

The Educator's Attitude & Satisfaction From Online Collaborative Learning

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ABSTRACT

The swift transition to online education prompted by the COVID-19 pandemic has endured even after the crisis, impacting schools globally. This research delves into the contentment and viewpoints of educators regarding online teaching within Delhi NCR, CBSE board-affiliated private schools. Utilizing a Likert scale, we scrutinized responses from 104 educators pertaining to 20 statements across 10 parameters. Overall, educators conveyed positive satisfaction with online learning, although some reservations surfaced regarding the virtual learning environment. The investigation explored facets such as organizational characteristics, school management, technical support, training, flexibility, course delivery, user quality, and personal factors. The outcomes indicate a general endorsement of the current online learning landscape by educators, with slight variations based on experience levels. This study offers valuable insights into educators' perspectives, playing a pivotal role in shaping the future of education in India amidst the ongoing digital transformation.

Keywords: E Education, Educator, Satisfaction, Attitude, ICT, online collaborative learning

1. Introduction

E-learning, also known as electronic learning, is a mode of delivering educational content and instruction through digital technology. With the advent of the internet and advancements in digital technologies, e-learning has become an increasingly popular method of education. It has transformed the way people learn, allowing for flexible and personalized learning experiences that can be accessed from their home.

The COVID-19 pandemic has transformed the education system worldwide. The shift to e-Education was sudden and abrupt, leaving educators scrambling to adapt to the new mode of teaching. The emergence of e-Education, also known as online education, has been a significant game-changer in the world of e-education. While e-Education has been around for some time, it has become increasingly popular due to its ability to provide access to education for a broader range of students, regardless of geographical location. In this paper, we will explore the perspectives of educators on e-Education and its impact on teaching and learning.

According to the National Centre for Education Statistics (NCES), e-Education has been on the rise since 2002, with over 6 million students enrolled in online courses in the fall of 2015 alone (NCES, 2016). As e-Education continues to gain momentum, educators are beginning to see its benefits and challenges.

Collaborative learning is a pedagogical approach that has been widely used in traditional classroom settings, and online collaborative learning has emerged as a promising way to engage students in collaborative activities in online learning environments. Online collaborative learning refers to the use of digital technologies to enable students to work together on tasks, projects, or discussions, regardless of their physical locations or schedules (Harasim, 2017). Online collaborative learning can take many forms, such as synchronous or asynchronous discussions, group projects, peer review, and simulations. Online collaborative learning has become increasingly popular in K-12 and higher education settings, especially during the COVID-19 pandemic when many schools and universities had to switch to online teaching and learning. However, online collaborative learning also presents challenges for educators, such as how to facilitate group dynamics, provide feedback, and assess students' individual and collective contributions.

One of the most significant benefits of e-Education is its ability to provide students with flexibility and accessibility. Students who cannot attend traditional classrooms due to various reasons, such as distance or time constraints, can now access educational materials from anywhere at any time. This flexibility allows students to balance work, family, and education more effectively (Dahlstrom, 2019).

Moreover, educators also see e-Education as an opportunity to personalize learning for each student. With the use of technology, educators can provide individualized learning experiences for each student, catering to their unique learning styles and preferences (Kramarski & Mizrachi, 2020). This personalization can lead to improved student outcomes and engagement.

One of the significant benefits of e-Education is its ability to provide students with flexibility and accessibility. Students who cannot attend traditional classrooms due to various reasons, such as distance or time constraints, can now access educational materials from anywhere at any time. In a survey conducted by the Babson Survey Research Group (BSRG), over 70% of academic leaders believe that online learning is critical to their long-term strategy (BSRG, 2018).

Online collaborative learning can offer several benefits for students, such as enhanced critical thinking, communication, and social skills (Harasim, 2017; Kirschner & van Merriënboer, 2013). Collaborative learning can promote higher-order thinking skills, such as analysis, synthesis, evaluation, and creativity, by challenging students to justify their ideas, compare and contrast different perspectives, and solve complex problems (Johnson & Johnson, 2009). Collaborative learning can also improve students' communication and social skills by exposing them to diverse viewpoints, cultures, and backgrounds, and by providing opportunities to practice active listening, constructive feedback, and conflict resolution (Dillenbourg et al., 2009). Moreover, online collaborative learning can increase students' motivation and engagement by fostering a sense of belonging, autonomy, and competence (Ryan & Deci, 2000). When students feel that their contributions are valued, and they have a sense of ownership over their learning, they are more likely to participate actively and persist in their learning goals (Deci & Ryan, 2000).

