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Generational differences in University Students:
Challenges or opportunities?

Teaching methods through the eyes of Bulgarian students from three generations

Dragomir Iliev, Daniela Ilieva, and Zhelyo Zhelev

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Abstract: This article aims to identify the attitudes of different generations regarding certain aspects of the teaching approaches used during the education of economic disciplines. The analysis primarily draws on a scientific review of previous studies in both international and Bulgarian contexts, focusing on the attitudes of lecturers and the perceptions of students from the three generations involved in the educational process. A descriptive research strategy is employed to support the thesis. A survey was conducted using a questionnaire to implement the descriptive method. With a population size of 37,403 students, the respondents formed a sample size of 662 respondents, achieving a confidence level of 99.056% and a margin of error of 3.78%. The results are presented using two-dimensional distributions in the form of cross-tabulations. The ordinal relationships between the categories of a given variable are represented using ordinal (rank) scales, applying Kendall's tau-b and Spearman's rank correlation coefficients. The calculations were carried out using

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IBM SPSS software. The study found no significant correlation between the characteristics of different generations and their preferred teaching methods. At the same time, generational traits did not influence attitudes towards acquiring new knowledge and skills during the educational process.

Keywords: Teaching methods; methods of presentation; lecturer's behaviour; generations; education; Gen Z; Gen Y; Gen X.

I. Introduction

The development of human society takes place through knowledge and learning. Various factors can describe the essence of a human individual during his life journey. One of them is the "generation" factor. The representatives of Generation Z are young people between the ages of 18 and 26, most of whom are studying at various universities.

Education is a process of acquiring knowledge, new skills and abilities and is considered a lifelong activity. The learning style of different generations is an essential topic as it is influenced by society, technology and psychology (Djiwandono 2017). Unlike others, Generation Z is characterized by creativity, flexibility, independence and increased environmental concern (Sugahara and Boland 2012; Giray 2022).

A comprehensive analysis of generational problems appeared for the first time in 1991 when the American scientists Howe and Strauss published their joint work on the generations of the future America (Strauss and Howe 1991). Today, topics related to generations and their characteristics are explored by authors such as Tapscott (2008), Prensky (2001), Bauerlein (2009), and Carr (2008).

Generation Z is the first generation to have achieved complete interaction with technology and perceive digital resources as an ordinary reality. Numerous studies have focused on their behaviour as individuals, customers, and attitudes towards environmental products and others (Tobler et al. 2011; Barber et al. 2014; Maichum et al. 2017). However, some studies have focused on their learning (Kohut et al. 2010; Povah and Vaukins 2017; Cilliers 2017; Pringle 2018; McNeil 2018; Poláková and Klímová 2019; Iftode 2019; Nicholas 2020; Szymkowiak et al. 2021). Single studies on this topic can be found in Bulgaria (Alexandrov et al. 2022).

Independence and the desire to learn many things are distinctive characteristics of Generation Z, which must be emphasized. The availability of countless online tutorials to teach you "how to make…" or "how to prepare..." to "how to use a certain software" or device is enough fact that the young generation wants to carry out their activities independently.

Communication is another distinguishing characteristic of Gen Z compared to other generations. More than ever, young people need to communicate constantly through all the possible means. They use social networks to communicate with each other and technology to spend more of their time online. This generation follows the Millennials; compared to them, they fully understand new technologies and online channels.

They have unique characteristics and expectations, and their lives are inextricably linked with technology. For this reason, educational resources and teaching methods need to be in harmony with the attitudes of this generation's learners.

Education is a lifelong process of acquiring knowledge, new skills, and abilities. The learning style of different generations is an important topic, as it is influenced by society, technology, and psychology (Djiwandono 2017; Smith 2012). Educational consultant and author Tom Hierck write, "We have 21st-century students being taught by 20th-century adults using 19th-century pedagogy and tools on an 18th-century school calendar." (2014, 1) He calls this a "System Dilemma." This term illustrates the disconnect between teaching methods, the generation from which most educators come, and the recipients of the educational service.

The evolutionary changes in recent years have impacted the social and cultural aspects of the environment, which significantly influence the behaviour of learners. Students trust that the educational process meets their requirements, thereby ensuring their professional success and the expected quality of life. Their attitudes are multidimensional, and the specificity of the academic environment allows for the acquisition of knowledge and skills and the development of the individual. Seeking opportunities for intergenerational activities increases the sense of value, creativity, flexibility, self-esteem, and confidence. However, relationships between different generations can also be identified as sources of difficulties and conflicts (Rupčić 2018). The essential characteristic of a productive academic environment is a strong "teacher-student" relationship (Opdenakker et al. 2012).

The multitude of tasks performed makes the profession of an academic lecturer demanding. The academic lecturer is simultaneously a scholar, a teacher, and an organizer (Ayllon et al. 2019). In their teaching role, academic lecturers convey knowledge that is the result of their scientific work. However, their most significant task is to motivate students to use a diverse set of knowledge and skills, thereby establishing an interpersonal connection with the learners (Bainbridge-Frymier and Houser 2000). Various scientific studies show that interpersonal relationships are essential for

students to realize their skills, self-confidence, and effectiveness (Brinkworth et al. 2018; Pennings et al. 2018).

