2 was chosen by the majority as the most effective, but there were different perspectives and preferences regarding storytelling effectiveness in the videos.

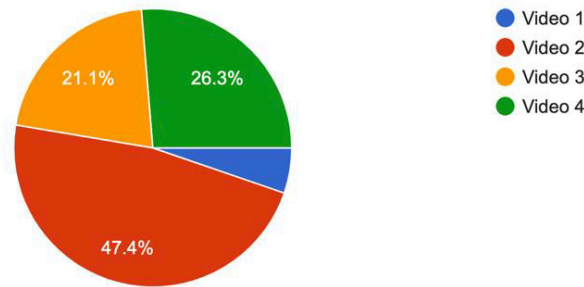In terms of the use of music and sound which video did you prefer?
19 responses

Figure 9 – Opinions about music and sound.

In the third question (Figure 9), participants had different opinions on the use of music in the videos. Some preferred Video 2 for its matching intensity and suspense-building music, while others enjoyed the catchy music in Video 3. Video 4 was appreciated for its absence of music, creating a realistic atmosphere. Overall, Video 2 was the most chosen due to its effective use of music to accompany and intensify the story. Some participants also highlighted the realistic atmosphere created by background noise in Video 4.

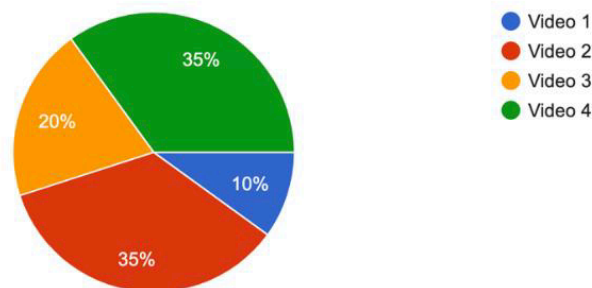Which video you would be inclined to share on social media?
20 responses

Figure 10 – Opinions about sharing the videos on social media.

In the final question (Figure 10), participants had varied opinions on the effectiveness of the videos for different purposes. Some believed Video 2 raised awareness effectively, while Video 4 provided practical solutions. One person preferred Video 4 but considered Video 3 more shareable on personal social media due to its use of text and infographics. Another person thought Video 2 was better suited for television or YouTube than Instagram. The votes were evenly split between Video 2 and Video 4, with Video 2 being impactful and relatable, while Video 4 offered practical solutions. The first video was seen as more informative and suitable for organizations.

In summary, audiovisual content should evoke emotions and empathy by using real-life examples and personal stories, fostering a connection with the audience and prompting action. Providing practical

solutions and tailored advice enhances the video's usefulness. Tailor the strategy to the audience and platform, using short, impactful videos for social media and longer, informative ones for websites. Captions play a crucial role for accessibility and can improve engagement. Controlling story intensity, creating suspense, and managing audience response are crucial. The strategic use of silence and background sounds adds realism. Emotional appeals, relatable examples, and informative content are effective. Language, visuals, and engagement techniques like eye contact and unique elements are key. Storytelling, music, and effective dissemination are also vital for success. Audiovisual content should aim to evoke emotions, incorporate real-life examples and personal stories, provide practical solutions, and be tailored to the target audience and dissemination platforms. The strategic use of visual and audio elements and a compelling narrative can create a lasting impact and effectively achieve the desired objectives.

4.4. The Five Scripts

Five scripts were crafted, each addressing challenges in "Information and Data Literacy", "Communication and Collaboration", "Digital Content Creation, Safety", and "Protecting Health and Well-being", aligning with the essential competencies outlined by DigComp (Commission et al., 2017), illustrating characters' early workplace experiences.

Figure 11- Rodrigo's Story

The first story falls under the theme of 'Information and Data Literacy" and tells us about Rodrigo (Figure 11), who landed his first job at a technology company. During a research task assigned by his boss, he struggled to find the necessary information. With the help of his colleagues, he learned to use keywords and advanced search features, improving his search approaches, and resulting in increasing efficiency and productivity.

Figure 12 - Nina's Story.

