



JOURNAL OF INNOVATIVE RESEARCH (JIR)

ISSN: 2837-6706 (Online)

VOLUME 2 ISSUE 2 (2024)

PUBLISHED BY
E-PALLI PUBLISHERS, DELAWARE, USA

Elements and Beyond: Content Creation for NextGen Learners and Making Bloom's Taxonomy in Action Using Icons

Susan Villanueva de Guzman^{1*}

Article Information

Received: July 08, 2024

Accepted: August 06, 2024

Published: August 10, 2024

Keywords

Alpha Learners, Bloom's Taxonomy, Content Designer, NextGen Learners

ABSTRACT

In the fast-moving world of technology, online interaction and good content production are essential, especially for involving NextGen learners. This research focuses on the incorporation of Bloom's Taxonomy, an established system for educational purposes. This study is a cross-sectional survey involving quantitative data from a statistically evaluated questionnaire. This comparative study includes a "The Art of Learning" survey for NextGen Learners, focusing on Gen Z and Alpha learners. The total sample size included in this study was 290, which included 230 responses gathered from the students of Primary and Secondary schools, Tertiary and Post graduate level from different regions, including Abu Dhabi, Dubai, Sharjah, Ajman, Umm Al Quwain, Ras Al Khaimah, and Fujairah. Similarly, 60 responses were collected from the teachers through Google Forms and emailed to the respondents. The teachers were employed in primary, secondary school, tertiary, and post-graduate levels in the mentioned regions. Teachers considered multimedia presentations and online interactive sessions as beneficial ways of learning. Students' responses were inclined toward various social media platforms. Teachers preferred educational images and icons in their presentations to make the topic understandable. Students also preferred colorful graphics and picture with high quality to learn and enjoy at the same time. Moreover, both teachers and students agreed on the influence of technology on the educational system. This cross-sectional survey highlights the visual graphics. By incorporating Bloom's Taxonomy, teachers and designers can design innovative and engaging learning programs.

INTRODUCTION

Effective teaching in the 21st century involves acknowledging students' abilities and limitations and learning to adapt advanced methods and teaching strategies to improve the education system (Gul *et al.*, 2020).

Marc Prensky suggested the idea of "NextGen Learners" in two articles (Prensky; Prensky, 2001). The concept was influenced by the ideas recommended by Don Tapscott in his book "growing up Digital: The Rise of the Net Generation" published in 1998, as well as by the work of Neil Howe and William Strauss, particularly their book "Millennials Rising: The Next Great Generation" released in 2000 (Judd, 2018). Knowledge of digital science is one of the key factors for developing the digital world and the main role in general education. Digital literacy is the most active element in promoting quality education (Tran *et al.*, 2020). Information and communication technologies are the most important elements in the daily aspect of the lives of humans, as they are both visible and invisible technologies. The term "NextGen Learners" belongs to the generation after the integration of ICT into human life as they have the knowledge to utilize ICT tools naturally (Sorgo *et al.*, 2017).

Parents play an important role in educating their children about digital and media use. Researchers have started investigating children's engagement in the modern world with media saturation. In contrast, parents possess both

the traditional and digital media. According to a recent study, children teach their adults to use digital media (Nelissen & Van den Bulck, 2018). It has been concluded by the survey of advertisers by the Association of National Advertisers that around 75% of companies own influencer programs, and 43% had plans to enhance their investment in influencer programs within the next 12 months. Influencer marketing firms increased from 190 to 740 from 2015 to 2018. Influencer advertising can produce up to 8 billion paid advertising by 2020 (Childers & Boatwright, 2021).

Bloom's Taxonomy is an important element used in pedagogy to produce an understandable image, vision, and learning procedure on which any course can be designed. There are two methodologies: The original Bloom's Taxonomy [BT] from 1956, an accomplishment in pedagogy, and the psychology of learning, which Dr. Benjamin Bloom proposed. The other is the revised version from 2001, which upgraded the old version while retaining the basic principles of the old version. According to recent studies, authors believe the taxonomy can be very beneficial when using digital media: online and blended learning. BT consists of six levels: Remember, Understand, Apply, Analyze, Evaluate, and Create. It is a naturally progressive stage, beginning from the simplest level and progressing to the complex level (Pikhart & Klimova, 2019).

¹ Higher Colleges of Technology, Sharjah Women's Campus, University City, Sharjah, United Arab Emirates

* Corresponding author's e-mail: zoosun1362@gmail.com

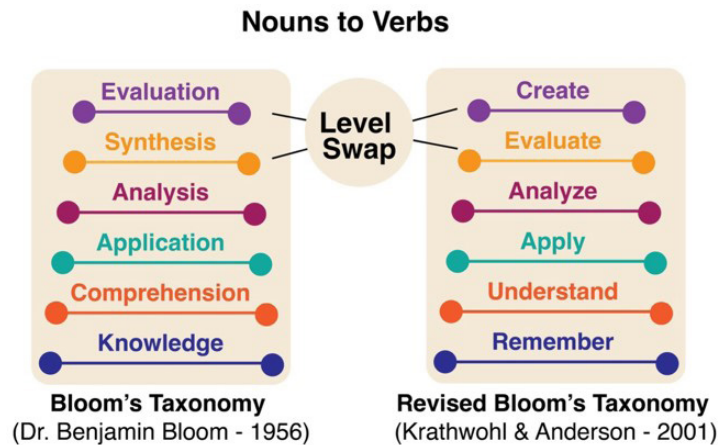


Figure 1: Digital Illustration for Bloom's Taxonomy revised version

The following three components of E-learning: Educational models, learning strategies, and teaching tools constantly interact to enhance learning and offer new learning and teaching environments (Barari *et al.*, 2022). Technology has upgraded the relationship between learning and teaching to a new advanced level. It also has a great influence on the minds of teachers and students. Technology and digital tools have changed how a teacher and student's mind thinks. The daily incorporation of digital technologies into human life has helped teachers upgrade their teaching levels. Incorporating higher-order thinking skills in today's world requires adequate knowledge and understanding of digital tools (Amin & Mirza, 2020).

The revised version of Bloom's Taxonomy has assessed its advantages in creating learning applications in mobile phones based on cognitive procedures and learning outcomes, acknowledging the relationship between assessment and teaching strategies. Due to their many benefits in digital functions, mobile phones are personal electronic devices that make learning easy in or out of the traditional class room (Ekren & Keskin, 2017). More research must further assess mobile phones' influence on learning. However, no scientific analyses assess student's cognitive levels during mobile learning activities (Crompton *et al.*, 2019).

BT has also designed instructional games that can be played online or offline and are an important source of digital learning. The two main characteristics of instructional games are fun and educational. The goal of instructional games is to promote learning enjoyably. According to research, they are also a great source for learning grammar (Ahmad & Hussin, 2017).

