

# Redesigning higher education study skills courses: reflections of Gen Z students on a dynamic and interactive syllabus

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## Abstract

One of the topical challenges of higher education is how to offer quality courses for the future; i.e., in a way to engage and motivate ‘Gen Z’ students, who will be the dominant generation in the not-far future. The aim of this study is to explore how to redesign courses for the future needs by reflections of the emerging ‘Gen Z’ generation students with specific focus on course dynamics, invested effort, optional assignments, group- and self-assessed presentations and the skills developed. Overall, two groups of *Study skills* students were involved in the study taught by two different instructors. Data was collected over the course of the Spring 2023 semester from multiple sources: individual student reflections and a mid-term feedback form was used in the first half of the semester followed by an end-term reflective questionnaire ( $N=67$ ). The results imply that it is possible to redesign existing courses, reconsider teaching practices, and collaborate in the process with the other instructors of the same course.

Keywords: Gen Z in higher education, higher education students’ competence development, study skills development, quality higher education, dynamic course design, flexible course design

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## INTRODUCTION

Foresight in higher education encompasses enabling higher education institutions to remain relevant in an ever-changing, fast-paced world, characterised by social and environmental challenges. Quality higher education plays a crucial role in achieving Sustainable Development Goal 4 (UNESCO, 2018), by equipping students with knowledge, skills, and attitudes necessary to navigate this complex and unpredictable world. To be successful at university, in the job market, and to be able to proactively address local and global issues (Divéki, 2020, 2023), young people need to develop their critical and creative thinking, problem-solving, communication and collaboration skills (OECD, 2018) and their education should empower

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them to use these skills in real life.

The past few years of higher education have been affected by our unpredictable world, as the Covid-19 pandemic took a heavy toll on education systems around the world and universities could only adapt to these changes by switching first to completely online, and then to hybrid education. In such a context, university teaching and assessment needed to undergo radical changes, without much time for preparation. Moreover, in recent years a new generation has started their university years, Generation Z (Gen Z). Students belonging to Gen Z were born between the mid-1990s and 2010s, and they can be characterised by their tech-savviness, unique use of social media and short attention spans (Guld, 2022). To successfully engage these students, and to offer them quality learning experiences, their unique characteristics must be understood, and courses need to be tailored to their needs, while also keeping in mind the demands of the labour market and the challenges of the world in the 2020s.

The aim of this case study is to present the two instructor-researchers' endeavours to redesign a *Study skills* course and its syllabus in a Budapest-based business university to cater for Generation Z's needs, and to reveal the students' perceptions of the redesigned course. A border aim was to investigate through an illustrative case if it is possible to cater to the needs of modern generations in a way that their 21st-century skills are traceably developed. To guide the researchers' inquiries, the following research questions were drafted:

1. What are participants' perceptions on the interactive course syllabus and its features?
2. In the participants' perceptions, how much effort did they have to put into completing the course?
3. In the participants' perceptions, how did the course contribute to developing 21st-century skills?

## 1.1. BACKGROUND

In alignment with our research questions, the scope of our research centres around young adults in higher education through the case example (Duff, 2012) of two seminar groups of a business university in Budapest. In the Hungarian educational context, the digitalisation of education was most recently highly boosted by the Covid-19 pandemic (Fekete & Divéki 2022a, 2022b; Fúzi et al., 2022; Philipsen et al., 2023). While education could continue in the online sphere throughout the pandemic, it was mainly characterised by formal connections and online education stripped the learners from socialising outside classroom settings, which arguably resulted in feeling isolation and a sense of wanting to be interconnected (Fúzi et al., 2022) once education has returned to the physical walls of universities in most regular university programmes of the country. In the given research context, even though seminars have returned to the buildings of the university, the modality of learning remains hybrid, i.e., the methods of engaging learners even within the walls of the university have changed towards being much more technology-dependent and -mediated. Higher education all over the globe, just like other levels of education, is currently seeking a new balance and is trying to define the new norms of engagement with a special focus on its relatedness with pedagogically motivated technology use in teaching and learning scenarios.