The second narrative applies to the theme of "Communication and Collaboration" and it features Nina (Figure 12), a recent graduate who secured a job at a prestigious company aligned with her values. She was responsible for promoting the company online. However, when she shared a related post on her social media, she got involved in a discussion on a social issue that the company held a position on. Overwhelmed by emotions, she responded inappropriately as a representative of the company. Her supervisor explained the importance of maintaining appropriate and respectful online interactions, even on personal pages. This experience taught Nina a valuable lesson.
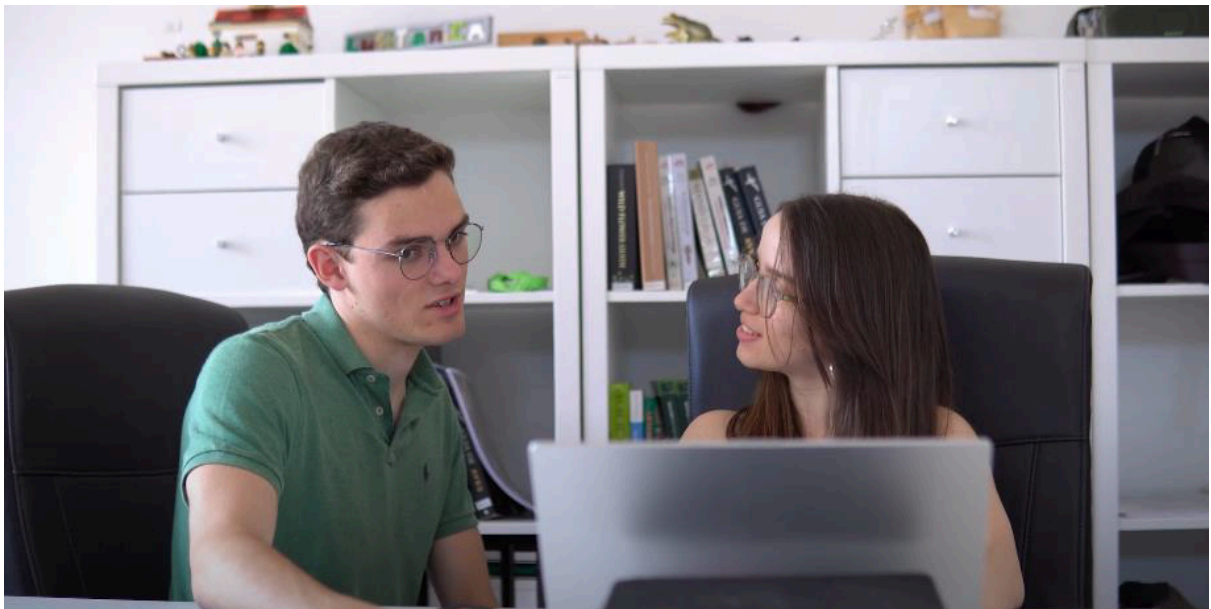

Figure 13 - Sofia's Story

The third story revolves around the theme of "Digital Content Creation" and it centres on Sofia (Figure 13). Working in the marketing department of a start-up company, she had a passion for video

production. When asked to create a video for a product launch, she inadvertently used copyrighted music. The video couldn't be used, leaving her devastated. Sofia researched copyright laws, learned to use royalty-free music, and successfully edited the video. Since then, she always used legal materials in her work.

Figure 14 - Maya's Story

The theme of the fourth story is "Safety" and it focuses on Maya (Figure 14), who shares an important lesson she learned from a mistake. By opening an email with a malicious attachment, her computer was infected with a virus, allowing hackers to take control of the company's YouTube channel. With the help of a co-worker, Maya resolved the situation. She learned the importance of being cautious when opening emails and implementing robust cybersecurity measures.

Figure 15 - Juan's Story.

"Protecting Health and Well-being" is the theme of the last story (Figure 15), which tells us Juan's narrative, describing how he changed his habits of excessive technology use. He used to spend hours on social media, feeling drained and unproductive. A co-worker drew his attention and advised him to implement digital well-being practices such as taking screen breaks and turning off notifications. Juan followed the advice and started enjoying more physical activities. Over time, he noticed an improvement in his mood and productivity.

The goal was to create relevant and engaging content to increase project visibility, attract more followers, and encourage interaction. The chosen social media platforms for video dissemination were Instagram, Facebook, TikTok, and YouTube based on the preferences reported on the initial questionnaire and due to their popularity, video-sharing features, and significant audience reach (Jo Dixon, 2023; Kemp, 2022). Videos were produced in vertical format for Instagram and TikTok and horizontal format for Facebook and Youtube7. In the dissemination process, two teasers and a trailer were created, these were designed to increase the audience's interest before the stories were released.

The stories were released every Tuesday and Thursday at 5 p.m., this time slot was chosen due to increased social media activity after individuals complete their daily tasks. The inclusion of subtitles played a crucial role in communicating the content. Many consumers view these videos in situations where audio is not possible or preferred, such as noisy environments or places where sound is not allowed. Subtitles, manually created in English, were translated by partners from other countries in Greek, Portuguese, and Spanish, enabling the content to be understood and appreciated by a broader and more diverse audience.

5. The Results of "The Five Stories"

5.1. Final Questionnaire

After the video dissemination, a final anonymous online questionnaire was made available from September 21 (two days after the release of the last video) until October 1, 2023. The purpose of this questionnaire was to understand the effectiveness of the project's videos in raising awareness among academic students about the digital skills sought by the labour market.

Participants were conveniently contacted and directly invited to participate, while some respondents spontaneously chose to participate after seeing the posts on social media. A total of 36 responses were collected and analysed.