Technological acceptance model is one of the widely used conceptual framework for researches in advance web-based learnings. With an intense learning management system and advancements in the educational sector, knowledge is a commodity which needed to be shared and utilized. Research have shown that the online data bases have enormous data easily accessible within a communication process. Cross-sectional research on 360 participants of India have shown that the ease of use, accessibility, and speed made the learners believe that online learning is important part of their knowledge attainment. Also validated by another review analysis on 96 peer reviewed research papers from 2006 to 2016 illuminate that educator are relying more on online learning due to ease of use and availability of the wide range of resources. In the age of globalization every student and teacher possess good range of multimedia devices like mobile phones, tablets, personal computers, laptops etc., which leads to usefulness of the gadget and created a further motivation to continue it for longer time (zachos et al., 2018).

Research has shown that online education cannot replace or substitute the impact of an educator instructional usage. The role of the educators is now changing where more control is given to the learners for enhancing their educational experience. The contemporary thought on technology will challenge the workers for more collaborative tasks and teamwork among learners. (Wagner, & Reddy, 1999).

The major role of educators now is enhancing the content and its presentation effectively by using multimedia techniques (Davie & Wells, 1998). The previous encounter of teachers with information and communication technology speaks a lot about how much changes is needed in their approach to facilitate online education. The change will lead to education of and from "facts and figures" to "learning to learn" (Gujar & Sanone, 2004). The new role also focuses on upskilling educators for more case base academics in favor of a vocational approach. Change in the industry demands the educators are focused on providing skill-oriented training that leads to creating a pipeline of superior quality skill-oriented scholars.

Online collaborative learning can offer many benefits, it also presents several challenges for educators. One of the main challenges is technical issues, such as access to reliable internet connection, compatible devices, and software (Garrison & Kanuka, 2004). Technical issues can impede students' participation and collaboration, and can also create frustration and anxiety. Another challenge is time constraints, as online collaborative learning can require more time for planning, monitoring, and feedback than individual learning (Kirschner & van Merriënboer, 2013). Educators may also face challenges in managing group dynamics, such as dealing with conflicts, ensuring equal participation, and balancing individual and collective accountability (Dillenbourg et al., 2009).

Educators must find ways to facilitate discussions and provide feedback to students, even in the absence of face-to-face interaction (Liu, Gomez, & Yen, 2018). Additionally, educators must be proficient in using technology and providing technical support to students who may encounter issues with the online platform (Kramarski & Mizrahi, 2020).

Furthermore, the shift to e-Education has highlighted existing disparities in access to technology and reliable internet connectivity. Students from low-income families and rural areas may not have access to the necessary technology and internet connectivity to participate in e-Education fully (Dahlstrom, 2019).

However, e-Education also presents some challenges for educators. One of the most significant concerns is maintaining engagement and interaction with students. Educators must find ways to facilitate discussions and provide feedback to students, even in the absence of face-to-face interaction (Liu, Gomez, & Yen, 2018). Additionally, educators must be proficient in using technology and providing technical support to students who may encounter issues with the online platform (Kramarski & Mizrahi, 2020).

2 Methodology

2.1 Study Design and Sample

In our research paper, we employed purposive sampling as a sampling technique to carefully select participants based on specific criteria relevant to our study's objectives. This method allowed us to intentionally target individuals who possessed the knowledge and experiences that would provide valuable insights into our research questions. By doing so, we ensured that our sample was not randomly chosen but instead designed to meet the precise needs of our exploratory research study. In conjunction with purposive sampling, we adopted an exploratory research design, which helped the research delve into uncharted territory and gain a deeper understanding of the topic under investigation. Together, purposive sampling and the exploratory research design enhanced the rigor and relevance of our study, ultimately contributing to the richness of our findings. The aim of the present study is to evaluate the satisfaction and perception of computer-aided teaching among private school teachers of the India CBSE board. The Test of Learning-Related Attitude (TeLRA) was used to assess educators' attitudes toward E-learning and self-administered questionnaire is made to assess the satisfaction.. Approximately 104 educators from private schools consented to participate and were examined between June 2022 and January 2023. The questionnaire included demographic information, such as academic background and experience in online teaching, as well as aspects related to attitude and satisfaction.