While Gen Z is often perceived as a tech-savvy generation (Guld, 2022), scholars have repeatedly highlighted the juxtaposition between young adults' capabilities of using technologies for entertainment and educational purposes. Even in the case of teachers, it has been observed that their willingness to use technologies in their teaching practice is mainly determined by their beliefs and invested effort into experimenting with digital alternatives (Bayne & Ross, 2011; Fekete, 2023; Mossberger et al., 2008). According to the literature, sometimes teachers' technology use remains limited to what technologies they learnt about during their pre-service teaching (Tondeur et al., 2016). To vest learners with the capabilities

of tapping the educational potential of digital technologies remains their instructors' job, especially because learners belonging to Gen Z have diverse needs and require differentiated instruction (Kótay-Nagy, 2023), which can be best facilitated by digital tools.

In today's world, where lexical knowledge is at a very quick search away and the costs of living are rising, time is of utmost importance for the learners. Universities are seen as educational institutions that are typically characterised by slower change, which is primarily affected by the needs of the job market and educational, ideological policies (Kozma, 2008; 2011a; 2011b). Since the pandemic, business-oriented higher education institutions have been working on reshaping their programmes to offer more applied knowledge in the shortest time possible as illustrated by the exponential boom of short cycle (1-year) master's programmes being launched in Hungary (Géring et al., 2022). A similar notion is detectable in universities' establishing more and more professional connections to offer dual degrees (Fenyves et al., 2020).

To make university studies relevant in today's world, university instructors have dual responsibilities: first, they must cultivate their students' work-related, cognitive, and transferable skills, enabling them to apply these abilities across various work environments due to the unpredictable nature of the job market and second, they must encourage the acquisition of knowledge, skills, and attitudes necessary for individuals to effectively confront the challenges of our contemporary society (UNESCO, 2016). In recent years, much emphasis has been put on skills development, which has been marked by the fact that the notion, *21st-century skills* has become a buzz-word, or very recently, the year 2023 was declared the European Year of Skills (European Commission, 2022). Though many institutions tried (Assessment and Teaching of 21st Century Skills - Griffin & Care, 2015; Partnership for 21st Century Learning, 2019; World Economic Forum, 2015), to date, there is no universally accepted comprehensive framework of the skills needed to thrive in the 21st century, and given the unpredictability of the future, drawing up such a framework could prove to be a futile endeavour. To tackle challenges in the foreseeable future more efficiently, it is more practical to put emphasis on the present and compile a list of skills reflective of the expectations and demands of prospective employers in the present. As an example, the World Economic Forum (2020) identified eight key attributes of educational content and experiences that can determine high-quality learning during the Fourth Industrial Revolution, which has been coined as Education 4.0: (1) global citizenship skills, (2) innovation and creativity skills, (3) technology skills, (4) interpersonal skills, (5) personalised and self-paced learning, (6) accessible and inclusive learning, (7) problem-based and collaborative learning, (8) lifelong and student-driven learning. When deciding what skills to emphasise in their courses, the World Economic Forum's yearly Future of Jobs report (2023) can inform instructors about the skills employers most seek in their prospective employees. In 2023, the top skills comprise (1) analytic thinking, (2) creative thinking, (3) self-efficacy skills: resilience, flexibility and agility, (4) motivation and self-awareness, (5) curiosity and lifelong learning, (6) technological literacy, (7) dependability and attention to detail, and (8) empathy and active listening.

As education and technology research are both heavily context- and time-dependent, it perhaps not surprising that foresight in higher education is often researched in the form of qualitative (case and/or action) studies (e.g., Adamku, 2021; Divéki, 2020; Efron & Ravid, 2020; Fekete, 2022; Gyurka, 2022; Pereszlényi, 2023; Prescott-Pickup, 2023; Szabó, 2023; Szoke, 2023). A focal point of research concerns educational technologies and learners' motivation through digital technologies. While technological solutions such as e-learning materials, interactive online task-sheets and online collaboration are buzzwords in modern approaches to engage learners, online tasks are still approached by students as tasks to be completed (Fekete, 2017; Tóth-Mózer & Kárpáti, 2016). This points towards the importance of teachers portraying strong technological-pedagogical competences; that is, the know-how of

designing tasks and lessons that necessitate students' engagement beyond the non-existing long-term motivational forces of simply working with technology. When used as an extension of teachers' pedagogical competences, online materials provide the teachers with the possibility to supervise learning and provide immediate feedback, which has been observed to serve as a sense of motivation for the learners to engage with such activities (Asztalos, 2015; Csizér & Dörnyei, 2005; Tartsayné Németh, 2012).

