

Managing Social Media for Learning and for Maintaining Academic Integrity

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Abstract

This article presents the results of two survey studies conducted in 2018. Each had two aims. The first was to determine how effectively instructors felt that they managed the use of social media in their courses for learning. The second purpose was to determine if instructors experienced students' misuse of technology, particularly social media, to violate academic integrity. In the first survey, instructors were asked if they used social media in their courses and, if so, how effective they found social media to be for learning. In the second survey, students were asked if they had been exposed to social media as a means of instruction and, if so, had they found that their learning experience was better as a result. Ninety-eight instructors of law and business studies participated in the first study. Ninety-four business master students participated in the second study. Results were inconclusive: instructors' use of social media for instruction was limited, as was students' experience with technology for learning course material. Where social media was incorporated in the course, both instructors and students rated Google Docs and YouTube as the most effective for learning. On the questions related to how they had addressed instances of violations of academic integrity, instructors most often cited teaching the importance of ethics and following up when violations occurred. Students stated that the instructor's oversight and the student's own sense of academic integrity were the most critical elements for maintaining academic integrity. There were statistically significant differences based on gender in the instructor survey and based on enrollment status in the student survey regarding questions on violations of academic integrity.

Keywords: academic integrity, e-learning, online education, social media, technology

Introduction

Examining ethical issues in the digital age, Jurkiewicz [1] noted that change was happening rapidly in all areas of life. Education is no exception. Institutions and instructors are developing new enhanced instructional programs at a fast pace to meet market demand. The authors argue that a critical element of enhanced e-learning instruction is the integration of technology with course material. But technology brings with it challenges to maintaining a climate of academic integrity in the classroom.

Distance education programs in the United States continue to grow, outpacing their classroom counterparts [2]. Facing declines in traditional-age college enrollments, increasingly institutions of higher education must look to the opportunities afforded by e-learning programs to attract and retain students from across the globe.

Jung and Gilson [3] argued that because of the technological evolution, online learning, i.e., e-learning could provide an innovative approach to overcoming the constraints of distance, time, location and differing learning styles. The same technological evolution also presents e-learners with significant opportunities to enhance their learning experience.

With the opportunities afforded by technology to enhance learning come concurrent challenges to promoting academic integrity in the learning environment. Some, including Spaulding [4], would argue that instructors must overcome additional hurdles in managing the e-learning environment in a way that supports and reinforces a culture of academic integrity.

Solomon [5] maintained that educators at all levels of higher education can and should be proactive in providing a solid foundation to promote academic integrity. This research examined how instructors and students were using technology, specifically social media, to enhance learning while maintaining the principles of academic integrity.

Researchers' earlier studies on the use of technology to enhance learning and the use of social media to violate academic integrity have focused on students' perceptions [6, 7]. To broaden the examination of how academic integrity has been impacted by the introduction of technology into course delivery, researchers asked instructors and students how they used technology, especially social media, in their courses.

Discussion and Research Questions

Social Media for Learning

Earlier studies of students' use of technology in their courses have noted an increasing reliance on web-based sources of information and other technologies to master course material [8]. Pointing to student interaction and peer learning, Huang and Nakazawa [9] found that when managed appropriately, technology could enhance student learning by facilitating access both to classmates and to the instructor in the course.

Several earlier studies have explored the integration of technology into the learning environment – both online and in the classroom [10, 11]. Recent years have seen an increased use of technology in higher education, with scholarship emerging around the ubiquity of social media as a “fast trend” [12] and around instructors' increased integration of tools and platforms such as Twitter, blogging, and other digital media into the classroom [13, 14].

Describing how social media can help to develop professional learning networks, Forbes [15] highlighted many of the issues instructors and students encounter in using technology for learning, including protecting privacy and ensuring the ethical use of data.