During the pandemic, a study was conducted on the perceptions of lecturers regarding Generation Z based on its characteristics (Cickovska 2020). A survey method was applied, concluding that finding appropriate teaching approaches and ensuring quality mastery of the educational content must involve the multimodal and personalized use of technology. In this regard, lecturers are encouraged to be "at least one step ahead of the times and constantly learn how to adapt to the didactic process" (Cickovska 2020, 288). The study concluded that, in most cases, lecturers perceive technology as a tool for researching and presenting information. In contrast, for students, technology teaches them what it is, how it works, and where it can be found. Students prefer independent and interactive learning, and in this context, digital tools are primarily used for communication, interaction with other learners, and demonstrating their perceptions through multimodal interaction.

Several studies indicate that written texts, manuals, traditional graphics, notes, and whiteboards are the most commonly used conventional resources in the classroom (Edyburn 2011; Moon et al. 2012). Currently, technological resources are becoming increasingly significant, and the use of such tools should enhance the educational process. The application of virtual learning platforms is also growing, serving various purposes such as training, communication, administration, and supporting lecturers (Chowdhury 2020).

A team of authors examined the impact of technology and the internet on different forms of learning and knowledge acquisition (Szymkowiak et al. 2021). The study's findings underscore the unique characteristics of Generation Z learners, who exhibit a strong preference for learning through mobile applications and video content over traditional teaching methods. This preference, largely shaped by technology, is driven by their shorter attention span, impatience, global information consumption habits, digital media preference, and constant need for diverse information (Szymkowiak et al. 2021).

One of the latest studies in global literature on the "teaching-learning" relationship explores the role of interactive approaches in educating digital generation students (Kalnitskaya and Maksimochkina 2023). The study identifies learners' priorities based on their characteristics, and from this, it derives the main features that lecturers should consider when presenting educational content. The authors conclude that using an interactive teaching approach aligns with the digital generation's characteristics, leading to positive effects (Kalnitskaya and Maksimochkina 2023). It is mainly due to the increased potential for enhancing interaction between lecturers and students in the learning environment.

Currently, academic lecturers are expected to introduce innovative forms of teaching while maintaining a positive attitude towards novelties and changes and, at times, adopting unconventional work methods.

The concept of generations and their differences is familiar, but current realities lead us to question whether we truly understand the new generation. Individuals within a generation are shaped not only by their temporal position but also by the socio-economic characteristics of their environment. The heterogeneity among individuals of the same generation raised in different countries makes foreign research partially applicable to Bulgarian conditions.

In recent years, higher education in Bulgaria has faced criticism regarding the quality of student preparation. Lecturers motivate, stimulate, and teach students according to their views on effective teaching, but more and more report that engaging students actively is difficult or impossible. Consequently, the results of education decline, affecting lecturers' enthusiasm as well (Iliev et al. 2023). Both lecturers and students increasingly note that the teaching approaches used must align with today's learners' aspirations and expectations.

Therefore, it is crucial to find an appropriate approach for students from different generations, improve teaching styles, and optimize the flow of information during their economics education.

II. Methodology

With its 88-year history, the D. A. Tsenov Academy of Economics has established itself as one of the leading universities in Bulgaria, offering higher education in economics. Based on the strategic mission of the Academy for continual improvement of education quality through modern educational technologies and its own 'know-how' in the training of economists, a team of researchers (including the authors of this article) implemented Project № 5-2023 "Challenges and opportunities for digital economics education of Generation Z," funded by the Institute for Scientific Research of the D. A. Tsenov Academy of Economics, Svishtov, Bulgaria.

II.1. Research objectives and hypotheses development

The research team aimed to investigate whether the lecturers teaching economic disciplines in Bulgarian higher education institutions are applying appropriate methods and approaches to enhance the quality of education and student satisfaction in economics. Additionally, the team sought to identify

the attitudes of different generations towards certain aspects of the teaching approaches used in the education of economic disciplines.

Four hypotheses were built based on the review of literary sources, including research on the behaviour of Generation Z.

First hypothesis: Generation Z students prefer to present new knowledge accompanied by "evidence"—examples from practice, figures, illustrations, video content, etc.

Second hypothesis: Generation Z students prefer the lecturer's behaviour to involve them in the use of technology and to have the freedom of two-way instructor-learner communication.

Third hypothesis: There is a relationship between the characteristics of different generations, the preferred learning methods, and the acquisition of new knowledge in economics.

Fourth hypothesis: The methods of teaching economic subjects need to catch up to the development of technology and correspond to the ways of learning of Generation Z.

II.2. Methods and instruments

A descriptive research strategy was used to determine whether there are any dependencies between belonging to a specific worship group and one's attitude toward the learning process. The data were collected directly from the study participants. The most suitable descriptive method for gathering primary quantitative data was chosen to be a survey conducted among the respondents. The data were collected through an online survey with a structured questionnaire and pre-formulated answers.