Consequently, the literature emphasises the importance of recognizing Gen Z students as unique individuals rather than treating them as a collective entity. With abundant online resources at their disposal, teaching them the abstract terminology of *Study skills* becomes a challenge. Despite their proficiency in utilising entertainment technology, they still rely on their teachers to foster their knowledge on the learning potential of technology. They also need their instructors' aid to develop certain global skills among Gen Z students, such as effective group work, critical reading, and critical thinking. By acknowledging and addressing these factors, higher education institutions can cater to the needs and learning preferences of Generation Z better, ultimately preparing them for success in higher education and in the modern world of work.

## 1.2. RESEARCH DESIGN

The aims of this study were to explore participants' perceptions of an interactive course syllabus and its features, as well as its contribution to developing their 21st-century skills in an attempt to create a forward-looking course that caters to learners' current needs. This study was carried out in the Spring semester of 2023 with the involvement of two *Study skills* courses instructed by the two author-researchers at a Hungarian business university of the capital city. The research process was approved by the university's Ethical board. As the study applied a case study approach, first, the context is going to be introduced in thorough detail, followed by the description of the participants and the data collection and analysis procedures.

### *The context of the study*

*Study skills* courses are compulsory elective interdisciplinary classes that are advertised especially for first-years but are sometimes attended by third-year students who are still in need of some credits to finish their university studies. The aim of the *Study skills* courses is to serve as a bridge between secondary and higher education and familiarise the students with the specifics of learning at a university centring around topics such as motivation, critical reading and thinking skills, understanding and creating digital/visual content and collaboration. The instructor-researchers redesigned the syllabus of the course to meet the needs of a new generation of students who were affected by emergency remote and hybrid forms of education. Part of the reconsideration of the curriculum included (1) the topics covered at the classes, (2) the forms of presenting the course curriculum to the students and (3) the assignments students had to do.

The unified core *Study skills* course syllabus focused on various areas of 21st-century skills students need to have a broad understanding of. These topics were: the concept of learning, learning styles, motivation, controlling the learning environment, setting realistic learning objectives, critical reading of online materials, reading and note-taking techniques, processing audiovisual and multimedia information, time management, scheduling, exam preparation, and myths and facts about foreign language learning. The presentation of the requirements needed to be updated too, especially as the instructor-researchers planned for elective assignments and preferred that the syllabus included substantial grading information and very precise description of the tasks. To meet this purpose, they decided to create a Genially presentation to serve as the syllabus for the course, as it is easy to navigate, and additional

information can be included on the slides in the form of 'Read more' or 'Extra info' buttons. (The entire detailed syllabus can be accessed via <https://view.genial.ly/63c4feed205b1400128e7bc9> in Hungarian.) This way, students were initially not overwhelmed by all the information, and they did not have to read through long texts detailing the entire course but could find the relevant information.

All throughout the semester students could collect 100 points and 10 extra points:

- 40 points could be collected for the group presentation (out of which 20 was awarded by the course instructor, 10 by the audience following the same assessment rubric and 10 by the individual team members reflecting their and their peers' efforts put into preparing for the presentation),
- 20 points could be collected in the end-term test that was based on the materials covered in the classes and largely relied on the beginning-of-the-class interactive Mentimeter quizzes on the previous weeks' topics,
- 10 points were awarded for in-class activity in a way that students evaluated themselves based on selecting on Likert scales how much they feel they fulfilled each criterion of active engagement specified by the course syllabus. This self-evaluation was performed in an online form at the end of the semester,
- 30 points could be collected for an individual written assignment. Here, students could choose from four various types of assignments all of which were detailed in the interactive course syllabus. The task description contained the rationale for each task, a detailed description, a final checklist for the students, information on the evaluation criteria as well as some examples. The four assignments students could choose from were 1) creating visual infographics in a global issue related to their studies, 2) creating digital study notes (e.g., a mind map) of a lecture course they attended, 3) creating an educative podcast within the realms of learning and studying, or 4) creating an educational video on learning and studying.
- Finally, an extra 10 points could be collected throughout the semester by participating in the beginning-of-the-class Mentimeter quizzes on previous materials and by doing the weekly homework assignments.