1 - Before opening this questionnaire, have you previously viewed the videos? (you can select more than one option.)?
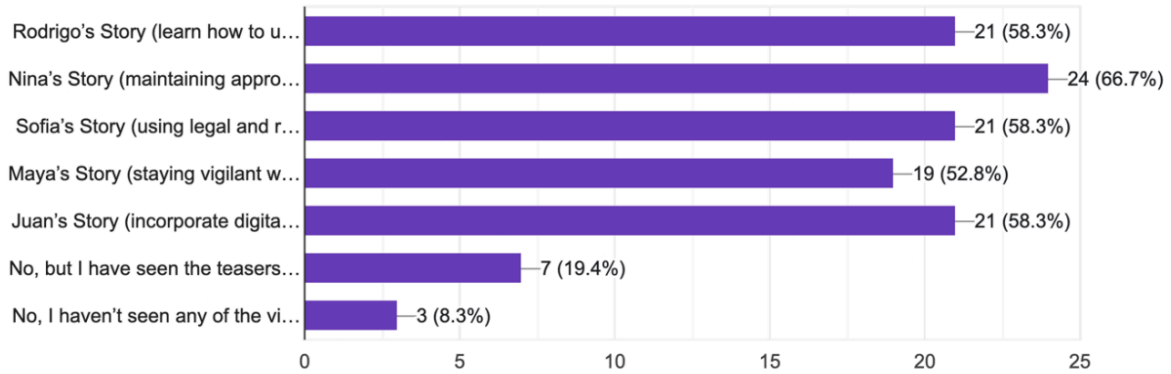
36 responses

Figure 16 – Previous contact with the videos.

When asked whether participants had watched the videos before, most participants had watched the videos beforehand (Figure 16). Nina's story was the most viewed, followed by Rodrigo, Sofia, and Juan's stories. Maya's story had the fewest views. Some participants had only seen teasers and trailers, while a few hadn't watched any of the videos.

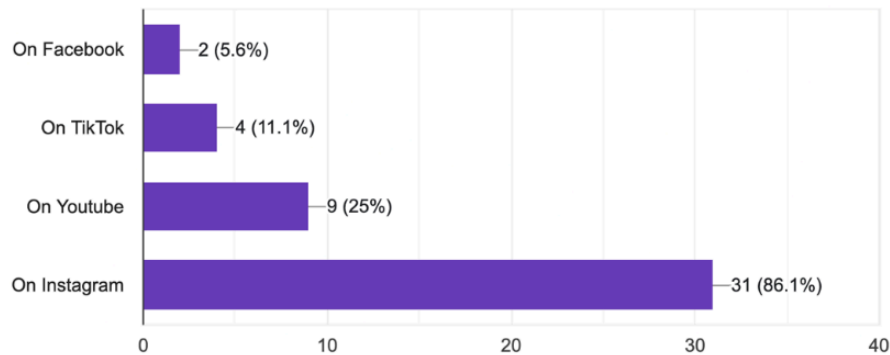2 - Where did you watch the videos? (you can select more than one option.)

36 responses

Figure 17 – Platforms where videos were watched

About the platforms where they watched the videos, participants reported watching the videos on different platforms (Figure 17). Instagram was the most popular platform for video viewing, followed by YouTube. TikTok and Facebook had fewer participants watching videos on those platforms.

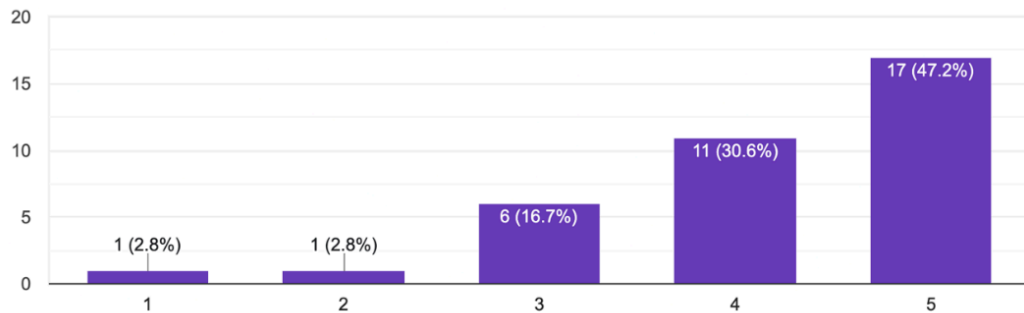3- From 1 to 5, did you find the videos engaging?
36 responses

Figure 18 - Videos engagement.

Participants were then asked to rate the videos engagement level on a scale of one to five. Results (Figure 18) showed that most of the participants found the videos engaging, with a significant number giving ratings of four or five. However, a few participants gave lower scores, indicating a lesser level of engagement with the content.