Maintaining Academic Integrity

The International Center for Academic Integrity [16] defines academic integrity as a commitment to six fundamental values on which ethical behavior rests: honesty, trust, fairness, respect, responsibility, and courage. Institutions of higher education can foster and nurture a culture of academic integrity in a variety of ways. These include posting their academic integrity (AI) policies prominently on their websites, stressing the importance of academic integrity in activities with incoming students (including international students), enforcing student codes of conduct, exhorting faculty to reinforce the precepts of academic integrity in their syllabi, and providing support to faculty who enforce the policy in their courses. Nonetheless, despite these efforts, research demonstrates that students continue to commit acts of academic dishonesty [5, 7, 17, 18, 19, 20, 21].

Hinman [22] considered the intersection of ethics and academic integrity with technology, specifically with regard to the Internet and the challenges posed by student use and misuse. In light of the increasing use of social media in higher education, the ethical use of data and the maintenance of ethical integrity pose significant challenges for instructors integrating technology into their courses [23]. Chertok, Barnes, and Gilleland [24] argued that ongoing developments in technology had the potential to create new modes and avenues of cheating.

Not unrelated to the ongoing introduction of new technologies, instructors may be reluctant to promote the use of social media to enhance learning for a number of reasons, such as their own comfort level with technology, the ability to tailor instruction and achieve desired learning goals, and a concern that academic integrity be ensured.

“One of the barriers to adoption of distance education by faculty in higher education is their fear that students can cheat too easily in their online courses. However, many options are available to impede students’ dishonesty when learning online.” [25, p. 9]. While it may be difficult to prevent such infringements as academic brokering, or paying someone to take a course for another, there are ways to reduce the likelihood of dishonesty and help instructors feel more confident about online instructional delivery.

Osborne and Connelly [26] note that it is incumbent on instructors and students, as well as “emerging professionals,” to develop an awareness of how to employ social media in ethical and socially responsible ways. In so doing, those who develop that awareness can proactively safeguard against the inherent dangers and challenge outdated notions in order to take advantage of the opportunities that technology affords and, at the same time, protect against the collateral risks and complexities.

Research Questions

Each study looked at how effectively instructors felt that they had managed the use of social media for learning and at what impact instructors felt that social media had on maintaining academic integrity in their courses. Instructors and students were also asked which social media they used for learning and which, if any, were used dishonestly in courses. Selected responses were transferred into SPSS for analysis.

RQ 1: Have instructors found that the use of social media has enhanced student learning?

RQ 2: Have instructors found that social media has been used to violate academic integrity?

RQ 3: Have students found that the use of social media has enhanced learning?

RQ 4: Have students found that social media has been used to violate academic integrity?

Methodology

For the first study, researchers developed a 22-question survey in *Question Pro*, the web-based survey instrument that is supported by the University. A solicitation to participate in the surveys was sent to members of the Academy of Legal Studies in Business (ALSB) by the ALSB Executive Director in January 2018. A follow-up email solicitation was sent in February, 2018. For the second study, researchers included additional questions on students’ observations of occurrences of academic dishonesty to form a 30-question survey in *Question Pro*. Students in

the summer, 2018, and fall, 2018, MBA and MS in Human Resource Management programs were asked to participate. Students were offered extra credit to take the survey.

Participants

The participants in the first study consisted of business and legal studies instructors who belonged to the ALSB. The survey link was sent to 779 instructors. There were 216 views of the survey recorded by *Question Pro*. Ninety-eight of the estimated 103 instructors who began the survey, finished it, for a completion rate of 95.14%. Respondents were experienced instructors, at the assistant professor, associate professor or professor level, a slight majority (53%) of whom taught primarily in the classroom. Thirty-nine percent taught both online and in the classroom. Almost 65% of those responding taught law. Twenty-five percent taught business courses. Males accounted for 57.14% (56) of the sample; females, 38.78% (38). Four instructors (4.08%) elected not to answer the question on gender.

For the first study, researchers chose to solicit members of the ALSB, most of whom are instructors of business and legal studies, to complement the follow-up study of business students' use of social media for learning and their views on academic integrity.