### ***Participants***

The two seminars were attended by 30 and 40 students, respectively. Both courses were advertised and instructed in Hungarian (as it is customary in the Spring semesters) and were attended by students of the Tourism and hospitality and the Commerce and marketing bachelor programmes. Each student was Hungarian. Because they all studied in a regular programme, age and demographic data was not collected from the students. The course was mainly attended by first-year (typically aged 18-19) and some third- or fourth-year students (typically aged 21-23).

### ***Tools of data collection***

Data was primarily collected through an online end-term questionnaire ( $N=67$ ) and optional in-course reflections (nine reflections with 13-21 students completing them, overall  $n=140$ ). The participants filled in the end-term questionnaire anonymously and voluntarily, which began by granting their permission to participate in the study. The questionnaire (see Appendix A) centred around three topics: (1) reflections on the competences developed during the course, (2) reflections on course features such as interactivity, assignments, and presentations, (3) effort put into completing certain aspects of the courses such as the assignments, and (4) an optional part where the participants could elaborate their reflections in writing ( $n=11$ ). In the first two parts, students were presented with some statements and were asked to rate how much they agree with each on five-point Likert-scales. In the third part, students were invited to decide if certain aspects of the seminar, such as the assignments, at-home preparation time, and the

discussion-based lessons required less, just enough or too much effort in their understanding. The final, fourth part of the questionnaire provided students with the possibility to share their ideas in a freely written form (11 of the 67 respondents took this opportunity) on any aspects that the questionnaire or the courses involved.

### *Methods and scope of data analysis*

Questionnaire data was analysed with the help of Excel. The Likert-scale items were analysed by calculating means and standard deviations, and the effort scales were analysed by selection frequencies. After-class reflections and the written comments of the end-term questionnaire ( $n=11$ ) were analysed manually due to the relatively low number of instances with the method of thematic content analysis (Xu & Zammit, 2020).

Since this study took a phenomenologist approach and investigated the case of two seminar groups, its findings are by no means presented as generalisable. The two author-researchers were closely involved in the study, which warranted an excellent perspective into the cases, however, each case (i.e., group) was only instructed by one of the researchers. It is also important to add that the core syllabus is not intended to be introduced as a finite and perfect one, the researchers are aware that its content will have to be revised constantly. The aim of the study in the scope of the *Study skills* classes was to collect empirical data on students' involvement that could be the basis of the further refinement of the syllabus that can inform other instructors to reform their syllabi. Finally, it has to be remarked that *Study skills* classes are not content classes in a sense that students do not have to learn much lexical content. This course rather aims at laying the foundations of how students could approach their own learning processes better, thus, in the context of this study, the 'success' of the course lays at how much students become aware and reflective of their own learning rather than how much lexical information they can retain and for how long.

## **1.3. RESULTS AND DISCUSSION**

### *The participants' perceptions of the interactive course syllabus (RQ 1)*

To gain insight into the participants' perceptions of the course design, in the end-of-course questionnaire, the students were given 21 statements which they had to rate on a scale of 1-5 based on the extent to which they agree with each (1 = completely disagree, 5 = completely agree). Table 1 presents the means and standard deviation of the statements in connection with the syllabus.