4- From 1 to 5, How likely are you to share these videos with others?
36 responses

Figure 19 - Likelihood of sharing the videos.
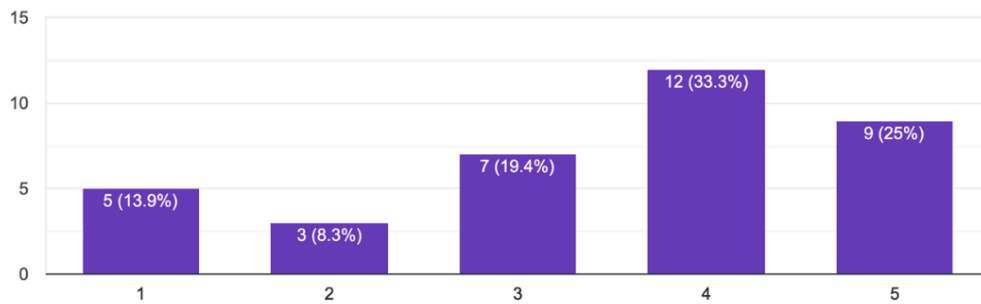
When asked to rate their likelihood of sharing the videos with others on a scale of one to five (Figure 19), the responses showed that many participants had a moderate to high probability of sharing the videos, with a notable number giving scores of four or five. However, there were also a few individuals who expressed a lower likelihood of sharing the videos with others.

5 - Did the videos present you with new information or insights? If yes, please share the specific information or insights you gained from watching the videos. (you can select more than one option.)
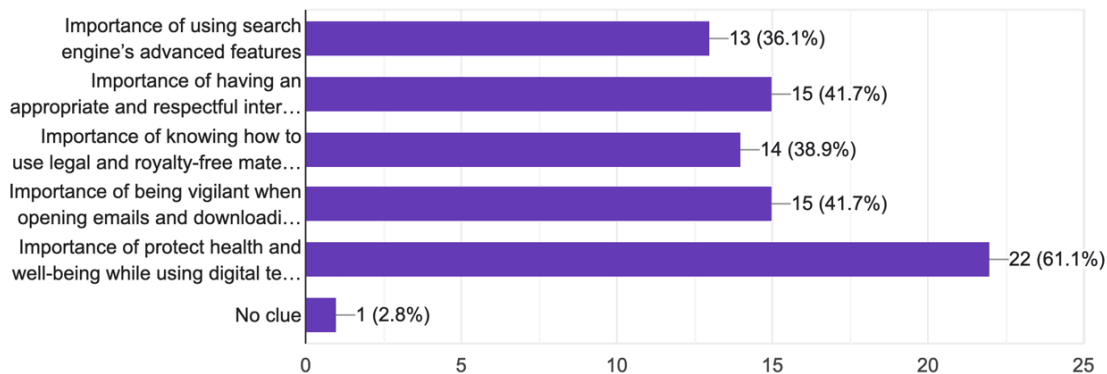36 responses

Figure 20 – Presentation of new information or perspectives.

Participants were asked if the videos presented new information or perspectives (Figure 20). If so, they were encouraged to share the specific information or perspectives they gained from watching the videos. Participants reported acquiring new information and perspectives from the videos in various areas. They mentioned gaining knowledge about advanced search features in search engines, emphasizing the importance of appropriate online interaction, respecting copyright by using royalty-free content, being cautious with email attachments, and prioritizing health and well-being when using digital technologies. However, one participant did not mention acquiring any specific information or perspective from the videos.

6 - Overall, on a scale from 1 to 5, do you feel that these videos would be effective in raising awareness about the digital skills valued by the labour market among Higher Education students?
36 responses
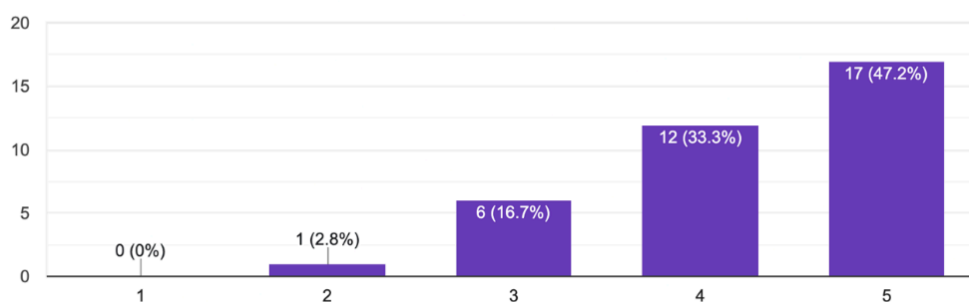
Figure 21 - Effectiveness of the videos.

Regarding the effectiveness of the videos in increasing awareness of digital skills among higher education students, the participants' responses showed a mixed perception (Figure 21). While one participant had a negative evaluation, most responses leaned towards higher scores, indicating that most participants found the videos effective for this purpose. However, a significant number of participants rated the videos with a moderate score, suggesting varying levels of effectiveness. Overall,

the responses revealed a range of opinions regarding the impact of the videos on digital skills awareness among higher education students.

7 - Based on your experience watching these short videos, what factors do you believe contribute to the videos' effectiveness in raising awareness about...ducation students? (Please select all that apply.)
36 responses

Figure 22 – Factors to Videos Effectiveness.