Uganda faces a severe issue of unemployment after graduation due to a lack of educational skills in their respective fields. Employers and policymakers are working to fill the educational gaps in the education system. It is estimated that only a quarter of the graduates from the public and private sectors get a job each year. Most adults associate themselves with the National Association of Unemployed, considering themselves as "poor youths,"

which causes real pressure on national security (Aheisibwe *et al.*, 2021).

The teacher's main goal is to build a good student-teacher relationship and bring the best possible outcomes in learning and creating an educational environment. Unfortunately, teachers promote theoretical explanations instead of using digital equipment and engaging students, leading to a lack of student involvement in the class. Learning involves only listening to lectures provided by the teachers and completing assignments without participating in educational activities (Parwata *et al.*, 2023).

LITERATURE REVIEW

Digital Content Creation

Today's world is the world of digitalization. With recent technological advancements, teaching methods have also advanced due to the implementation of digital tools and programs to make learning easy and effective. This progress became more evident in the Covid-19 period when online teaching was the main source of knowledge. According to an open consultation of the European Union, almost 60% of European teachers had their first time teaching online. The same percentage of teachers had polished their digital skills during the same period. This process still demands more elemental measures and advanced tools to promote effective learning among students. The global pandemic led to the evaluation of the educational system, with the main purpose of creating an advanced digital ecosystem available to all. These goals are the fundamentals of global programs worldwide on future education, such as the European Union's Agenda 2030 (Antón-Sancho *et al.*, 2021).

Rise of Content Designers

In this current world of modern technology, the term "content creator" has been effectively used by every individual. Designing one's own "media brand" has now become the desire of every content producer (Arriagada & Ibáñez, 2020). One of the most common methods to create an interactive and appealing session is Digital Story Telling. (Nicoli *et al.*, 2022). Recent advancements in the

field of technology have caused an academic curiosity among content designers. It has now become essential for media companies to grow and adapt to the advanced technology. Also, educational system advancements lead to the industrial revolution (Keser & Semerci, 2019).

The current globalization of media allows effortless content creation. New content creation guidelines have exposed creators to different stories, narratives, and ideas, increasing the number of content creators without experience designing. Inexperienced content creators upload many songs and videos on YouTube, Instagram, and other related platforms (Mehta & Kaye, 2021). Social media has been a part of daily life routines. It does not only serve the purpose of entertainment but also serves as a basic platform for socializing and gaining information. Recent data from the Basque Youth Observatory focusing their widespread popularity among young individuals. Almost all youth aged 15 to 29 use social media daily. The most frequently used online app, Whatsapp, constitutes around 98.2%. Although less prevalent, Snapchat is used by many adults (Fernández-de-Arroyabe-Olaortua *et al.*, 2018).

Exploring NextGen Learners

According to Prensky, NextGen Learners are highly skilled and professional in digital technology. They are very familiar with various digital platforms and can multitask and use different digital platforms simultaneously. Digital immigrants are the term used for educators from the old generation. They did not understand how learners perceive and utilize technology (Smith *et al.*, 2020). Today's generation follows digital tools and technology. Today's world provides health applications and smartphones for parents to utilize and let them make their lives easy. New advancements influence children of the current period in computer games and related stuff. Everything has become digital, from communication to buying food and entertainment, learning any skill, and meeting people (Kesharwani, 2020).

NextGen Learners have much experience and exposure to technology and smart gadgets, particularly mobile phones. They are exposed to social media, online games, and online learning outside school. According to one study conducted in Finland, technology is rarely used in Finnish schools, which might cause students to lack interest in school. However, as the Program for International Assessment (PISA) (Education) suggested, students perform well in their tests and assessments. At the same time, they lack interest in attending school compared to students from other nations (PISA) (Co-operation & Development, 2013; Salmela-Aro *et al.*, 2019).

With the fast advancements in technology, the source of information is also being advanced. Smartphones and computers have become the basic sources of knowledge. Even paper maps are replaced by digital maps (Słomska-Przech & Gołębiewska, 2020). Learning methods have become advanced and more personal, allowing a

better teacher-student relationship. The major shift to technology use for quality education happened after 2020 in the pandemic (Alfia *et al.*, 2020).

Digital Impact of Generation Z (Gen Z)

Generation Z students are among the age groups of 7 and 22 years. They are exposed to digital advancement in the modern world. The United States is the strongest, with 61 million Gen Zs. A report by Global Web Index suggested that Gen Zs spend around 2 hours to 52 minutes on social networking through smartphones daily. It is reported that 18 to 24-year-olds are under the influence of mobile phones and easily multitask texting while watching videos simultaneously (McCoy, 2020).

NextGen Learners greatly influence a company's strategies and how they function. Businesses are moving from old conventional to web-based businesses, including online shops, leading to a rapid pace of increasing online sellers. NextGen Learners are found to be online shoppers, and they can be the easiest target for online sellers (Ayuni, 2019). In terms of friendships, NextGen Learners are observed to be welcoming. They are usually unaware of the friends they make online or the people they meet in person. They are typically exposed to more than one social networking platform that encourages their interest and helps them grow socially, academically, or professionally (Francis & Hoefel, 2018).

NextGen Learners are brought up in the digital era. They are proficient in rapidly finding solutions to problems using smartphones and computers but need guidance to know what's true and essential. They usually binge-watch shows and videos, and teachers must understand how their students get easily distracted by technology. The tasks the teacher provides must have information regarding the sources for research and how much time they spend on each task (Mohr & Mohr, 2017).

METHODOLOGY

Study Design

This study is a cross-sectional survey involving quantitative data from a statistically evaluated questionnaire. This comparative study includes a "The Art of Learning" survey for NextGen Learners, focusing on Gen Z and Alpha Learners.

Data Collection

The main purpose of using this method was to efficiently gather data on content creation habits, branding preferences, and platform usage among these targeted generations. The most effective method for collecting data for quantitative purposes is surveys. They are capable of producing standardized responses and easy analyses.

Sample Size

The total sample size included in this study was 290, which included 230 responses gathered from the students of Primary, Secondary and tertiary Schools from

different regions, including Abu Dhabi, Dubai, Sharjah, Ajman, Umm Al Quwain, Ras Al Khaimah, and Fujairah. Similarly, 60 responses were collected from the teachers through Google Forms and emailed to the respondents. The teachers were employed in the region's primary and secondary schools. These responses were essential for the reliability of the outcomes. This sample size helped us achieve statistical significance among the targeted Gen Z and Alpha learner's groups.

This sample size provided sufficient data for interpreting and understanding these generations' content creation and branding habits. The design of the survey and questions were tailored to capture detailed information on demographic factors, content preferences, visual elements, and use of technology among NextGen Learners. The goal is to offer a comprehensive understanding of the preferences and behaviours of Gen Z and Alpha learners compared to content creation and Branding.