2.2 Examining Satisfaction from online teaching

Online education has become an integral part of the Indian education system lately.. A 5-point Likert scale was created with 20 statements on 10 dimensions to understand the teachers' perception of online learning. To minimize researcher biases, the statements were prepared using a framework known as the Technological Acceptance Model (TAM) by Davis. Subsequently, these statements were reviewed by professionals in the respective fields. The satisfaction scale ranged from "Highly Disagree" to "Highly Agree," with a value of 5 for "Highly Disagree," 4 for "Disagree," 3 for "Neutral," 2 for "Agree," and 1 for "Strongly Agree." Finally, the cumulative scores were summarized and calculated, with values ranging from one to five, where 1 represented dissatisfaction and 5 indicated high satisfaction.

2.3 The test of e learning related attitudes (TeLRA)

Online education had become an integral part of the Indian education system in the past. However, it was not considered beneficial unless educators had a very positive attitude towards it and were highly satisfied with it. A 5-point Likert scale had been created with 20 statements on 10 dimensions to understand the teachers' perception of online learning. To minimize researcher biases, the statements had been prepared using a framework known as the Technological Acceptance Model (TAM) by Davis. Subsequently, these statements had been reviewed by professionals in the respective fields. The satisfaction scale ranged from "Highly Disagree" to "Highly Agree," with a value of 5 for "Highly Disagree," 4 for "Disagree," 3 for "Neutral," 2 for "Agree," and 1 for "Strongly Agree." Finally, the cumulative scores had been summarized and calculated, with values ranging from one to five, where 1 represented dissatisfaction and 5 indicated high satisfaction.

	Gender	N	Mean	Std. Deviation	Std. Error Mean
Challenges of e learning	Male	26	2.8462	.36795	.07216
	Female	78	2.9615	.19355	.02192
Benefits from e learning	Male	26	2.7692	.42967	.08427
	Female	78	2.6795	.46969	.05318
Attitude on using computer systems	Male	26	2.5769	.57779	.11331

Interest on e learning innovations	Female	78	2.8333	.46756	.05294
	Male	26	2.7308	.45234	.08871
	Female	78	2.7692	.42405	.04801

Table 1 Mean for gender comparisons (N=104)



Figure 1 A comparison of 10 key factors influencing satisfaction levels among the surveyed population (N=104)

Aspects	Strongly Disagree	Disagree	Somewhat Agree	Agree	Strongly Agree	Mean
Organisational Characteristics	6	25	25	112	40	3.75
School Management	7	47	25	106	23	3.44
Technical Support	4	61	33	90	20	3.29
Training	3	55	39	79	32	3.39
Virtual Learning Environment Characteristic	3	76	43	52	34	3.18
Interaction	15	63	30	87	13	3.1
Flexibility	8	40	23	102	35	3.56
Course Delivery	10	38	40	97	23	3.41
user quality	16	73	18	83	18	3.07
personal factors	7	43	20	115	23	3.5
Overall Mean						3.369
Cronbach Alpha	.668					

Table 2 Satisfaction of educators by E teaching (N=104)