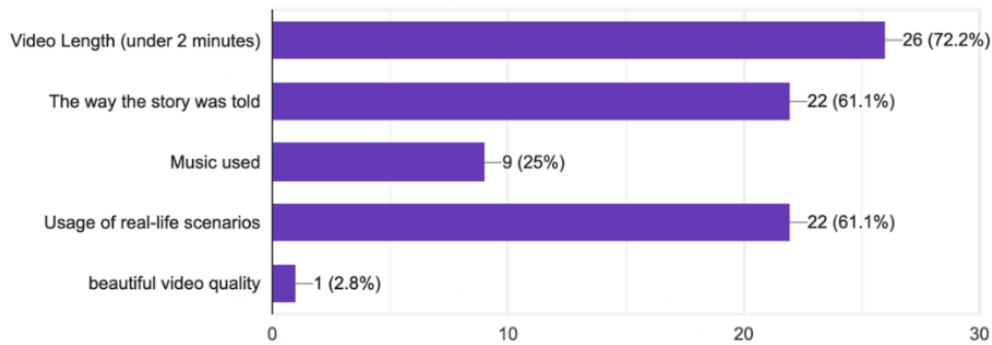The next question's results (Figure 22) highlighted the key factors that participants considered important for the effectiveness of the videos in increasing awareness of digital skills among higher education students.

Most participants emphasized the significance of video duration, preferring shorter videos under two minutes. Storytelling was identified by a significant number of participants as a crucial factor in the videos' effectiveness.

The choice and use of music were mentioned by some participants as relevant factors contributing to the videos' effectiveness. Incorporating real-life scenarios was emphasized by 22 participants, enabling students to relate digital skills to practical experiences. Only one participant mentioned the overall video quality as a relevant factor.

In summary, the results indicated that participants perceived video duration, storytelling, music selection, and the inclusion of real-life scenarios as key factors influencing the effectiveness of the videos.

8 - What factors do you believe can act as barriers to the effectiveness of these videos in raising awareness about digital skills among Higher Education students? (Please choose all relevant factors.)
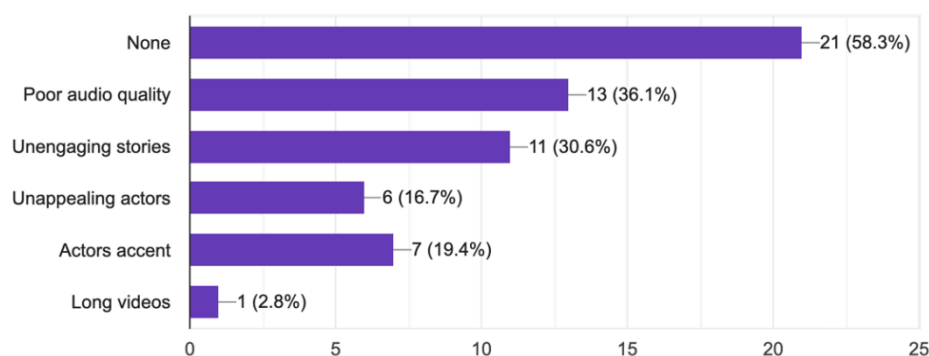36 responses

Figure 23 – Barriers to the effectiveness of the videos.

Participants also identified key factors that they believe act as barriers to the effectiveness of the videos in raising awareness about digital skills among higher education students (Figure 23).

While most participants (21) did not perceive any specific factors as barriers, suggesting the potential effectiveness of the videos, some obstacles were mentioned by a portion of the participants. Thirteen participants highlighted poor audio quality as a problematic factor, indicating that unclear or low-quality audio can hinder comprehension and diminish effectiveness. Eleven participants expressed that a lack of engagement in the storytelling presented in the videos could be a barrier, as unappealing content may impede emotional connection and information absorption.

Additionally, some participants mentioned the presence of unengaging actors (six participants) and accents of the actors (seven participants) as potential barriers. One participant also noted that long video duration could hinder effectiveness.

In the responses to the last question regarding potential improvements to the content of the videos to more effectively develop digital skills valued by the job market, opinions varied.

One response praised the project, highlighting the relevance of the stories, excellent editing, and overall organization. Some participants believed that the videos were already optimized due to their concise and direct nature, appreciating their brevity and lack of unnecessary information. Positive comments were also made about the video duration, emphasizing their concise nature.

Some suggestions were also provided by participants. One person recommended addressing more challenging or traumatic experiences in the stories, believing that this could have a greater impact. On the other hand, another person expressed dissatisfaction with the direction of the videos, specifically mentioning that the initial dialogues seemed fake and repetitive. This person suggested incorporating more authenticity in the actors' interactions.

Regarding technical quality, one participant mentioned the possibility of improving the overall quality (without specifying details) and the actors' expressiveness.

5.2. Social media data collection

The social media data collection took place on October 3, 2023, precisely two weeks after the publication of the last story and four weeks after the first story's publication. This data collection was conducted using the analytics and insights tools available on the dissemination platforms.