Confidentiality

Basic steps were taken to ensure the confidentiality of the participants, such as making the participants' names anonymous, providing unique IDs instead of real names, and securing the participant's data using encrypted systems. Also, participants voluntarily participated in the study, indicating respect toward individual freedom and privacy.

Data Analysis

The responses collected from the students and teachers have been examined using the Statistical Package for the Social Sciences (SPSS) program after the completion of data collection. Statistical inferential and descriptive methods have been used to find patterns and relationships in the quantitative data.

Questionnaire Construction

The questionnaire was made to understand the perception and experience of teachers and students with content creation tailored for NextGen Learners. This study compares the opinions of students and teachers to determine how each group perceives the qualities and demands of NextGen Learners. Four variables were considered while making a self-made Questionnaire with the help of previous research. The following variables were considered: Teaching approach, content design, and integration of Bloom's taxonomy, and one dependent variable, Teacher perception. Students aged 6 to 15 were enrolled in Primary and Secondary school. Teachers with teaching experience of 1 to more than 10 years were considered. The students and teachers were selected from different regions of the United Arab Emirates.

RESULTS AND DISCUSSIONS

Teacher Demographics

Table 1: Demographic Information of Teachers

Characteristics	Frequency	Percentage
Age		
Age between 25 to 35	22	36.7%
Age between 35 to 45	27	45.0%
Age between 45 to 55	11	18.3%
Gender		
Male	33	55.0%
Female	12	20.0%
Qualification		
Bachelors	14	23.3%
Masters	28	46.7%
PhDs or higher	14	23.3%
Other. Please specify	4	6.7%
Total	60	100.0%
Teaching Experience		
Less than 1 year	4	6.7%
1-5 year	27	45.0%
5-10 year	26	43.3%
More than 10 year	3	5.0%
Total	60	100.0%

Table 1 shows the demographic information of the teachers involved in the research. It describes the age distribution, with a major portion of the participants falling within the 25 to 45 age group, with the highest

concentration seen between 35 to 45 years. Gender distribution shows the concentration of the male population is comparatively greater. According to the educational qualifications, half of the participants hold

a Master's degree, and a considerable portion were PhD degree holders. Moreover, teaching experience was observed to be 1 to 10 years of experience. All these findings serve a beneficial purpose in concluding the study.

Teacher's Responses

Table 2: Responses of the Teachers

Characteristics		Frequency	Percentage
How familiar are you with NextGen Learners?	Familiar	10	16.7%
	Very familiar	30	50.0%
	Somewhat familiar	15	25%
	Never heard before	5	8.3%
What are the characteristics of NextGen Learners?	Comfortable using technology	20	33.3%
	Multitask multiple digital platforms simultaneously	17	28.3%
	Prefer digital communication	13	21.7%
	Adaptability of technological advancement	10	16.7%
What teaching strategies do you use when creating learning material for NextGen Learners?	Multimedia presentations	28	46.7%
	Engaging in activities with rewards	5	8.3%
	Digital storytelling	7	11.7%
	Discussions online	20	33.3%
What elements do you incorporate in your teaching style to enhance engagement and interactivity?	Videos, audio clips and animations	30	50.0%
	Visual aids (charts, graphs, diagrams)	20	33.3%
	Interactive elements (quizzes, polls)	5	8.3%
	Others (Please specify)	5	8.35%
How do you ensure that learning elements are accessible to NextGen Learners?	Offer format (text, audio, video)	20	33.3%
	Universal design principles (Font colour and style)	5	8.3%
	Provide customizable multimedia presentations	5	8.3%
	Text descriptions for audio, videos, and images	30	50.0%
How do you use visual elements such as icons and images to offer clarity and effectiveness of the teaching material?	Icons to represent key concepts	10	16.7%
	Effective images that represent the concept	30	50.0%
	Infographics	15	25.0%
	Visually attractive layouts and font style	5	8.3%
How familiar are you with Bloom's taxonomy?	Familiar	28	46.7%
	Not familiar	17	28.3%
	Somewhat familiar	10	16.7%
	Never heard before	5	8.3%
How do you incorporate Bloom's taxonomy into content creation?	Create activities to progress from a lower level to a higher level of thinking	10	16.7%
	Guide complex task	10	16.7%
	Encourage students to self-assessment	15	25.0%
	Incorporate Bloom's action verbs to guide task design	25	41.7%
How do you evaluate the student's learning in alignment with Bloom's taxonomy	Assessments that focus on enhancing cognitive skills	23	38.3%
	Providing feedback to encourage students to engage in higher-order thinking skills	20	33.3%
	Assessments that focus on Bloom's taxonomy levels	12	20.0%
	All of the above	5	8.3%
In your opinion, what is the impact of NextGen Learners on the old educational system?	Positive influence	26	43.3%
	Negative influence	20	33.3%
	Both	12	20.0%
	Not sure	2	3.3%

Impact of Technology on student learning experience?	Positively enhances learning	27	45.0%
	Moderately enhances learning- causes distractions and laziness	20	33.3%
	Little impact	10	16.7%
	Not sure	3	5.0%
What challenges do you face according to the needs of NextGen Learners?	Resistance to the traditional educational system	20	33.3%
	Over-dependency on technology	27	45.0%
	Shortage of attention	11	18.3%
	Other (please specify)	2	3.3%

Table 2 shows the responses gathered from the teachers, and it provides awareness regarding the characteristics of NextGen Learners and the use of digital technology by the teachers to promote fast and effective learning procedures. Most respondents knew the term “NextGen Learners,” which shows their awareness of the demographic group. Respondents knew NextGen Learners, their relation to digital technology, and their preferences. Therefore, educators implement various teaching strategies to engage NextGen Learners efficiently. It includes multiple engaging activities such as digital storytelling and online discussions, creating a dynamic learning environment to catch the attention of NextGen Learners. NextGen Learners are interested in eye-catching graphics and high-quality images that make learning enjoyable. Educators use multimedia platforms, learning styles, attractive fonts, and visual elements to enhance teacher and student interaction. They make sure that such resources are reachable to every student. Respondents showed different stages of familiarity with “Bloom’s Taxonomy,” they incorporated it in various content designs, offering guidance, encouraging learners to self-assess, and using Bloom’s action verbs. This approach provides learning