#### **1. Table Students' perceptions of the features of the course syllabus**

<b>The syllabus...</b>	<b>M</b>	<b>SD</b>
detailed the tasks well	4.46	0.86
was unique in design	4.45	0.94
included all details	4.43	0.89
provided useful task examples	4.40	0.92
was logically arranged	4.39	0.94
was student-friendly	4.34	0.98
was easy to find	4.22	1.07

As Table 1 shows, the students awarded relatively high means to each of these features, and all in all, they felt that the course syllabus was well-detailed, logical, user friendly and unique in design, which aligned closely with the intentions of the instructors. As detailed in the

*Research design and methods* section, the instructors' aim was to design a syllabus which would cater to Generation Z's needs by making it visually appealing, detailed but not overwhelming, and easy to navigate. Quite interestingly, they rated the statement *It was easy to find the course syllabus* the lowest of all, with the highest standard deviation. Given that both instructors included the link to the course syllabus at the top of the course page in the learning management system (Moodle), this result may have been a slight criticism of the LMS used, or it may come down to the fact that the students were not paying enough attention to the instructors explaining where it could be found. Had the questionnaire not been anonymous, it would have been worth examining whether those students who actively used the syllabus managed to complete their assignments better (adhering to all the guidelines) than those who could not even find it (to see example assignments and submission checklists). Overall, however, the students seem to have appreciated the interactive syllabus tailored to their needs.

***The participants' perceptions of the amount of effort put into completing the course (RQ 2)***

As mentioned above, the core syllabus allowed for considerable flexibility, and both instructors could tailor it to their preferences. Even though the instructor-researchers had different teaching styles, their approach to teaching was rather similar: they both aimed to have lessons centring around both theoretical and practical knowledge which the students needed to acquire through student-centred, interactive, game-like activities in a fun, relaxed atmosphere. The end-of-the-course questionnaire inquired into the students' perceptions of the effort they needed to put into these activities in the course. First, some activities from the course were listed and they needed to decide whether the effort they required was too little, too much or just enough. Table 2 shows how many students chose each option.

**2. Table Students' perceptions of the effort they had to put into each activity**

<b>How much effort did each activity require? (N=67)</b>	<b>Too little</b>	<b>Just enough</b>	<b>Too much</b>
group work in class	4 (6.0%)	52 (77.6%)	11 (16.4%)
being active in class	8 (11.9%)	53 (79.1%)	6 (9.0%)
written assignment	1 (1.5%)	54 (80.6%)	12 (17.9%)
in-class test	1 (1.5%)	59 (88.1%)	7 (10.4%)
the effort to pass the course (in class)	2 (3.0%)	60 (89.6%)	5 (7.5%)
the effort to pass the course (outside of class)	4 (6.0%)	53 (79.1%)	10 (14.9%)
individual responsibility	3 (4.5%)	60 (89.6%)	4 (6.0%)
creative assignments	2 (3.0%)	57 (85.1%)	8 (11.9%)

As can be seen from Table 2, the students, in general, were rather satisfied with the different elements of the course, as most of them rated each activity with "just enough". Some numbers that are relatively high compared to others in their column must be addressed though. It is, for instance, interesting to see that there were students who felt that there was too much group work in the lessons. In the end-of-course reflection, there was a student who even commented on it: "I found that there was too much interaction between peers, and I often felt distracted by all the group work" Reflection #12. Even though the instructors consciously aimed to make the students work in groups to develop their interpersonal, cooperative, and communicative skills (Partnership for 21st Century Learning, 2019; World Economic Forum, 2015; 2020; 2023), they by no means felt that there was too much group work in the course, and they always strived to level it off with full class discussions and eventual frontal

explanations. There may be several explanations for some students feeling overwhelmed by group work: one is (as also discussed in the course in the learning styles lesson) that there are students who prefer studying alone, but the other more likely explanation is that many students are still not used to this work mode because they rarely worked in groups in secondary school (Öveges & Csizér, 2018). Consequently, given that cooperation is one of the most important 21st-century skills and global skills (OECD, 2018; World Economic Forum, 2020), considerable emphasis should be put on developing it in 21st-century university lessons, even if it is slightly uncomfortable for some students at first.