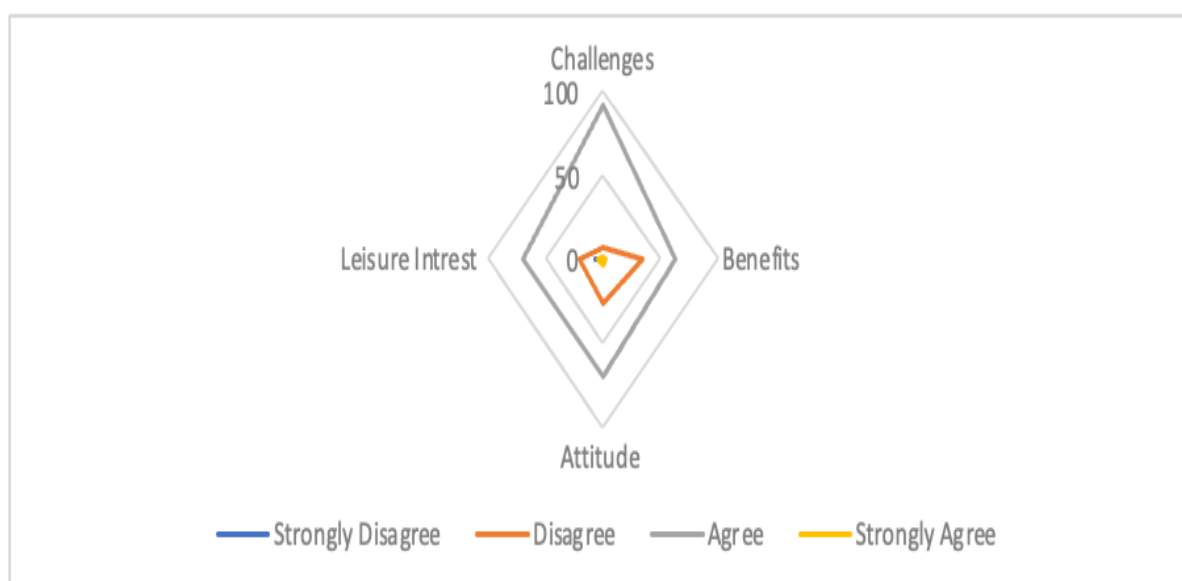


Figure 2 Test of e-Learning Related Attitudes (TeLRA) Results (N=104)

	Time	N	Mean	Std. Deviation	Std. Error Mean
Challenges of e- learning	Less than 5 Year	45	2.8889	.31782	.04738
	More than 5 year	59	2.9661	.18252	.02376
Benefits from e learning	Less than 5 Year	45	2.6889	.46818	.06979
	More than 5 year	59	2.7119	.45678	.05947
Attitude on using computer systems	Less than 5 Year	45	2.7111	.54864	.08179
	More than 5 year	59	2.8136	.47251	.06151
Interest on e learning innovations	Less than 5 Year	45	2.6667	.47673	.07107
	More than 5 year	59	2.8305	.37841	.04926

Table 3 E- Teaching experience of studied participants (N=104)

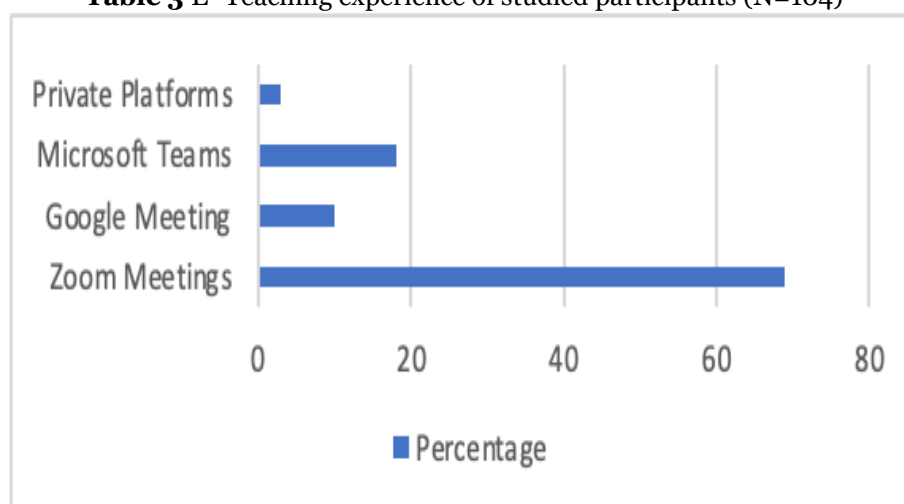


Figure 3 Platforms used for teaching by studied participants (N=104)

3. Results and Discussion

The results, based on socio-demographic composition along with holistic results, were described in this section, as depicted in table 1. Out of 15 schools, more than half of the respondents were female (75%), while males comprised 25%. This study had included a disproportionate ratio of female and male teachers. On average, 43.2% of educators had less than 5 years of experience in the e-education field, while 56.8% had more than 5 years of experience in e-education. The mean data, ranging from 2.5769 to 2.9615, indicated that gender did not play any role in determining the satisfaction derived from e-learning among educators.

3.1 Educators satisfaction from E teaching

During the COVID-19 crisis, most of the schools universally turned their classes into online classes. After the pandemic was over, the schools continued to use technological devices in their classes to facilitate academics. Under the given circumstances, the satisfaction level and the attitude of the teachers were very important in understanding the perspective of the educators and analyzing the future of education in India. To unravel the same, a self-reporting evaluation based on a Likert scale was created. Participant responses to the 20 statements based on 10 parameters, as reflected in Table 2.

According to the average score, the overall satisfaction of teachers towards e-learning was determined to be in agreement, indicating a positive satisfaction towards the learning. The only deviation was in the virtual learning environment.