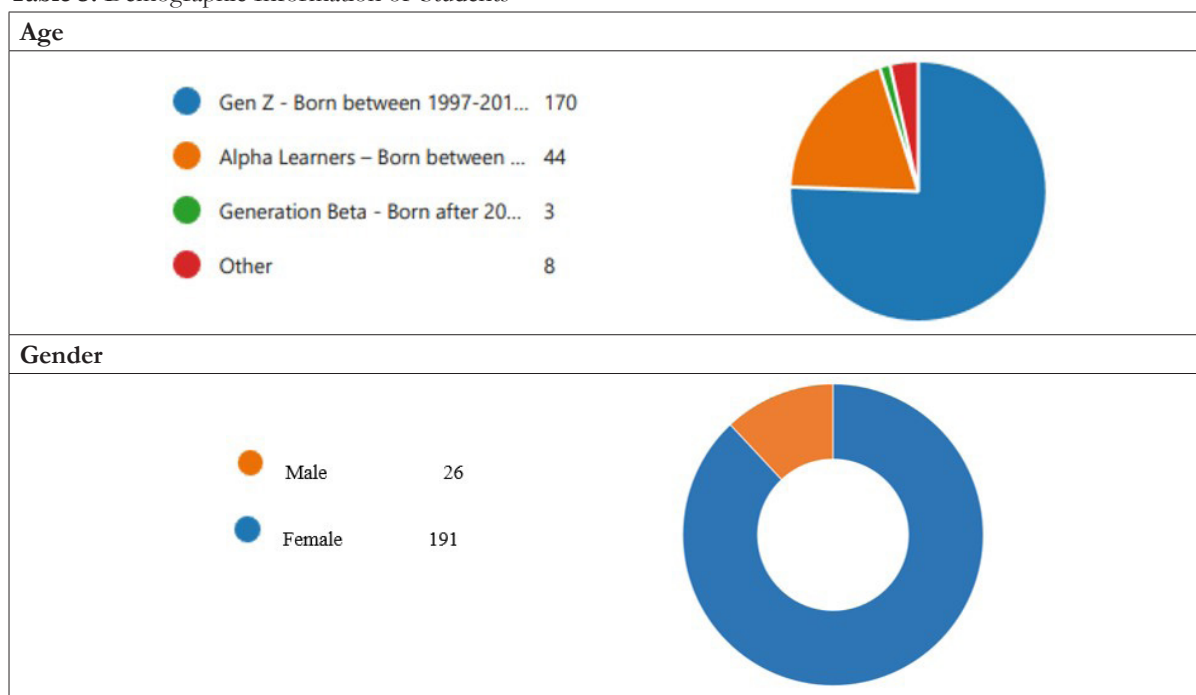
experiences, promoting higher-level thinking abilities and excellent understanding among students. Assessment strategies are beneficial in developing cognitive skills. Also, it encourages the students to participate in higher-order thinking skill activities.

The educators had different opinions regarding the influence of NextGen Learners on the old education system. Some participants responded positively regarding enhanced knowledge and information, which is easily approachable.

In contrast, others responded negatively due to lower attention spans and over-dependency on technology. To overcome the difficulties experienced by educators in fulfilling the needs of NextGen Learners, such as resistance to the old educational system, over-dependency on digital technology, and shortage of attention spans, educators need a multifaceted approach. This approach helps in balancing the incorporation of digital tools with pedagogical principles. This strategy allows polishing digital literacy skills and enhancing students’ critical thinking and problem-solving skills.

Demographic Information of Students

Table 3: Demographic Information of Students



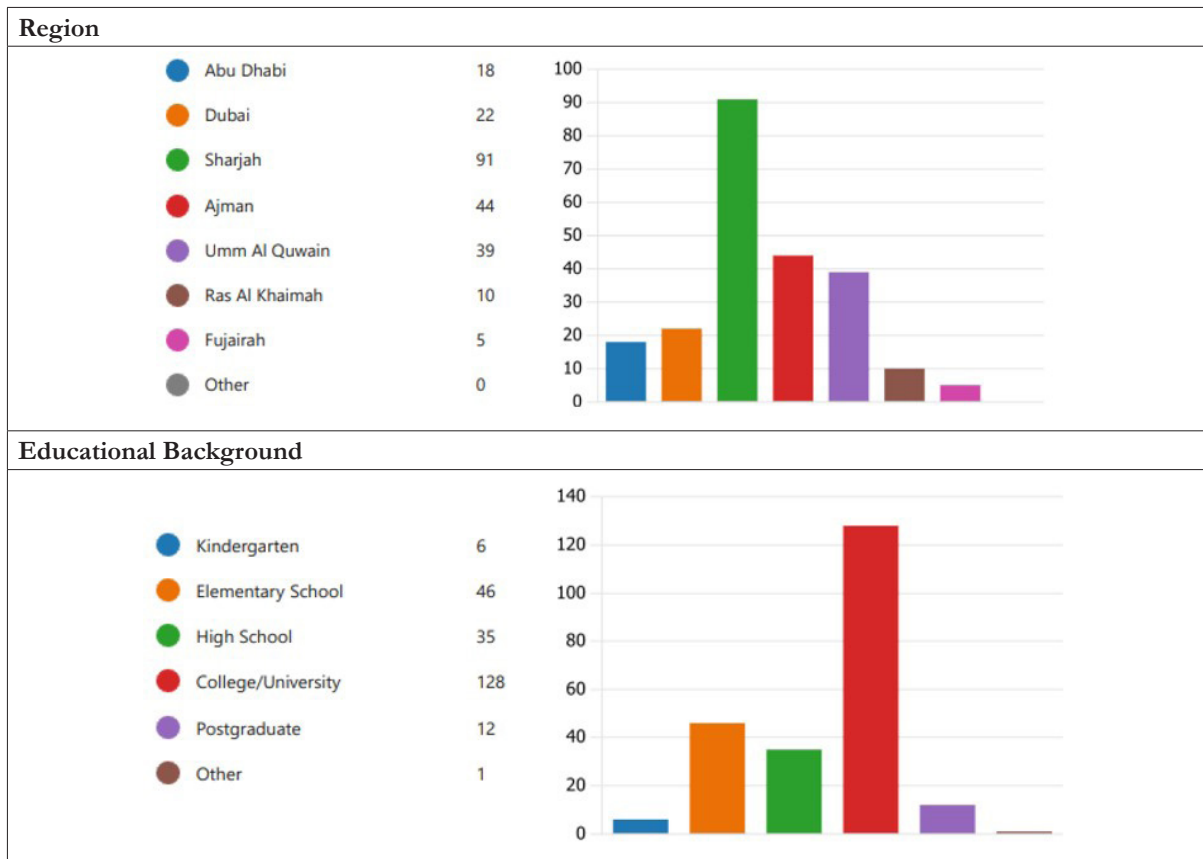
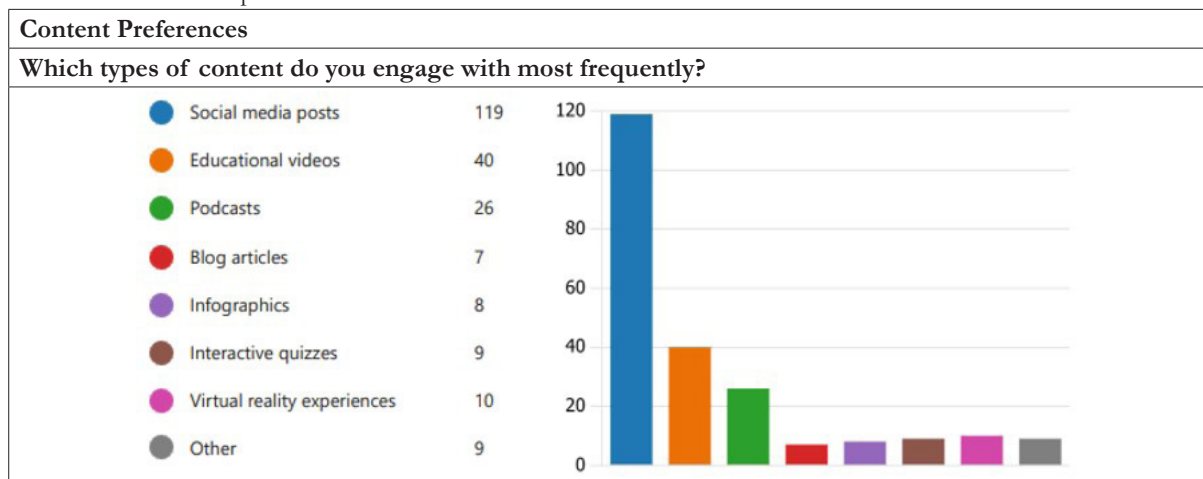