The survey consists of 21 questions. Five describe the characteristics of the surveyed population (age, gender, course, type of education, educational institution). The remaining questions were divided into three groups.

The first group, which includes nine questions, aims to assess students' preferences regarding methods of presenting the educational content and includes the following questions:

Question 1: Do you accept the method where the teacher dictates and you take notes?

Question 2: Do you accept the method where the teacher uses presentations with a predominant text part during lectures?

Question 3: Do you accept the teacher's use of presentations with relevant figures and illustrations on each slide to reinforce your visual memory?

Question 4: Do you accept the method where the teacher uses video content developed by him/her or freely available on the Internet (for example, on YouTube)?

Question 5: Do you accept the teacher's method of using case studies that he/she sets to solve during class?

Question 6: Do you accept the method where the teacher includes practical examples in his/her presentations?

Question 7: Do you accept the method where the teacher includes links to additional information during lectures in his/her presentations?

Question 8: Do you accept the method where the teacher uses short tests (up to 1-2 questions) to check whether you have mastered the current material?

Question 9: Do you accept how the teacher makes the presentations and materials freely available to you?

The second group, which includes four questions, aims to assess students' preferences regarding the lecturer's behaviour during lectures and includes the following questions:

Question 1: Do you accept the approach where the teacher takes short breaks with a change of topic?

Question 2: Do you accept the approach where the teacher encourages (allows) you to interrupt him/her and ask him/her questions?

Question 3: Do you accept the approach where the teacher divides extended topics (lectures) into smaller parts?

Question 4: Do you accept the approach where the teacher encourages you to use your phones for educational purposes during lectures?

These two groups, responses were based on balanced rating scales with a neutral position (Yes; Rather yes; I cannot decide; Rather no; No).

In **the third group**, students were asked to rate their level of agreement with the following three statements:

Statement 1: Higher school teaching methods must suit my way of learning.

Statement 2: Teaching methods in higher education must catch up to technological development.

Statement 3: Teachers do not use new technologies for interactive lecture learning.

A balanced rating scale with a neutral position (Totally agree; Agree; I cannot decide; Disagree; Totally disagree) was used to assess the level of agreement.

Two-dimensional distributions in the form of cross-tabulations were used to present the results. In these tables, responses to the questions were presented in rows, and generations were represented in columns. The ordinal (rank) scales were used to represent the order relationships between categories of a given variable. Kendall's tau-b and Spearman's rank correlation coefficients were used to measure the dependencies between generations and responses to the questions. The following scale was employed for interpreting the coefficient values: $0<R<0.3$ – weak correlation; $0.3<R<0.5$ – moderate correlation; $0.5<R<0.7$ – significant correlation; $0.7<R<0.9$ – high correlation; $0.9<R<1$ – very high correlation. IBM SPSS software was used for the calculations.

II.3. Sample population and description

The study's target population consists of students enrolled in economics-related programs at higher education institutions in Bulgaria. According to data from the National Statistical Institute (National Statistical Institute – NSI 2023), for the academic year 2022/2023, there were 37,403 students enrolled in programs in the "Business and Administration" field, and these students represent the study's target population.

The survey was conducted at the end of the academic year, from June to September 2023. The questionnaire was administered online using Google Forms through a profile of a research team member.

After receiving permission from the administrations of universities offering economics programs, letters were sent to the students' official email addresses, inviting them to participate in the survey. Along with the provided link to the questionnaire, students were informed that the results would be used solely for research purposes and that completing the survey was voluntary. The questionnaire is anonymous, does not collect personal information, and the respondent cannot be identified through it.

With a population size of 37,403 students, the respondents formed a sample size of 662 respondents, achieving a confidence level of 99.056% and a margin of error of 3.78%.

The gender distribution reveals that 72.81% (482 respondents) are female, while 27.19% (180 respondents) are male. There is a balanced distribution across academic years: 15.71% are in the first year, 27.79% in the second year, 20.85% in the third year, 23.26% in the fourth year, and 12.39% are enrolled in master's programs. Regarding the mode of study, 47.43% are in full-time programs, 22.05% in part-time, and 30.51% in distance learning.

III. Results

The respondents were divided into three generations (Table 1.) based on their indicated age. Generation Z includes students up to 26, including those born between 1997 and 2010. They represent 48% (318 respondents). Generation Y includes students between the ages of 27 and 42 or those born between 1981 and 1996. They are 40% (264 respondents). Generation X consists of students over 43 years old or those born between 1965 and 1980. They are 12% (80 respondents). On the one hand, the results prove the already mentioned ageing, but on the other hand, they allow comparisons to be made between generations.

Table 1

Distribution of respondents by generation

Generation	Years	Born between	Number of respondents	Percentage
Gen Z	up to 26	1997 and 2010	318	48%
Gen Y	between 27 and 42	1981 and 1996	246	40%
Gen X	over 43	1965 and 1980	80	12%
Total	-	-	**662**	**100%**

The first group includes nine questions (*Table 2*.) concerning different methods of presenting new knowledge by the lecturer – taking notes, text, illustrations, video, the use of examples and case studies from practice, links with additional information, control questions, providing for free use of the materials from the lecture.