The effort put into written assignments should also be mentioned, as 12 students felt they required too much effort from them. At this point, it must be noted that the students only had to complete one assignment out of four and they were given the opportunity to choose the one which they preferred. Out of the 67 students who filled in the questionnaire, 47 chose to create infographics, 16 a creative note, two a podcast episode and two an educational video. The reasons for choosing the given assignment type varied from finding it the easiest (#17, #21, #31, #54, #57), most suitable to their learning styles (#6, #18, #52, #63), and better than the other options (#1, #32, #41) to the most interesting and creative (#8, #27, #34) and the most challenging one (#16), therefore these answers also show how much effort the students intended to put into creating their assignments or whether they intended to get out of their comfort zones. Nevertheless, the students were also asked how much time it took for them to complete these assignments, and 45% of them ( $n=30$ ) said it took more than they expected, 36% ( $n=24$ ) said it took as much as they expected, and only 19% ( $n=12$ ) said it took less time than they expected. Taking all into consideration, it may be worth emphasising the importance of time management more to the students in connection with these new types of assignments and discussing with them in advance how they should prepare for writing them.

Finally, in connection with the results of Table 2, the results of the effort to pass the course outside of class must be mentioned, as 10 students felt the course required too much from them. Even though the students were required to create one written assignment, put together a group presentation and prepare for an end-term test, it is noteworthy that only 15% of the students felt it was too much outside-of-class work. It must be noted though that preparing homework week by week was also optional: in one of the groups, they had to write reflections after each class based on extra videos and extra helping questions to get extra points (see *The context of the study*), which only approximately a third of the students completed. Overall, as can be seen, students felt the course was still feasible in and outside of class with this much effort required as well. Nevertheless, it would be beneficial to experiment with reallocating the course points to find ways to motivate students to engage with the course content outside of class as well in order to support their overall development and ensure their well-preparedness for the following lesson.

To conclude this section about the effort the students had to put into the course, here are two excerpts from the end-of-course reflections that capture some students' initial reactions to the course:

“I honestly didn't think I would learn anything from this course. As my teacher mentioned at the beginning of the semester, this is not a straight-A subject as I had planned.” Reflection #12

“When I took the course, I didn't think about how much I would learn, I was just curious to see what these classes would be about. As I approach the last class of the semester, I can tell you that I have learned a lot and some of these things I started using right after the class and it has helped me a lot.” Reflection #2

Nevertheless, just as these students and many others concluded, it was worth putting effort into the course, because if they did, they learnt a lot they could implement for other subjects immediately. Consequently, it is important to highlight the amount of effort the course requires, urging both instructors and students to approach the subject with seriousness and

recognize its significance in order to change the perception of the *Study skills* course as a mere “filler subject”.

***The participants’ perceptions of developing their 21st-century skills throughout the course (RQ3)***

The questionnaire also sought to give the chance to the students to reflect on the extent to which the course contributed to developing their 21st-century skills. To this end, they were given a list of skills which they had to rate on a 5-point Likert scale, where 1 meant *not at all developed* and 5 meant *completely developed*. Table 3 summarises the participants’ answers by displaying the means and the standard deviations.

**3. Table Students’ perceptions of the skills developed during the course**

<b>The extent to which these skills were developed (N=67)</b>	<b>M</b>	<b>SD</b>
creativity	4.20	0.86
presentation skills	4.19	0.89
cooperation	4.09	0.96
looking for information	4.01	1.01
digital skills	3.89	1.13
LLL (lifelong learning)	3.89	1.13
critical thinking	3.79	1.04
critical reading	3.73	0.96