Table 3 represents bar charts that show the age, gender, region, and educational background of the students. The chart that shows age indicates that among the respondents, Gen Z consists of around 75.56% of the population selected, and Alpha learners consist of almost 19.56%; the respondents who selected “others” were 8. As far as gender selection is concerned, females have the highest concentration, which includes around 86.95% of participants, with males 13.04% of participants. The region and the educational level show the number of students from different academic levels belonging to various areas.

The regions include Sharjah, which constitutes about 39.74% of the respondents, the highest amongst other regions, and Fujairah is the least. Other areas include Abu Dhabi, Dubai, Ajman, Umm Al Quwain, and Ras Al Khaimah. The educational background bar graph shows students’ levels: Kindergarten constitutes around 6 respondents. The major population was received from the college or university level and constituted around 56.14 % of respondents.

Student’s Response to Content Preferences

Table 4: Student’s Response to Content Preferences



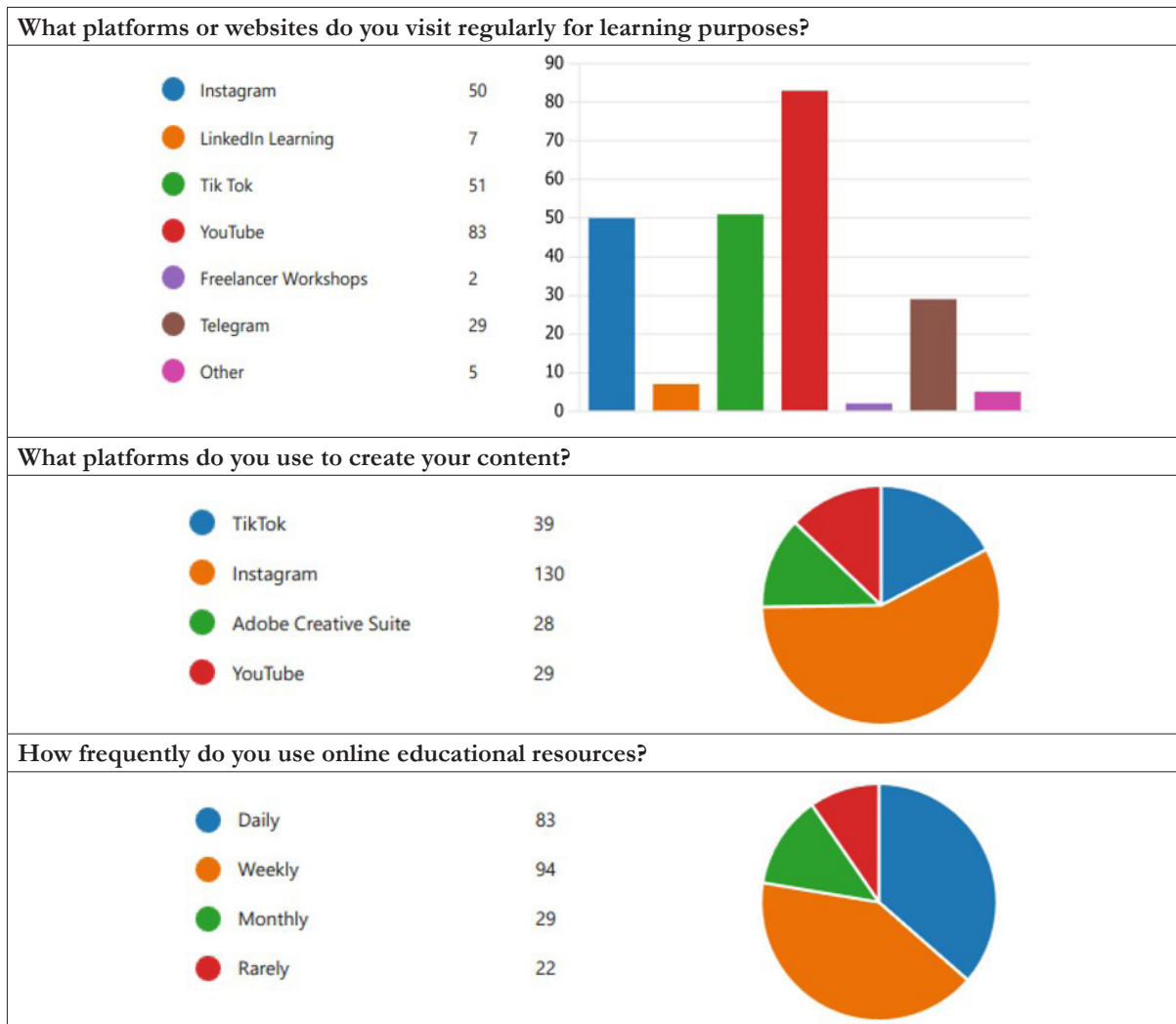


Table 4 shows the respondents of the students belonging to different levels of learning systems. In the modern world of technology, content design has upgraded. For better content production, NextGen Learners' preferences are essential. This study includes the content and visual preferences of the students to provide understanding for content designers and teachers. The most common type of content used is social media, with 52.19% of students responding positively to three questions, followed by videos showing education-related content with 17.54% responses. Indicating visual interactive learning. Surprisingly, lower responses belonged to blogs and podcasts, with 3.07% and 11.40% responses, respectively. The most commonly utilized platform for learning was YouTube. 37.39% of students visit YouTube daily. YouTube is a widely used platform and is preferred for offering extensive educational materials, such as lectures, tutorials, documentaries, and films. Followed by Instagram and TikTok with clear engagement with 22.52% and 22.97% responses, respectively. The least interactive platforms were found to be LinkedIn and

Telegram. Meanwhile, Instagram appears to be the most dominant platform for content creation, with 57.52% of students using it daily. TikTok and YouTube followed accordingly, showing that students preferred to create video-based content.