Table 2
Methods of presentation of learning content

Question 1: Do you accept the method where the teacher dictates and you take notes?								
Answer	Generation X		Generation Y		Generation Z		Total	
Yes	30	38%	146	55%	186	58%	362	55%
Rather yes	34	43%	64	24%	72	23%	170	26%
I cannot decide	6	8%	24	9%	14	4%	44	7%
Rather, no	10	13%	22	8%	34	11%	66	10%
No	0	0%	8	3%	12	4%	20	3%
Total	80	100%	264	100%	318	100%	662	100%

Question 2: Do you accept the method where the teacher uses presentations with a predominant text part during lectures?								
Answer	Generation X		Generation Y		Generation Z		Total	
Yes	38	48%	152	58%	174	55%	364	55%
Rather yes	24	30%	62	23%	74	23%	160	24%
I cannot decide	10	13%	20	8%	20	6%	50	8%
Rather no	8	10%	24	9%	32	10%	64	10%
No	0	0%	6	2%	18	6%	24	4%
Total	80	100%	264	100%	318	100%	662	100%

Question 3: Do you accept the method where the teacher uses presentations with relevant figures and/or illustrations on each slide to reinforce your visual memory?								
Answer	Generation X		Generation Y		Generation Z		Total	
Yes	58	73%	190	72%	232	73%	480	73%
Rather yes	20	25%	62	23%	60	19%	142	21%
I cannot decide	0	0%	10	4%	18	6%	28	4%
Rather no	2	3%	0	0%	4	1%	6	1%
No	0	0%	2	1%	4	1%	6	1%
Total	80	100%	264	100%	318	100%	662	100%

Question 4: Do you accept the method where the teacher uses video content developed by him/her or freely available on the Internet (for example, on You tube)?

Answer	Generation X		Generation Y		Generation Z		Total	
Yes	52	65%	194	73%	198	62%	444	67%
Rather yes	18	23%	42	16%	74	23%	134	20%
I cannot decide	8	10%	20	8%	28	9%	56	8%
Rather no	2	3%	6	2%	10	3%	18	3%
No	0	0%	2	1%	8	3%	10	2%
Total	**80**	**100%**	**264**	**100%**	**318**	**100%**	**662**	**100%**

Question 5: Do you accept the method where the teacher uses case studies that he/she sets to solve during the class?

Answer	Generation X		Generation Y		Generation Z		Total	
Yes	42	53%	170	64%	210	66%	422	64%
Rather yes	26	33%	52	20%	68	21%	146	22%
I cannot decide	8	10%	32	12%	20	6%	60	9%
Rather no	4	5%	6	2%	10	3%	20	3%
No	0	0%	4	2%	10	3%	14	2%
Total	**80**	**100%**	**264**	**100%**	**318**	**100%**	**662**	**100%**

Question 6: Do you accept the method where the teacher includes practical examples in his/her presentations?

Answer	Generation X		Generation Y		Generation Z		Total	
Yes	72	90%	216	82%	276	87%	564	85%
Rather yes	8	10%	36	14%	32	10%	76	11%
I cannot decide	0	0%	8	3%	6	2%	14	2%
Rather no	0	0%	2	1%	0	0%	2	0%
No	0	0%	2	1%	4	1%	6	1%
Total	**80**	**100%**	**264**	**100%**	**318**	**100%**	**662**	**100%**

Question 7: Do you accept the method where the teacher includes in his/her presentations links to additional information during the lectures?								
Answer:	Generation X		Generation Y		Generation Z		Total	
Yes	42	53%	184	70%	172	54%	398	60%
Rather yes	22	28%	34	13%	48	15%	104	16%
I cannot decide	10	13%	32	12%	54	17%	96	15%
Rather no	6	8%	8	3%	28	9%	42	6%
No	0	0%	6	2%	16	5%	22	3%
Total	80	100%	264	100%	318	100%	662	100%

Question 8: Do you accept the method where the teacher uses short tests (up to 1-2 questions) to check whether you have mastered the current material?								
Answer:	Generation X		Generation Y		Generation Z		Total	
Yes	44	55%	166	63%	172	54%	382	58%
Rather yes	26	33%	66	25%	76	24%	168	25%
I cannot decide	8	10%	22	8%	46	14%	76	11%
Rather no	2	3%	6	2%	8	3%	16	2%
No	0	0%	4	2%	16	5%	20	3%
Total	80	100%	264	100%	318	100%	662	100%

Question 9: Do you accept the method by which the teacher makes the presentations and/or materials freely available to you?								
Answer:	Generation X		Generation Y		Generation Z		Total	
Yes	68	85%	214	81%	244	77%	526	79%
Rather yes	10	13%	34	13%	40	13%	84	13%
I cannot decide	2	3%	14	5%	14	4%	30	5%
Rather no	0	0%	0	0%	10	3%	10	2%
No	0	0%	2	1%	10	3%	12	2%
Total	80	100%	264	100%	318	100%	662	100%

The calculated correlation coefficients between the generations and the answers to the questions did not show the presence of such (*Table 3*.). All the coefficients have a weak correlation dependence with values below 0,2.