As Table 3 shows, the students awarded relatively high means to these skills, which entails that they felt they had the opportunity to develop all these skills to some extent. Nevertheless, these results must be interpreted with some caution: even though all the participants were Hungarian university students, they had different educational backgrounds (they came from different school types, from both the capital and the countryside; not all of them took the course in their first year, and there were some students already in their third and fourth year) so they had very different prior skills development opportunities, and they may have also had different understanding and awareness of these skills (this is also shown by the standard deviations). Nonetheless, from the results, it became apparent that they rated those skills the highest on which explicit emphasis was put by the instructors and by the tasks. For instance, creating visually appealing infographics or course notes was understood by the students as an assignment requiring creativity (Partnership for 21st Century Learning, 2019; World Economic Forum, 2020; 2023), and creating a joint presentation as an assignment as a task requiring cooperation (Partnership for 21st Century Learning, 2019; World Economic Forum, 2020) and presentation skills. However, to create these very assignments successfully, they also needed to rely on their critical thinking and reading skills, even if they were not explicitly highlighted by the instructors. It is also noteworthy that they did not rate the development of their digital skills (World Economic Forum, 2020; 2023) too highly, even if many of them commented on learning about navigating new platforms (e.g., Canva and Piktochart) thanks to the course and the instructors also strived to model the successful use of digital tools to them during the whole course.

The end-of-the-course reflections revealed other facets of the skills fostered, ones the questionnaire did not even enquire about. One of these was the ability to transfer knowledge. In the students’ words,

“I learnt a lot of things, and some of them I started using immediately after the lesson and it helped me a lot in completing my other courses” Reflection #2

“I think the class helped me overcome obstacles at university more easily, as we also learned about useful note-taking methods, staying motivated, overcoming procrastination and time management. I will try to use as many of these as possible in the coming years.” Reflection #3

“...this is one of the subjects that does not impart lexical knowledge, but rather practical and mindset-changing knowledge that we can then tailor to our own needs.” Reflection #5

Even though it was intentional from the instructors to design the course in this way, it was applaudable that some students also realised and commented on this aspect of the course. Another skill they pointed out developing was self-awareness (World Economic Forum, 2023). As they put it,

“Overall, I really benefited from this subject/course, I learned a lot about myself in the process.” Reflection #4

“Both the preparation and delivery of the presentation, spiced up with the social interactions that go with it, such as not taking criticism as an insult, all made me feel like a better human being.” Reflection #5

Given that the students were very often asked to reflect on their own attitudes and behaviours during the course, these results were not surprising; however, the fact that some students could verbalise developing their self-awareness is the testimony of active and reflective learning.

One takeaway from these results may be that it would be beneficial to regularly highlight the purpose of each activity in the course, thereby enabling the students to gauge their relevance more consciously. Another one is that it may be worth re-evaluating which skills should take precedence in the course. Pereszlényi (2023), when examining English majors’ reading skills, also found that first-year students (belonging to Generation Z) do not read much, and they lack some important skills and strategies (e.g., critical thinking and critical reading skills, ability to focus, study skills), which would enable them to complete their courses more successfully. Thus, it would be beneficial to incorporate activities with the help of which these skills could be explicitly fostered. In addition, when reevaluating the skills to develop in such a course, up-to-date literature (World Economic Forum, 2020; 2023) can and should guide such enterprises. As the Future of Jobs report points out (World Economic Forum, 2023), the three main skills employers are looking for are analytic thinking, creative thinking, and self-efficacy skills. Having all considered, based on the students’ perceptions, it seems that out of these three main skills, mostly their creative thinking was developed, even if there were some activities aiming at making them more analytic thinkers (e.g., analysing infographics, charts, and texts). Based on the written student feedback though, more emphasis should be put on developing students’ self-efficacy skills so that they learn to embrace challenges, new assignment types, adjust to new situations more easily and take ownership of their own learning.

## CONCLUSIONS

The aim of the presented study was to investigate how students perceived the syllabus of a redesigned, forward-looking *Study skills* course, their perceptions regarding the amount of effort required for the course, and their perceptions of the skills developed through this course. The methodology the two instructor-researchers used was the case study approach, with the participation of two *Study skills* groups ( $N=70$ ), taught by the instructor-researchers in Spring 2023 in a Budapest-based business university.