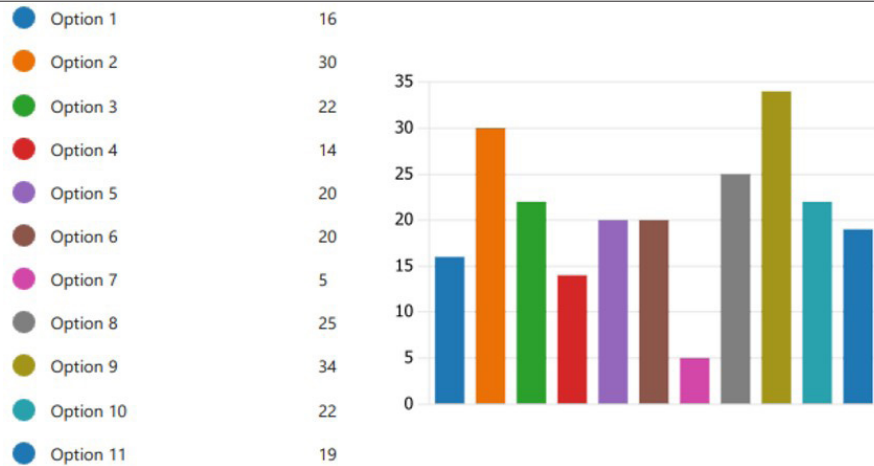
Student's Response to Visual Preferences

Table 5 shows the students' respondents in terms of visual preferences. Visual elements play an important role in grasping the attention of NextGen Learners. Many students chose photos of excellent quality and visually appealing graphics, with 27.35% and 23.76% responses. The demand for visually appealing pictures with bright colors, such as orange and purple, with 27.07% and 27.52% responses, respectively, indicates the higher demand for aesthetics. Students also prefer aesthetic typography and infographics to make learning enjoyable. Blue, red, and green colours are also preferred by some students, showing varying degrees of colour choices among students.

Table 5: Student's Response to Visual Preferences

Visual Preferences		
What visual elements attract your attention when consuming educational or informative content?		
- Eye-catching graphics and illustr... 53 - High-quality images and videos 61 - Creative use of typography 23 - Infographics that simplify compl... 20 - Color schemes that evoke specif... 33 - Interactive elements (e.g., clicka... 12 - Minimalistic design with cleanlin... 16 - Engaging charts 3 - Thoughtful use of icons 2 - Other 0		
Are specific colors or color combinations that you find appealing or effective in educational content?		
- Option 1 39 - Option 2 62 - Option 3 23 - Option 4 42 - Option 5 63		
Are there any specific San-serif fonts that you find appealing or effective in educational content?		
- Option 1 40 - Option 2 79 - Option 3 39 - Option 4 50 - Option 5 17		
Poppins Regular The Art of Learning Option 1 Nobel Regular The Art of Learning Option 2 Montserrat Regular The Art of Learning Option 3 Proxima Nova Regular The Art of Learning Option 4 Nunito Sans Regular The Art of Learning Option 5		

Banners that you prefer for educational content delivered online



Student's Response to Branding and Messaging

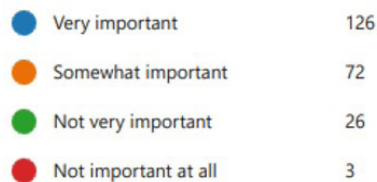
Table 6 shows students' responses to branding and messaging and their preferences for the learning environment. When students pick educational resources, they emphasized trustworthiness. A large number of students, around 55.5%, ranked the author's or publisher's

reliability as an important factor when choosing any educational tool. Regarding the topic concept, technology and digital literacy received the most responses, around 6.56%. This suggests the NextGen Learners' inclination toward the students and their keen interest in following technological advancements in education.

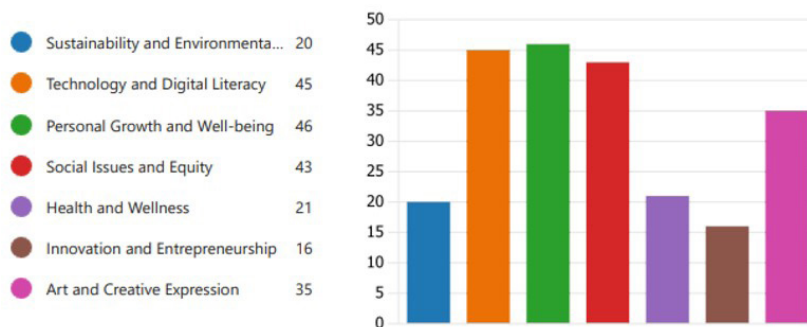
Table 6: Student's Response to Branding and Messaging

Branding and Messaging

What role does the credibility of the publisher or creator have in your decision to choose a particular textbook, website, or other educational resource?



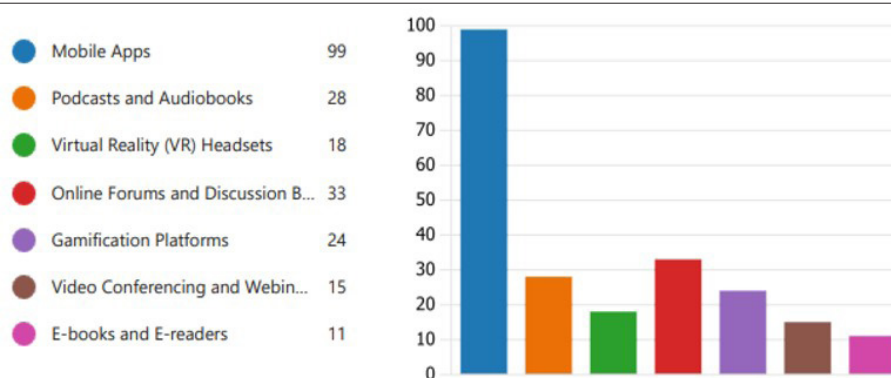
What messaging or content themes do you find most compelling for learning purposes?