Table 3

Correlation coefficients between generations and the answers to the questions

Questions …: Do you accept the method where the teacher …	Kendall's tau-b	Spearman's (R)
1: … dictates and you take notes?	.069*	.077*
2: … uses presentations with a predominant text part during lectures?	-.006	-.007
3: … uses presentations with relevant figures and/or illustrations on each slide to reinforce your visual memory?	-.005	-.005
4: … uses video content developed by him/her or freely available on the Internet (for example, on You tube)?	-.072*	-.079*
5: … uses case studies that he/she sets to solve during the class?	.056	.061
6: … includes practical examples in his/her presentations?	.017	.018
7: … the teacher includes in his/her presentations links to additional information during the lectures?	-.099**	-.112**
8: … uses short tests (up to 1-2 questions) to check whether you have mastered the current material?	-.075*	-.083*
9: … makes the presentations and/or materials freely available to you?	-.077*	-.082*

* Correlation is significant at the 0.05 level (2-tailed).
** Correlation is significant at the 0.01 level (2-tailed).

Ranking in order of approval of the various methods of presentation of the learning content by the lecturer (*Table 4*.), in the first place, students put the use of examples from practice with 96% positive answers (summed answers "yes" and "rather yes"). They are followed by the use of more figures and illustrations with 94%. The last two places are presentations with predominant text with 79% and links with additional information during a lecture with 76% approval.

Table 4

Ranking of methods for presenting the learning content,
according to the percentage of positive responses

Rank	Questions …: Do you accept the method where the teacher …	Positive answers (yes + rather yes)
1	**6:** … includes practical examples in his/her presentations?	96%
2	**3:** … uses presentations with relevant figures and/or illustrations on each slide to reinforce your visual memory?	94%
3	**9:** … makes the presentations and/or materials freely available to you?	92%
4	**4:** … uses video content developed by him/her or freely available on the Internet (for example, on You tube)?	87%
5	**5:** … uses case studies that he sets to solve during the class?	86%
6	**8:** … uses short tests (up to 1-2 questions) to check whether you have mastered the current material?	83%
7	**1:** … dictates and you take notes?	81%
8	**2:** … uses presentations with a predominant text part during lectures?	79%
9	**7:** … includes in his/her presentation's links to additional information during the lectures?	76%

The second group includes four questions analysing the lecturer's behaviour during a lecture, shown in Table 5. Four aspects of behaviour were investigated such as short breaks to change the topic, tolerance of students asking questions, dividing the big topics into small parts, the use of mobile phones in the educational process during a lecture.

Table 5

Acceptance of the lecturer's behaviour during a lecture

Question 1: Do you accept the approach where the teacher takes short breaks with a change of topic?							
Answer:	Generation X		Generation Y		Generation Z		Total	
Yes	30	38%	106	40%	126	40%	262	40%
Rather yes	12	15%	66	25%	48	15%	126	19%
I cannot decide	22	28%	60	23%	68	21%	150	23%
Rather no	14	18%	20	8%	50	16%	84	13%
No	2	3%	12	5%	26	8%	40	6%
Total	**80**	**100%**	**264**	**100%**	**318**	**100%**	**662**	**100%**

Question 2: Do you take the approach where the teacher encourages (allows) you to interrupt him/her and ask him/her questions?							
Answer:	Generation X		Generation Y		Generation Z		Total	
Yes	40	50%	126	48%	206	65%	372	56%
Rather yes	30	38%	86	33%	66	21%	182	27%
I cannot decide	6	8%	26	10%	28	9%	60	9%
Rather no	2	3%	20	8%	10	3%	32	5%
No	2	3%	6	2%	8	3%	16	2%
Total	**80**	**100%**	**264**	**100%**	**318**	**100%**	**662**	**100%**

Question 3: Do you accept the approach where the teacher divides long topics (lectures) into smaller parts?							
Answer:	Generation X		Generation Y		Generation Z		Total	
Yes	60	75%	174	66%	250	79%	484	73%
Rather yes	16	20%	68	26%	46	14%	130	20%
I cannot decide	4	5%	10	4%	14	4%	28	4%
Rather no	0	0%	8	3%	4	1%	12	2%
No	0	0%	4	2%	4	1%	8	1%
Total	**80**	**100%**	**264**	**100%**	**318**	**100%**	**662**	**100%**

Question 4: Do you accept the approach where the teacher encourages you, during lectures, to use your phones for educational purposes?							
Answer:	Generation X		Generation Y		Generation Z		Total	
Yes	28	35%	122	46%	182	57%	332	50%
Rather yes	22	28%	62	23%	52	16%	136	21%
I cannot decide	20	25%	42	16%	46	14%	108	16%
Rather no	4	5%	26	10%	20	6%	50	8%
No	6	8%	12	5%	18	6%	36	5%
Total	**80**	**100%**	**264**	**100%**	**318**	**100%**	**662**	**100%**

This group of questions is needed to differentiate responses between different generations. The calculated Kendall's tau-b and Spearman's (Rs) coefficients for correlation between generations and the questions' answers did not show such presence (Table 6.). All coefficients show weak correlation dependence with values below 0,2.