Table 1 - Facebook Data Collection

Title	Duration (secs)	Publish time	Custom labels	Comment	Date	Comments	Likes	Shares
Back2Basics - Sofia's Story	90	09/12/2023 09:09			Lifetime	0	7	1
Back2Basics - Maya's Story	81	09/14/2023 09:09			Lifetime	0	13	3
Back2Basics - Juan's Story	88	09/19/2023 09:09			Lifetime	0	7	0
Back2Basics - Rodrigo's Story	88	09/05/2023 09:09			Lifetime	0	11	2
Back2Basics - Nina's Story	87	09/07/2023 09:09			Lifetime	0	20	2

Seconds viewed	3-second video views	Impressions	Averaged Seconds viewed	People reached	Unique 60-second video views	60-second video views
560.37	26	55	10.57	46	3	3
1421.21	78	164	9.73	144	3	3
361.3	14	24	17.2	18	3	3
1190.93	70	229	5.49	206	4	5
2909.23	127	310	9.6	262	19	20

The data collected from Facebook (Table 1), videos without content paid promotion revealed certain observations. The videos received a low number of comments, indicating limited audience interaction. Engagement metrics, such as likes, shares, and views, showed significant variation among the videos, suggesting different audience responses. The average view duration was relatively short, ranging from 5,49 to 17,20 seconds, indicating that viewers did not watch the videos in their entirety. Reach and impression metrics were also relatively low, with the content reaching a limited number of people and generating a modest number of impressions.

Table 2 - YouTube Data Collection

Video title	Video publish time	Views	Watch time (hours)	Subscribers	Impressions	Impressions click-through rate (%)
		46	0.5901	1	128	12.5
Back2Basics - Rodrigo's Story	Sep 5, 2023	17	0.2199	1	13	30.77
Back2Basics - Sofia's Story	Sep 12, 2023	9	0.1407	0	23	8.7
Back2Basics - Nina's Story	Sep 7, 2023	8	0.0619	0	31	9.68
Back2Basics - Maya's Story	Sep 14, 2023	6	0.0585	0	32	9.38
Back2Basics - Juan's Story	Sep 19, 2023	6	0.109	0	29	13.79

The analysis of videos published on YouTube without any content paid promotion reveals certain patterns (Table 2). These videos garnered a relatively low number of views, ranging from 6 to 17 views. Additionally, the watch time for these videos was also quite low, with an average of less than one hour watched across all videos. This suggests that these videos struggled to attract a significant audience and failed to hold viewers' attention for extended periods.

In terms of audience growth, the channel only managed to gain one new subscriber during the analysis. This indicates difficulties in building a substantial following and suggests that the channel may not be effectively engaging and resonating with viewers.

Looking at impressions, which represent the number of times the videos were displayed, they ranged from 13 to 32. However, the click-through rate (CTR) on these impressions was relatively low, fluctuating between 8.70% and 30.77%. This suggests that the titles, thumbnails, or video descriptions may not have been compelling enough to capture viewers' interest and encourage them to click and watch the videos.
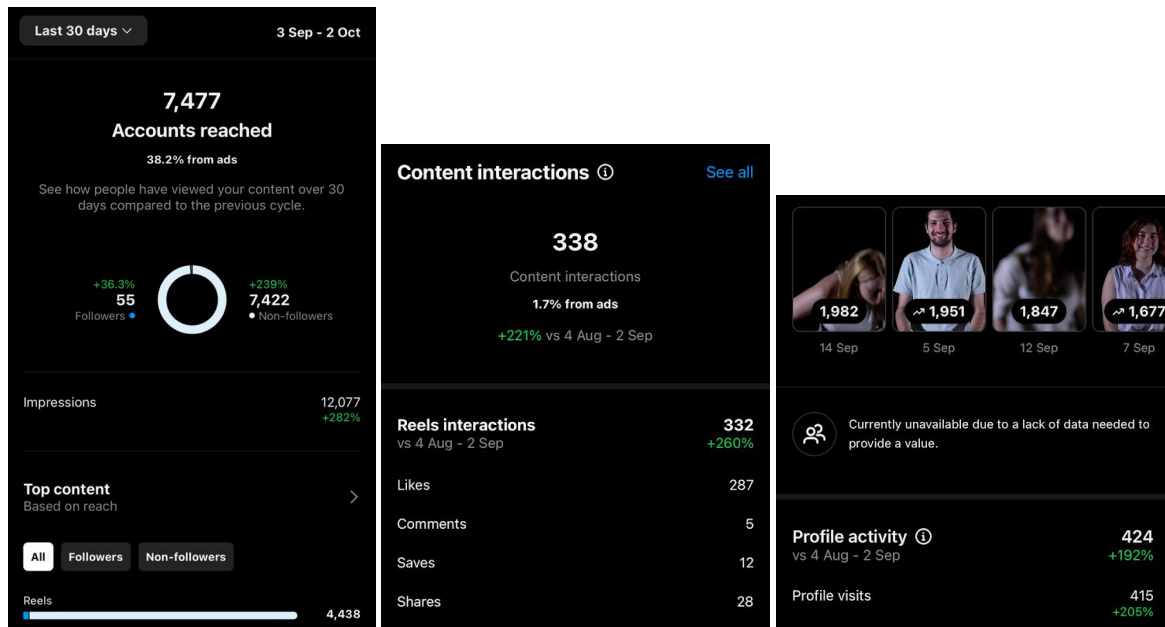

Figure 24 - Instagram Data Collection

In the case of Instagram (Figure 24), the results were different compared to YouTube. This is because the account gained a considerable number of followers since its creation and during its promotion at the Greece event. Additionally, during the Stories dissemination, some videos were promoted.