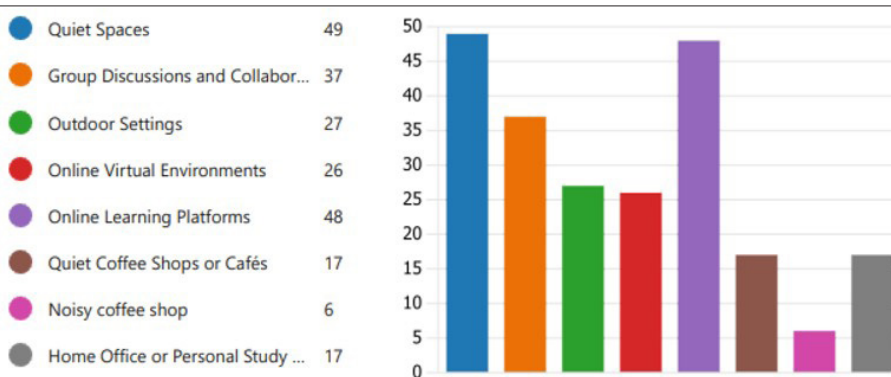
Do you prefer content that is:



What technologies or tools do you find most effective for learning and engagement?



Are there specific learning environments or settings where you are most productive or receptive to new information



Preference for Content and Technologies

Students show interest in the educational content they can learn and enjoy simultaneously. This study highlights the importance of balancing the entertainment aspect and the academic aspect of the learning environment. Moreover, students selected interactive courses, preferring hands-on practical lessons to learn effectively. Mobile phones were considered the most effective tool for socialization, participation, and interactive sessions. The young generation often uses smartphones and other smart gadgets, which are easily accessible. They can be used from any location, adapting to the lifestyles of NextGen Learners. Gamification, online forums, and podcasts also received notable responses.

Learning Environment

The environment affects students' efficiency, productivity, learning experience and overall performance. The most favourite environments were observed to be quiet places and online learning platforms, selected by 21.59% and 21.14% of students, respectively. Such an environment offers focused learning and little to no disturbances; therefore, a student experiences a better understanding of the topic and retention of the information. Group discussions are also very important to learn new ideas and concepts.

DISCUSSION

According to International Organizations such as

UNESCO and the European Union, creativity, knowledge of digital technology, and higher-order thinking skills are essential for academic, professional, and societal growth. The daily usage of technology has developed the communication and construction of knowledge (Mayisela, 2018).

This study has compared the perspectives of both the teacher and the student's response regarding the knowledge of the digital world. The digital preferences of the educator and students gathered, showing similarities and differences. This study represents an understanding of the habits and characteristics of NextGen Learners. Teachers' and students' perceptions of gaining information and learning differ. Teachers considered multimedia presentations, discussions, and online interactive sessions as beneficial ways of learning. Meanwhile, students' responses were inclined toward various social and content-designing platforms such as Instagram and TikTok.

Teachers preferred educational images and icons in their presentations to make the topic understandable. Students also preferred colourful graphics and pictures with high quality to learn and enjoy at the same time. Moreover, both teachers and students agreed on the influence of technology on the educational system, with varying opinions regarding advancement and improvement in learning strategies. Academic institutes and universities are now reviving themselves by incorporating advancements in their teaching strategies and focusing on

the preferences of NextGen Learners to make learning easy and enjoyable. Institutes are working on initiative programs to promote better understanding. They also seek graduates and experienced educators skilled in technology use (Hernandez-de-Menendez *et al.*, 2020).

Bloom's Taxonomy for educational goals is considered an important tool for intellectual development. It has widely influenced the educational systems following approaches involving higher-order thinking skills. Anderson revised the taxonomy in 2001, and the new version received criticism from the academic point of view, stating it as one of the least effective educational systems. Several issues were addressed to determine the importance of BT in educating students critical thinking abilities in English Literature. This involves the factors involved in the learning process of English Literature, the students' preferences, and whether they are interested in simple knowledge or information that involves critical thinking abilities (Rahman & Manaf, 2017).

The revised version of BT consists of two-dimensional approaches: knowledge dimension and cognitive process dimension. The knowledge dimension involves factual, conceptual, procedural, and metacognitive, and the mental process dimension consists of remembering, understanding, applying, analyzing, evaluating, and designing. The six orders of thinking ranked from the easiest to the most complex level (Kozikoglu, 2018). Assessment is the most important aspect of the education system, and it helps in the evaluation of the student's progress, which further helps in making amendments to the teaching strategies to promote effective learning. Despite advancements in technology, there are still issues unresolved regarding learning assessments. Scheduling exams is the old way of taking assessments, and the most critical part of making an exam is the selection of the exam questions (Köksal & Ulum, 2018).

This survey also highlights the challenges teachers and students face, including the fact that NextGen Learners who have been surrounded by technologies and rapid ways of learning through social media might find conventional teaching strategies boring or less interesting. It is one of the major challenges for the teacher and the learner, leading to a lack of engagement in the classroom and a poor relationship with the teacher. Teachers must include advanced teaching methods while listening to NextGen Learners' interests to conquer this challenge. Otherwise, it would lead to demotivation in students.

Moreover, continuous exposure to electronic devices leads to digital fatigue, reduced attention span, and even addiction to smartphones and gadgets. Teachers must maintain a balance between the usage of electronic devices and good digital habits.

LIMITATIONS AND RECOMMENDATIONS

There are educational gaps between NextGen Learners exposed to advanced technology and learners with limited access to digital tools and technological devices. Differences in cultural values and concepts may also lead

to misconceptions about digital icons. A decreased sample size may also be a hindrance to the research. Additionally, over-dependency on digital devices leads to laziness, a shorter attention span, and a lack of connection with educators. To overcome drawbacks related to the research, access to alternate digital options must be provided to students struggling with access issues. Use universally accepted educational platforms to avoid confusion or misconception about the icons. Research with a greater sample size involving other countries must be the goal for better results.

CONCLUSION

This survey focuses on and emphasizes the understanding of the choices and preferences of NextGen Learners to make technological enhancements in learning strategies for high-quality education. Educators can efficiently involve and inspire native learners by incorporating digital tools and adapting creative teaching strategies to improve learning.

Acknowledgments

The author thanks the University staff for supporting this study.