The data table presented the results of a survey conducted to assess various aspects of a virtual learning environment. This environment encompassed online educational platforms and courses. The survey collected responses from participants who were asked to indicate their level of agreement or disagreement with statements related to different aspects of satisfaction from E-teaching. The aspect of organizational characteristics received an average score of 3.75, indicating that, on average, participants tended to agree with statements about the way the virtual learning system was organized and structured. Participants gave an average score of 3.44 for school management, suggesting a moderate level of agreement with statements concerning how the virtual school was managed and operated. The technical support aspect received an average score of 3.29, indicating a moderate level of agreement regarding the availability and effectiveness of technical

support. Participants' average score of 3.39 for training indicated a generally positive perception of the training resources and materials available within the online learning system. This aspect received an average score of

3.18, indicating a moderate level of agreement with statements about the unique characteristics and features of online learning.

The interaction aspect garnered an average score of 3.1, suggesting that participants had a slightly positive view of the level of interaction and engagement facilitated by the E-learning environment. With an average score of 3.56, the flexibility aspect was well-received, indicating that participants generally agreed with statements about the flexibility of the virtual learning system in accommodating different schedules and preferences. Participants' average score of 3.41 for course delivery suggested a positive perception of the methods and effectiveness of delivering educational content. The user quality aspect received an average score of 3.07, indicating a moderate level of agreement with statements about the quality of other participants' interactions and contributions. Participants gave an average score of 3.5 for personal factors, suggesting that, on average, participants agreed with statements that considered personal attributes and circumstances affecting their experience in the E-learning environment.

The overall mean score for all aspects combined was calculated as 3.369, suggesting a generally positive sentiment among participants toward satisfaction from online learning as a whole.

The provided Cronbach Alpha value of 0.668 was a measure of the internal consistency reliability of the survey. While this value was acceptable, it indicated that there might have been some room for improvement in terms of consistency among the survey items used to measure these aspects.

In all, it can be said that participants generally expressed agreement with various aspects of the virtual learning environment, including organizational characteristics, school management, technical support, training, flexibility, course delivery, and personal factors. However, there were some aspects, such as interaction and user quality, where the level of agreement was more moderate. The provided data offered insights into participants' perceptions and could guide improvements to enhance the virtual learning experience.

3.2 Educators Attitude on E teaching

The findings related to participants' attitudes and perceptions towards e-learning were based on their years of experience in e-teaching. The data provided insights into how participants' perspectives differed depending on their level of experience.

Participants with less than 5 years of e-teaching experience (45 participants) had an average mean score of 2.8889 when it came to the challenges of e-learning. This, along with Figure 2, suggested that they found e-learning somewhat more challenging. The standard deviation of 0.31782 indicated that there was a moderate amount of variability in their responses. The standard error mean of 0.04738 represented the precision of the mean estimate for this group. On the other hand, participants with more than 5 years of e-teaching experience (59 participants) had a slightly higher mean score of 2.9661, indicating that their perception of challenges was slightly more positive and less challenging.

Participants with less than 5 years of e-teaching experience (45 participants) had an average mean score of 2.6889 for the benefits of e-learning. This suggested they recognized some benefits but were not overwhelmingly positive. The higher standard deviation of 0.46818 indicated greater variability in their opinions. The standard error mean of 0.06979 gave an idea of the precision of the mean estimate. For participants with more than 5 years of e-teaching experience (59 participants), the mean score was 2.7119, suggesting a similar sentiment, with slightly more recognition of benefits.

Participants with less than 5 years of e-teaching experience (45 participants) had an average mean score of 2.7111 for their attitude towards using computer systems. This indicated a moderately positive attitude. The higher standard deviation of 0.54864 implied a wider range of opinions. The standard error mean of 0.08179 reflected the precision of the mean estimate. For participants with more than 5 years of e-teaching experience (59 participants), the mean score was 2.8136, showing a slightly more positive attitude towards using computer systems.

Participants with less than 5 years of e-teaching experience (45 participants) had an average mean score of 2.6667 for their interest in e-learning innovations. This suggested a moderate level of interest. The standard deviation of 0.47673 indicated variability in their responses. The standard error mean of 0.07107 represented the precision of the mean estimate. For participants with more than 5 years of e-teaching experience (59 participants), the mean score was 2.8305, indicating a slightly higher level of interest in e-learning innovations. Overall, Table 3 showcased subtle variations in attitudes and perceptions between participants with different levels of e-teaching experience. Those with more experience generally tended to have slightly more positive mean scores across the measured aspects, such as low challenges, benefits, positive attitudes towards using computer systems, and interest in e-learning innovations.