Table 6

Correlation coefficients between generations and the answers to the questions

Questions …: Do you accept the approach where the teacher …	Kendall's tau-b	Spearman's (R)
1: … takes short breaks with a change of topic?	-.041	-.048
2: … encourages (allows) you to interrupt him/her and ask him/her questions?	.121**	.134**
3: … divides long topics (lectures) into smaller parts?	.081*	.087*
4: … encourages you, during lectures, to use your phones for educational purposes?	.112**	.126**

* Correlation is significant at the 0.05 level (2-tailed).
** Correlation is significant at the 0.01 level (2-tailed).

Ranking in order of approval the various aspects of the lecturers' behaviour (*Table 7*.), in the first place, the students divided extended topics into smaller parts with 93% positive answers (summed answers "yes" and "rather yes"). After that, the lecturer's approval is ordered to be interrupted during a lecture, and questions are asked by 83%. In the last two places are respectively the use of mobile phones for educational purposes during a lecture with 71% and the use of short breaks (breaks) with a change of topic

during a lecture with only 59% approval, which is the lowest of all elements of the presentation and the lecturer's ideas during the lecture.

Table 7

Ranking of the teacher's behaviour according to positive responses

Rank	Questions …: Do you accept the approach where the teacher …	Positive answers (yes + rather yes)
1	**3:** … divides long topics (lectures) into smaller parts?	93%
2	**2:** … encourages (allows) you to interrupt him/her and ask him/her questions?	83%
3	**4:** … encourages you, during lectures, to use your phones for educational purposes?	71%
4	**1:** … takes short breaks with a change of topic?	59%

Respondents were asked to rate to what extent they agreed with three statements regarding teaching methods and using new technologies in the educational process (Table 8.). About a quarter of the students need help deciding on all three statements. The three statements were purposefully set with a negative connotation – the teaching methods did not suit their learning style, teaching methods lag behind technology, and teachers do not use new technologies. Guided by the understanding that people more readily agree with positive statements, to avoid responses given on impulse, were purposefully reversed in the negative connotation, requiring careful reading and understanding of the question.

Table 8

Degree of agreement with the statements

Statement 1: The teaching methods in higher schools do not suit my way of learning.								
Degree of agreement:	Generation X		Generation Y		Generation Z		Total	
Totally agree	2	3%	14	5%	12	4%	28	4%
Agreed	2	3%	24	9%	50	16%	76	11%
I cannot decide	18	23%	52	20%	98	31%	168	25%
Disagree	48	60%	144	55%	116	36%	308	47%
Totally disagree	10	13%	30	11%	42	13%	82	12%
Total	**80**	**100%**	**264**	**100%**	**318**	**100%**	**662**	**100%**

Statement 2: Teaching methods in higher education are lagging behind the development of technology.								
Degree of agreement:	Generation X		Generation Y		Generation Z		Total	
Totally agree	2	3%	18	7%	40	13%	60	9%
Agreed	8	10%	40	15%	76	24%	124	19%
I cannot decide	22	28%	56	21%	78	25%	156	24%
Disagree	40	50%	124	47%	96	30%	260	39%
Totally disagree	8	10%	26	10%	28	9%	62	9%
Total	**80**	**100%**	**264**	**100%**	**318**	**100%**	**662**	**100%**
Statement 3: Teachers do not use new technologies for interactive learning in lectures.								
Degree of agreement:	Generation X		Generation Y		Generation Z		Total	
Totally agree	2	3%	12	5%	30	9%	44	7%
Agreed	8	10%	44	17%	54	17%	106	16%
I cannot decide	26	33%	52	20%	88	28%	166	25%
Disagree	42	53%	128	48%	118	37%	288	44%
Totally disagree	2	3%	28	11%	28	9%	58	9%
Total	**80**	**100%**	**264**	**100%**	**318**	**100%**	**662**	**100%**

Compared to the previous ones, this group of questions shows a slight difference in answers between different generations. The values of the calculated coefficients Kendall's tau-b and Spearman's (Rs) for correlation between generations and the answers to the questions are the highest in this group compared to the others (Table 9.); however, the coefficients show a weak correlation dependence with values below 0,2.

<div align="center">**Table 9**</div>

<div align="center">Correlation coefficients between generations and the answers to the questions</div>

Statements	Kendall's tau-b	Spearman's (R)
Statement 1: The teaching methods in higher schools do not suit my way of learning.	.125**	.142**
Statement 2: Teaching methods in higher education are lagging behind the development of technology.	.169**	.194**
Statement 3: Teachers do not use new technologies for interactive learning in lectures.	.090**	.104**

* Correlation is significant at the 0.05 level (2-tailed).
** Correlation is significant at the 0.01 level (2-tailed).