REFERENCES

- Aheisibwe, I., Kobusigye, L., & Tayebwa, J. (2021). Bridging Education Gap in Higher Institutions of Learning Using Bloom's Taxonomy of Educational Objectives. *African Educational Research Journal*, 9(1), 69-74.
- Ahmad, T., & Hussin, A. A. (2017). Application of the Bloom's taxonomy in online instructional games. *International Journal of Academic Research in Business and Social Sciences*, 7(4), 1009-1020.
- Alfia, N., Sumardi, S., & Kristina, D. (2020). Digital Native Students' Perceived Competence on Digital Literacy: A Study of Digital Native Students at A Private Islamic Junior High Boarding School. *Aksara*, 21(1), 360995.
- Amin, H., & Mirza, M. S. (2020). Comparative study of knowledge and use of Bloom's digital taxonomy by teachers and students in virtual and conventional universities. *Asian Association of Open Universities Journal*, 15(2), 223-238.
- Antón-Sancho, Á., Vergara, D., Lamas-Álvarez, V. E., & Fernández-Arias, P. (2021). Digital content creation tools: American university teachers' perception. *Applied Sciences*, 11(24), 11649.
- Arriagada, A., & Ibáñez, F. (2020). "You need at least one picture daily, if not, you're dead": content creators and platform evolution in the social media ecology. *Social Media+ Society*, 6(3), 2056305120944624.
- Ayuni, R. F. (2019). The online shopping habits and e-loyalty of Gen Z as natives in the digital era. *Journal of Indonesian Economy and Business*, 34(2), 168.
- Barari, N., RezaeiZadeh, M., Khorasani, A., & Alami, F. (2022). Designing and validating educational standards

- for E-teaching in virtual learning environments (VLEs), based on revised Bloom's taxonomy. *Interactive learning environments*, 30(9), 1640-1652.
- Childers, C., & Boatwright, B. (2021). Do digital natives recognize digital influence? Generational differences and understanding of social media influencers. *Journal of Current Issues & Research in Advertising*, 42(4), 425-442.
- Co-operation, O. f. E., & Development. (2013). PISA 2012 results: Ready to learn (volume III): Students' engagement, Drive and Self-Beliefs. OECD Publishing.
- Crompton, H., Burke, D., & Lin, Y. C. (2019). Mobile learning and student cognition: A systematic review of PK-12 research using Bloom's Taxonomy. *British Journal of Educational Technology*, 50(2), 684-701.
- Ekren, G., & Keskin, N. O. (2017). Using the revised Bloom taxonomy in designing learning with mobile Apps. *E-Journal of UDEEEWANA*, 3(1), 13-28.
- Fernández-de-Arroyabe-Olaortua, A., Lazkano-Arrillaga, I., & Eguskiza-Sesumaga, L. (2018). Digital Natives: Online Audiovisual Content Consumption, Creation and Dissemination. *Comunicar: Media Education Research Journal*, 26(57), 61-69.
- Francis, T., & Hoefel, F. (2018). True Gen': Generation Z and its implications for companies. *McKinsey & Company*, 12, 1-10.
- Gul, R., Kanwal, S., & Khan, S. S. (2020). Preferences of the teachers in employing revised Bloom's taxonomy in their instructions. *South Asian Journal of Engineering and Sciences Research*, 3(2), 258-266.
- Hernandez-de-Menendez, M., Escobar Díaz, C. A., & Morales-Menendez, R. (2020). Educational experiences with Generation Z. *International Journal on Interactive Design and Manufacturing (IJIDeM)*, 14(3), 847-859.
- Judd, T. (2018). The rise and fall (?) of the digital natives. *Australasian Journal of Educational Technology*, 34(5).
- Keser, H., & Semerci, A. (2019). Technology trends, Education 4.0 and beyond. *Contemporary educational researches journal*, 9(3), 39-49.
- Kesharwani, A. (2020). Do (how) digital natives adopt a new technology differently than digital immigrants? A longitudinal study. *Information & management*, 57(2), 103170.
- Köksal, D., & Ulum, Ö. G. (2018). Language assessment through Bloom's Taxonomy. *Journal of language and linguistic studies*, 14(2), 76-88.
- Kozikoglu, I. (2018). The Examination of Alignment between National Assessment and English Curriculum Objectives Using Revised Bloom's Taxonomy. *Educational Research Quarterly*, 41(4), 50-77.
- Mayisela, T. (2018). Enhancing first-year students' digital content creation at a South African university. In *Proceedings of the International Conference on e-Learning*.
- McCoy, B. R. (2020). Gen Z and digital distractions in the classroom: Student classroom use of digital devices for non-class related purposes.
- Mehta, S., & Kaye, D. B. V. (2021). Pushing the next level: Investigating digital content creation in India. *Television & New Media*, 22(4), 360-378.
- Mohr, K. A., & Mohr, E. S. (2017). Understanding Generation Z students to promote a contemporary learning environment. *Journal on empowering teaching excellence*, 1(1), 9.
- Nelissen, S., & Van den Bulck, J. (2018). When digital natives instruct digital immigrants: Active guidance of parental media use by children and conflict in the family. *Information, Communication & Society*, 21(3), 375-387.
- Nicoli, N., Henriksen, K., Komodromos, M., & Tsagalas, D. (2022). Investigating digital storytelling for the creation of positively engaging digital content. *EuroMed Journal of Business*, 17(2), 157-173.
- Parwata, I., Jayanta, I. N. L., & Widiana, I. W. (2023). Improving metacognitive ability and learning outcomes with problem-based revised Bloom's Taxonomy oriented learning activities. *Emerging Science Journal*, 7(2), 569-577.
- Pikhart, M., & Klimova, B. (2019). Utilization of linguistic aspects of Bloom's taxonomy in blended learning. *Education Sciences*, 9(3), 235.
- Prensky, M. (2001). Digital natives, digital immigrants: Part 1. *On the Horizon*, 9(5), 1-6. <https://doi.org/SHCMS 2023>
- Prensky, M. (2001). Digital natives, digital immigrants: Part 2: Do they really think differently? *On the Horizon*, 9(6), 1-6.
- Rahman, S. A., & Manaf, N. F. A. (2017). A Critical Analysis of Bloom's Taxonomy in Teaching Creative and Critical Thinking Skills in Malaysia through English Literature. *English Language Teaching*, 10(9), 245-256.
- Salmela-Aro, K., Muotka, J., Alho, K., Hakkarainen, K., & Lonka, K. (2019). School burnout and engagement profiles among digital natives in Finland: A person-oriented approach. In *Bildung Psychology* (pp. 79-93). Routledge.
- Ślomska-Przech, K., & Golebiowska, I. M. (2020). Falling into a digital world: how are paper and in teractive maps used by digital natives and immi grants. *Geografie*, 125(4), 447-472.
- Smith, E. E., Kahlke, R., & Judd, T. (2020). Not just digital natives: Integrating technologies in professional education contexts. *Australasian Journal of Educational Technology*, 36(3), 1-14.
- Šorgo, A., Bartol, T., Dolničar, D., & Boh Podgornik, B. (2017). Attributes of digital natives as predictors of information literacy in higher education. *British Journal of Educational Technology*, 48(3), 749-767.
- Tran, T., Ho, M.-T., Pham, T.-H., Nguyen, M.-H., Nguyen, K.-L. P., Vuong, T.-T., Nguyen, T.-H. T., Nguyen, T.-D., Nguyen, T.-L., & Khuc, Q. (2020). How digital natives learn and thrive in the digital age: Evidence from an emerging economy. *Sustainability*, 12(9), 3819.