Conclusion

In conclusion, online collaborative learning offered many advantages from the educator's perspective, including increased flexibility, improved communication and collaboration, and enhanced student engagement and motivation. However, there were also some challenges associated with online learning, and educators had to carefully consider these challenges when designing and implementing online learning programs. Overall, online collaborative learning had the potential to transform the way we taught and learned, and it was an area that was likely to continue to grow and evolve in the years to come. The paper tried to highlight the perspective of educators on the E-education system that could be used as a base guideline to improve the experience of the E-education system.

In the first place, it was noted that the teachers needed to have some theoretical background when it came to face-to-face teaching. However, when it came to online teaching, the theoretical framework was already available in the PPT format or in any other electronic educational tool that the teacher was using. The ease of use was one of the important factors when it came to online learning because the activities that the students performed in the class were more entertaining and engaging than when it came to face-to-face teaching. Both systems had some positive and negative highlights. Negative consequences included students having less social engagement and difficulty in comprehending facial expressions and emotional cues. The course building and financial strain on the academicians were major challenges that this paper intended to highlight to the authorities. Educators had to continue to adapt and evolve with the changing landscape of education to ensure that students received the best possible learning experience.

References

1. Babson Survey Research Group. (2018). Online report card: Tracking online education in the United States. Babson Survey Research Group.
2. Davie, L., & Wells, P. (1998). Enhancing content presentation through multimedia techniques.
3. Dahlstrom, E. (2019). ECAR study of undergraduate students and information technology, 2019. EDUCAUSE Center for Analysis and Research.
4. Dahlstrom, E. (2019). The Digital Transformation of Education: Large-Scale Adoption and Use of OER at the University of Maryland. *The International Review of Research in Open and Distributed Learning*, 20(3), 1-17.
5. Dillenbourg, P., Baker, M., Blaye, A., & O'Malley, C. (2009). The evolution of research on collaborative learning. In *Technology-enhanced learning* (pp. 3-19). Springer.
6. Garrison, D. R., & Kanuka, H. (2004). Blended learning: Uncovering its transformative potential in higher education. *The Internet and Higher Education*, 7(2), 95-105.
7. Gujar, R., & Sanone, S. (2004). Transitioning from "facts and figures" to "learning to learn" in education.
8. Harasim, L. (2017). *Learning Theory and Online Technologies* (2nd ed.). Routledge. <https://doi.org/10.4324/9781315716831>
9. Johnson, D. W., & Johnson, R. T. (2009). An Educational Psychology Success Story: Social Interdependence Theory and Cooperative Learning. *Educational Researcher*, 38, 365-379.
10. Kirschner, P. A., & van Merriënboer, J. J. G. (2013). Do learners really know best? Urban legends in education. *Educational Psychologist*, 48(3), 169-183.
11. Kramarski, B., & Mizrachi, D. (2020). Online collaborative learning (OCL) in higher education: A theoretical model. *Computers & Education*, 145, 103724.
12. Kramarski, B., & Mizrachi, N. (2020). From face-to-face to e-learning: A comprehensive review of the changing pedagogical environment. *Education and Information Technologies*, 25(3), 1393-1416.
13. Liu, Y., Gomez, J., & Yen, C. (2018). Communication and engagement in online learning: Opportunities and challenges for students and instructors. *Journal of Online Learning and Teaching*, 14(2), 68-85.
14. Ryan, R. M., & Deci, E. L. (2009). Promoting self-determined school engagement: Motivation, learning, and well-being. In K. R. Wenzel & A. Wigfield (Eds.), *Handbook of motivation at school* (pp. 171-195).
15. Wagner, Nicole & Hassanein, Khaled & Head, Milena. (2008). Who is Responsible for E-Learning Success in Higher Education? A Stakeholders' Analysis.. *Educational Technology & Society*. 11. 26-36.
16. Zachos, G., Paraskevopoulou-Kollia, E.-A., & Anagnostopoulos, I. (2018). Social Media Use in Higher Education: A Review. *Education Sciences*, 8(4), 194. MDPI AG. Retrieved from <http://dx.doi.org/10.3390/educsci8040194>