The positive sign of the correlation coefficients shows that older students show more significant disagreement with the statements than Generation Z; however, even among the younger generation, the share of those who disagree exceeds those who agree (*Table 10.*).

<div align="center">**Table 10**</div>

<div align="center">Agreed v/s Disagree in answers to the statements</div>

Statements	Agreed (totally agree + agreed)		Disagree (totally disagree + disagree)	
	Gen X	Gen Z	Gen X	Gen Z
1: The teaching methods in higher schools do not suit my way of learning.	6%	20%	73%	49%
2: Teaching methods in higher education are lagging behind the development of technology.	13%	37%	60%	39%
3: Teachers do not use new technologies for interactive learning in lectures.	13%	26%	56%	46%

IV. Discussion

The distribution of the respondents based on the indicated age showed a relatively high percentage of students over the age of 43, who are classified as Generation X. Recently, a kind of "ageing" has been observed, i.e.

increasing the average age of active students in Bulgaria. This trend, on the one hand, is due to the efforts made in the National Strategy for Lifelong Learning (Ministry of Education and Science 2014), motivating adults to get involved in different forms of learning (including higher education). On the other hand, the ageing of the population as a whole and the increasingly small number of young people graduating from secondary education leads to a reduction in the competitive pressure for university places and motivates people who did not originally intend to pursue higher education to start studying in graduate school at a later stage in their lives.

There is a clear separation of age groups in the primary and secondary levels of education, which are obligatory for all students. Students in these levels are typically of the same age or closely aligned in age, with any age discrepancies typically limited to one or two years, as mandated by regulatory norms established by the state. In contrast, higher education is not mandatory, and individual student choices entirely drive the composition of graduation classes and student groups within universities. As a result, the intermingling of different generations becomes possible and increasingly prevalent. Until about 25-30 years ago, a relatively stable age homogeneity was observed in higher education in Bulgaria. However, the prevailing trend of an "ageing" student population has transformed this landscape.

This "ageing" trend opens up new opportunities to analyse generational differences from a different perspective. Suppose representatives of different generations are studied independently. In that case, each is in their environment, and then comparisons are made, and the results will be the same. However, if representatives of generations are studied and placed in the same natural environment, the results will be different. The objects of research (students of the three generations), placed in the same learning environment in the higher educational institution, interact unnameable, subsequently leading to a change in themselves. That is why the results differ.

The first hypothesis was categorically confirmed. Students prefer visualizing the presented knowledge using visual elements (figures, illustrations, video content). They want the learning content to be presented and shown (proven) with an example from practice, graphic, illustration, or video. That is why visual elements are positioned in the first four positions in Table 3.

The second group of questions is related to the lecturer's behaviour during the lecture. They aim to check to what extent the generations (mainly Generation Z) adopt behaviours that conform to some of the main characteristics of the younger generation. The characteristic of Generation Z is their short attention span and preference to receive information divided into smaller parts

in smaller volumes. Answers to questions 1 and 3 showed a preference for breaking long lectures into smaller parts, but breaks with topic changes could have been better received. The freedom to interrupt and ask questions of the lecturer was placed second as approval (see Table 6.). The shortening of the distance, through the freedom for two-way communication between lecturer and students, incentivizes real inclusion in the learning process, not just reporting presence in the classroom. Incorporating their smartphones into the learning process is rated highest by Gen Z compared to their older counterparts. There are already plenty of apps (e.g. Kahoot!) that lecturers can use to make their lectures engaging and interactive using students' electronic devices. All of this confirms the second hypothesis. Of course, going to extremes does not always lead to a positive result.

The analysis of the results did not confirm the initial expectations of the third hypothesis. On the contrary, they were categorically refuted.

The survey results give reason to reject the third hypothesis categorically. There are no differences between generations regarding preferences for one or the other methods lecturers use to present the learning content. It is seen from the shares of the different responses and the calculated correlation coefficient values. Arguments in support of the third hypothesis were the result of the many publications describing a new, different way of learning about Generation Z compared to the preceding Generations Y and X. If each generation is considered in its time slice, such differentiation will be found, but if they are placed in current conditions, under the same circumstances, differences between them would hardly be detected. The reason for this can be the overall development of technologies and teaching methods. The drive has always been to improve and facilitate users by adapting to new technologies and discovering new teaching methods. The goal is to make learning content as accessible and valuable as possible, regardless of which generation the economics students belong to. A problem would arise in the reverse situation if we used methods and techniques from a quarter of a century ago. It may be suitable for the elderly Generation X and give the expected results, but for the young Generation Z, it will give negative ones.

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The positive sign of the correlation means that as age increases, positive responses decrease, and the negative sign shows us that as age increases, positive responses increase. Consequently, note-taking and case studies during lectures are preferred by younger generations slightly more than their older counterparts. For questions 2 to 4 and 7 to 9, the negative sign proves that they are more preferred, albeit slightly, than the older generations.