With this combination of factors, the account managed to reach a total of 7477 accounts during the promotion. This indicates a good performance in terms of follower growth and audience interest. The promotion during the Greece event and the dissemination of Stories were effective strategies to attract attention and increase the number of followers.

On Instagram alone, there were approximately 332 interactions with the Stories, representing a 260% increase compared to the previous period when interactions were not significant. There were 287 likes, five comments, 12 people saved the video for later viewing, and around 28 shares. Of these interactions, only 1.7% were due to video paid promotion.

Thanks to this significant engagement, activity on the channel increased by 192%, with profile visits increasing by 205% compared to the previous period. Although the paid promotion of videos helped the account reach many people, the increase in the interaction rate was minimally influenced by this investment.
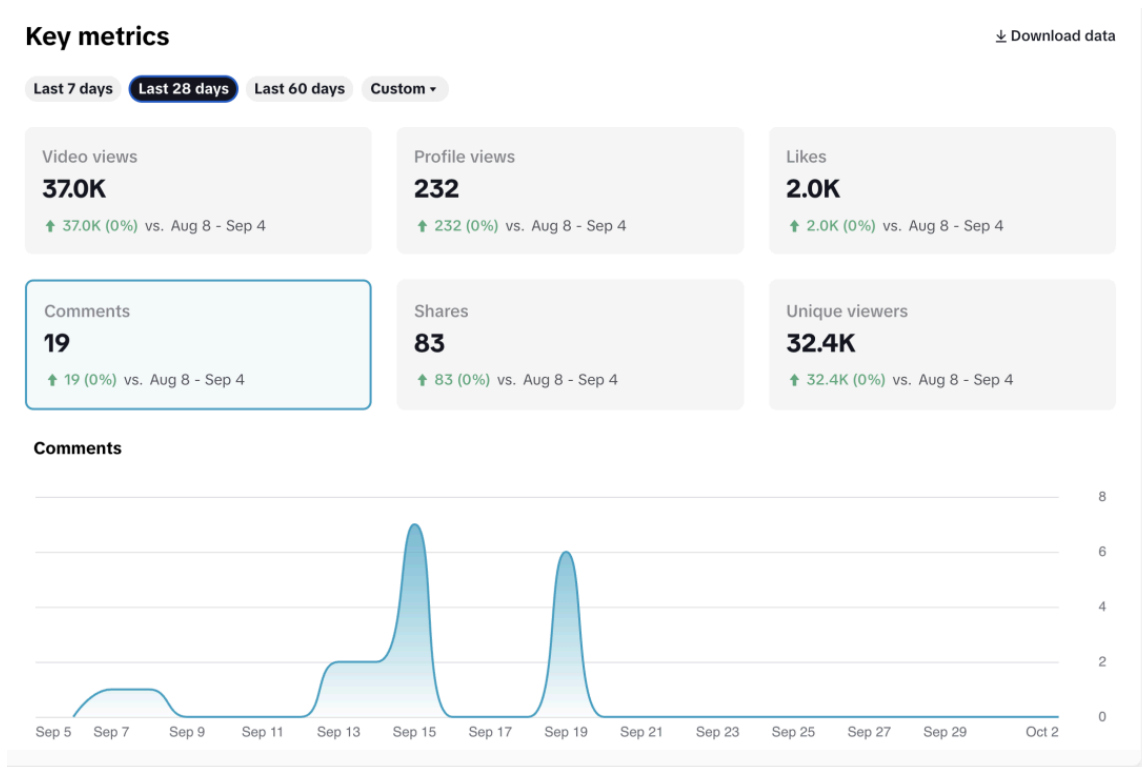
Figure 25 - TikTok Data Collection – Key metrics.

In the case of TikTok (Figure 25), the measured situation is different compared to Instagram. Since the account was not created during the Greece event, there was no similar initial promotion like on Instagram. Therefore, it was not possible to leverage the initial momentum provided by the event to gain followers from the start.

However, to promote videos on this platform, a larger financial investment was required in terms of paid promotion. This means that additional resources were allocated to boost the visibility and exposure of the videos through advertising and promotional tools offered by TikTok. As a result, TikTok became the platform with the highest reach.

The results of key metrics on TikTok reveal promising performance for the stories. There were approximately 37,000 views, indicating good exposure to users. The profile had 232 views, showing that some people showed interest in learning more about the content. Additionally, the videos received about 2,000 likes, indicating that the audience enjoyed the content, and it was well-received.

Although there were only 19 comments, it is important to highlight that this interaction is valuable as it demonstrates that the content generated enough interest in people to engage and leave their opinions. The videos were also shared 83 times, which is a good indicator that the content was considered interesting enough to be shared with other people's followers.