In connection with the first research question (i.e., *What are participants' perceptions of the interactive course syllabus and its features?*), the results revealed that the participants appreciated the visually appealing, sufficiently detailed, logical, and user-friendly nature of the syllabus. The students also expressed their satisfaction with the fact the course was flexible in design, which meant that they could make certain choices (e.g., collect extra points, and choose which assignment to complete). The second research questions shed light on the amount of effort the students needed to put into the course (i.e., *In the participants' perceptions, how much effort did they have to put into completing the course?*). Most students seemed satisfied with the elements of the course, and they felt the course required just enough effort from them; however, the analysis revealed that the newer, less traditional elements of the course (e.g., collaborating in groups, creating creative written assignments) took more effort and time to complete. Finally, the last research question (i.e., *In the participants' perceptions, how did the course contribute to developing 21st-century skills?*) investigated the skills developed during the course. Many of the participants felt that the course was useful for developing their 21st-century skills, but it must be noted that they were only moderately aware of the developed skills, unless they were explicitly highlighted in the course.

Based on the results of the study, it can be argued that it is possible to design a core syllabus tailored to Generation Z's needs, which is flexible in design, and which can be adapted based on the instructor's personality and teaching style. The results imply that such a syllabus is not only suitable for being used by different teachers, but it also enables them to offer differentiated instruction (Kótay-Nagy, 2023) and foster students' 21st-century skills. However, conscious planning should precede the implementation of such a syllabus, which involves researching the current needs of the labour market and reflecting on how the skills sought by employers could be developed in the classroom in an engaging manner. Nonetheless, the process of designing an effective study skills course is longer than a semester's work: the findings and the two instructor-researchers' experiences both imply that the syllabus should be modified and refined based on the course feedback and the analysis of the assignments after each semester, even if the course was deemed successful by both the researcher-instructors and the students.

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## APPENDICES

*Appendix A: The English translation of the questions of the end-term reflective online questionnaire*

Dear Participant,

Please help us by completing the following questionnaire, which will take a maximum of 10 minutes and does not require long answers.

Thank you,

Rita Divéki, Imre Fekete

I. Reflections on the course

Please rate the extent to which the classroom and assignments helped you to develop the following skills.

1 = not at all; 5 = fully

- critical thinking
- critical reading
- presentation skills
- finding information
- digital skills
- lifelong learning
- working with peers
- creativity

Please rate how strongly you agree with the following statements!

1 = strongly disagree; 5 = strongly agree

- During the course I learnt what a good presentation looks like.
- The course gave me useful ideas on how to make an aesthetic presentation.
- The course gave me useful ideas on how to make an effective group presentation.
- The course taught me how to give appropriate feedback on the performance of the presenters.
- I enjoyed working with my peers while preparing for the presentation.
- I prepared for the group presentation to the best of my ability.
- The lessons were conducted in a good atmosphere.
- I enjoyed attending the lessons.
- Homework was related to the topics of the lessons.
- The lessons were dynamic.
- The topics of the lessons reflected the characteristics of 21st century learning well.
- I gained new knowledge during the lessons.
- I could always count on the teacher to answer my questions.
- The course description was easy to find.
- The course description was easy to understand and navigate (logical layout).
- The course description design was unique.
- The course description was student-friendly.
- The course description covered all important details.
- The course description had a unique layout compared to other subjects'.
- The course description covered all details of the assignments to be submitted.

- I found useful examples of the assignments to be given in the course description.

## II. Effort

Please rate whether you think you have done too little, just enough or too much of the following during the semester.

(too little, just enough, too much)

- classroom exercises
- classroom activities
- presentation task
- assignment to be handed in
- end-term test
- invested effort in the subject during the lessons
- invested effort in the subject outside lessons
- group cooperation
- individual responsibility
- possibility of collecting extra points
- feedback from the teacher on the individual assignment
- teacher feedback on the presentation
- creative learning material to be processed in a new format (e.g. machine infographics, digital notes)

Which of the possible individual assignments did you choose?

- digital infographics
- digital notes
- educational podcast
- educational video

OPTIONAL QUESTION: On what basis, why did you choose this particular assignment?

How long did it take you to complete the individual assignment?

- less than I thought
- as much as I thought
- more than I thought

How much time did it take to prepare the group presentation?

- less than I thought
- as much as I thought
- more than I thought

OPTIONAL QUESTION: If you would like to elaborate on your views regarding the course, or if you would like to explain any of your answers, please do so here.