Rejecting the third hypothesis should eliminate the concerns of lecturers who face an audience of representatives of different generations. If the lecturer has prepared his/her presentation of the educational content well and the methods used are correctly selected, the information he presents will be accepted by all generations. In such a case, the choice of methods of presenting the learning content should be tailored to the attitudes of the younger generation in the audience.

Attention can also be directed to the answers to the question, "Do you accept the method where the teacher dictates and you take notes?" By its nature, this is an archaic teaching technique, and it was here that the research team expected that this method would be firmly rejected or have a small number of supporters, mainly among Generation X. The results show a very high percentage of approval among all three generations (see Table 2.). If we sum up the answers "yes" and "rather yes", we will see that 81% of representatives of generations X and Z approve of the method, and 79% of generation Y. If for older people this percentage is acceptable, then for Generation Z it is shocking. If 20-30 years ago, information was not so easily accessible and students had to take notes, now Generation Z has access to all kinds of information. In this regard, it does not make sense for Gen Z to keep notes. It is where the answer to the question, "Why do they tend to keep notes?" lies. One reason is the desire for two "sheets" of notes (more likely in e-version, on a laptop or tablet). They have synthesized knowledge provided by the teacher. It eliminates the need to sift through numerous Internet sources from which to select and process the relevant content.

The fourth hypothesis did not receive full proof, but it must be rejected, too. Yes, let us compare the responses between the different generations. Z are the ones who agree to the greatest extent that teaching methods lag behind the development of technology and do not correspond to their ways of learning (see Tables 7. and 9.). However, the relative shares of disagreement with the statements also exceeded those of agreement.

It may seem reassuring to Bulgaria teachers that their students receive their teaching methods relatively well and that the technological lag is not too significant, or perhaps the myth that Generation Z is on the cutting edge of technology is only partially true for Bulgarian students.

Upon reviewing the literature, no entirely analogous studies were found. However, the research conducted by Nina Pološki and Ana Aleksić can be mentioned, in which the preferences for active and passive teaching methods among Generation Y students were analysed, with a focus on the role of creativity and learning styles. The results reveal that students with higher creativity prefer active methods such as internships and interactive exercises that stimulate their imagination and develop problem-solving skills. In contrast, students with theoretical preferences find lectures with examples and teacher feedback more useful. The study emphasizes the importance of adapting teaching strategies to the individual characteristics of students (Pološki and Aleksić 2020). The authors note that educators should create flexible learning environments that balance active and passive methods to meet the needs of all students. For example, reflectors benefit from individual projects, while pragmatists prefer practical training.

However, developing an effective strategy to cater to students from diverse age groups has consistently remained a paramount concern for educators in their professional endeavours. In recent years, the enhancement of pedagogical methods and the refinement of the dissemination of information during the educational process for economics students have assumed a growing significance.

V. Conclusion

In conclusion, this study emphasizes the need for a flexible teaching approach that meets the diverse needs and expectations of different generations of students in Bulgaria. The main goal of the research was to identify relationships between generations and their preferences for specific teaching methods in economics disciplines. By examining the attitudes of students from various age groups, the study explores the extent to which teaching methods need to be adapted to the specific characteristics of each

generation, particularly Generation Z, which shows a preference for visual and interactive learning approaches.

Members of Generation Z anticipate that knowledge should be readily accessible and easily attainable. Lengthy texts, which may lead to disorientation or the provision of supplementary information, while theoretically accessible in their digital surroundings (via Internet links), tend to elicit less enthusiasm from them.

The results confirm the hypothesis that Generation Z students favour visual elements and practical examples in learning. Young students exhibit a strong need for learning materials enriched with figures, illustrations, and video content, which help them absorb new information more effectively. The second hypothesis is also confirmed, as Generation Z prefers two-way communication with instructors, opportunities for active participation in discussions, and the use of digital devices in the learning process. This reflects their desire to take an active role in knowledge acquisition.

The third hypothesis, suggesting significant differences between generations in terms of preferred teaching methods, is decisively rejected. Data shows no significant relationship between generational affiliation and preferences for teaching methods. This indicates that well-designed, modern teaching methods can meet the needs of students from all ages if effectively planned and implemented. This finding is particularly valuable for educators, as it demonstrates that visual and interactive methods, if properly adapted, can be effective for all generations in the classroom.

The fourth hypothesis, which posits that teaching methods in economics disciplines lag behind technological development and the needs of Generation Z, did not receive categorical support. Although some Generation Z students feel that a greater degree of digitalization is needed in the learning process, the majority do not share the view that teaching is significantly lagging behind technological trends. This may be because, while young people are oriented towards technology, they also value direct contact and the clear structuring of knowledge offered by instructors.

In summary, the study offers important insights for educators in economics and other disciplines. To meet the demands of today's students and ensure an effective learning process, educators should integrate visual and interactive approaches that enable active engagement and involvement of the audience. Such adaptability would not only increase student satisfaction and motivation but would also facilitate intergenerational dialogue, fostering a conducive environment for the exchange of knowledge and experience across age groups.

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