Lastly, the number of 32,400 unique viewers indicates that the videos and the money invested in promoting the content managed to reach a wide audience and attract the attention of a diverse range of people. These results demonstrate audience engagement and potential for greater reach on the platform.

The most viewed video (Maya's Story) has the following key metrics: a total of 9,700 viewers, with 88% being female and 12% male. In terms of age range, around 80% of the viewers are between 18 and 24 years old, while just over 20% are distributed among the other age groups. The predominance of female viewers in the most viewed video may be related to the fact that the actress in question also has a TikTok channel with over 300,000 followers, where her audience is predominantly female. In addition, the predominant age range is between 18 and 24 years old, suggesting that this demographic group is more receptive and engaged with the presented content, aligning with the project's objectives.

The second most viewed video (Nina's Story) recorded a total of 8,600 viewers, which is slightly lower than the first most viewed video. However, it is important to note that both videos still achieved a good number of views. Regarding gender, the second video had a more balanced distribution, with 42% female audience and 58% male audience. This indicates a relatively equal interest and engagement from both genders with the video content. In terms of age range, around 45% of the viewers of the second video are between 18 and 24 years old, which is like the first video. However, the second video also attracted a considerable percentage of viewers in the 25 to 34 age range, representing almost 20% of the audience. The remaining percentage is distributed among other age groups.

6. Conclusion

This study focused on the conception, production, and dissemination of an audiovisual strategy to raise awareness about the digital skills valued by the labour market among higher education students. Three objectives were outlined.

The first objective aimed to understand the social media platforms used by higher education students and identify the types of audiovisual content that captivated them the most on those platforms. This knowledge was crucial to direct the audiovisual strategy and was acquired through theoretical framing, an analysis of the current state of the art, and the use of focus groups and questionnaires with the target audience. It was found that social media, particularly video-sharing platforms like YouTube and TikTok, played an important role in disseminating information, with TikTok and Instagram gaining prominence due to their "Short Videos" format. The focus group and questionnaires provided valuable insights into the preferences and behaviours of university students regarding audiovisual content consumption. Overall, the results indicated that Instagram and TikTok were the most popular social media platforms among the respondents and a decline in interest in Facebook and YouTube. Additionally, the respondents showed a preference for short videos under 2 minutes, reflecting the current trend of quick and easy content consumption.

The second objective involved developing an audiovisual strategy and defining an appropriate video graphics language through a comprehensive literature review and analysis of the state of the art. Best practices in audiovisual content production were explored to convey the message effectively and engagingly about the importance of digital skills. Specific elements such as tone of voice, informal language, and direct eye contact with the camera were mentioned to capture the audience's attention in a content-saturated and stimulating environment. The appropriate cinematographic and visual language was found to be essential in creating engaging and effective videos, especially when targeting

a younger audience. Factors such as video duration, music selection, storytelling, and video quality played a crucial role in determining a video's message transmission effectiveness. Careful selection of actors and shooting locations was done to ensure authenticity and relevance in the stories.

During the production phase, the importance of filming in different formats (both horizontal and vertical orientation) was highlighted to ensure the content was suitable for various social media dissemination platforms. The use of the right equipment was also emphasized to maintain content quality. In post-production, editing played a crucial role in creating an attractive and impactful final product, including careful music selection and the use of appealing graphics.

Lastly, the third objective was to disseminate the content and evaluate the effectiveness of this audiovisual strategy. The strategy was designed to spark the interest of students and guide them towards other informative multimedia resources related to digital skills provided within the project. During the video dissemination, it was evident that most viewers belonged to the age gap of 18 to 24 years old, thereby closely aligning with the project's objectives. After the video dissemination, participants in the final questionnaire showed engagement with the videos, with the majority having watched the videos before responding to the questionnaire. They considered the videos engaging and expressed willingness to share them. The participants acquired knowledge in important digital skills and believed that the videos were effective in raising awareness about these skills among higher education students. However, there were some lower ratings regarding video engagement and the likelihood of sharing. Some participants mentioned obstacles to the effectiveness of the message in the videos, such as poor audio quality, lack of engagement in the stories, unattractive actors, actors' accents, and long video duration. Some participants felt that the initial dialogues seemed fake and repetitive. These factors may have contributed to lower interaction and sharing of the videos, impacting the desired visibility and reach. The social media dissemination strategy, although meticulously planned, faced the reality of a highly content-saturated digital environment, making it increasingly challenging to stand out and capture the attention of higher education students.

In conclusion, the development and implementation of an audiovisual strategy to raise awareness about digital skills among higher education students is a complex and multifaceted process. This study demonstrated the need to understand the preferences of the target audience and the platforms they use, adapt the content to those preferences and platforms, and actively promote that content to reach the desired audience. However, this field is constantly evolving, requiring continuous learning and adaptation to new trends and the needs of higher education students.

Acknowledgements

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[6] Forth Video Shown at Focus Group: https://youtu.be/fVQszT4NgN0?si=Avc3h5rTzrGwHtMG

[7] Back2Basics social media and all videos produced: https://linktr.ee/back2basicserasmus