The sample from the second study included graduate students from the University's MBA and MS in Human Resource Management programs. Seventy-seven MBA students and 17 MSHR students participated. There were 195 views of the survey recorded by *Question Pro*. Ninety-four of the 94 students who began the survey finished it for a completion rate of 100%. More than 60% of the students were enrolled part-time. Ninety students identified as graduate students (95.74%); one was a doctoral candidate (1.06%); and two were PhDs (2.13%). Males accounted for 56.38% (53) of the sample; females, 43.62% (41). Thirty-five students (37.23%) had taken one to three fully or partially online courses. Ninety students (20.21%) had taken four to six courses; and 14 had taken seven to ten fully or partially online courses. Eight students (8.51%) had taken more than 10 fully or partially online courses. For 18 students (19.15%), the course in which the survey was administered was their first experience with e-learning.

Results

RQ 1: Have instructors found that the use of social media has enhanced student learning?

Fourteen instructors (14.29%) reported using Facebook and twelve (12.24%) said that they used Twitter for instructional activities. None reported using Snapchat/Instagram for instruction. Of those instructors who reported using other types of social media to deliver or reinforce learning objectives, 48 (32.88%) used YouTube; 21 (14.38%) used blogs; and 17 (11.64%) said that they used Google Docs.

When instructors were asked how effective they felt the social media used was in achieving learning goals, 1, "very effective" to 5, "not effective", instructors rated YouTube highest at 1.804, followed by Google Docs, 2.059, LinkedIn, 2.200, and Blogs at 2.143. Facebook and Twitter each were somewhat effective at 2.385, followed by Google +, 3.00, and Wikis at 3.375. Table 1 presents the results.

Table 1. Instructors’ View of Effectiveness of Social Media for Enhanced Learning

Social Media	Responses	Effectiveness Rating
Facebook	13	2.385
Twitter	13	2.385
Snapchat/Instagram	1	5.000
Blogs	21	2.143
YouTube	46	1.804
Google+	2	3.000
Google Docs	17	2.059
LinkedIn	10	2.200
Wikis	8	3.375

RQ 2: Have instructors found that social media has been used to violate academic integrity?

Respondents’ experience with students misusing social media to enhance learning was not extensive. Fifty-eight instructors (59.18%) reported having encountered only occasional acts of academic dishonesty such as plagiarism and cheating on tests and/or assignments by students. Twenty-eight (28.57%) said that they had not encountered any instances of students using social media to cheat in their courses. Five (5.10%) reported having experienced instances of students committing acts of academic dishonesty often in their courses. The same number of instructors answered, “Yes, once.” Two respondents (2.04%) chose not to answer the question. Table 2 presents the results.

Table 2. Instructors’ Experience with Instances of Academic Dishonesty

Responses	N=98	Percent of Instructors N=98
Yes, often	5	5.10%
Yes, occasionally	58	59.18%
Yes, once	5	5.10%
No	28	28.57%
Do not wish to answer	2	2.04%

Instances of inappropriate behavior included accessing and using materials to prepare for exams when those materials were not intended for students; using the internet for answers; impermissible materials in exam room; buying case solutions from online sources. Students who were found to be cheating on tests were using web sources, smart phones or e-mail.

Independent samples t-tests were run on question 16 in the instructor survey (“Have you experienced instances of students’ committing acts of academic dishonesty in your courses?”) for gender and mode of instruction (online v. classroom). There were statistically significant

differences at the .05 level based on gender (.011, equal variances not assumed). There were no statistically significant differences based on mode of instruction.

RQ 3: Have students found that the use of social media has enhanced learning?

Responses were limited with regard to the three specific examples of social media highlighted in the survey, that is, Facebook, Twitter and Snapchat/Instagram.

When used to enhance learning, on a scale of 1, “very effective” to 3, “not effective”, students rated Google Docs as most effective, 1.114, followed by YouTube, 1.257, LinkedIn, 1.727, and Google + at 1.875. Table 3 presents the results.

Table 3. Students’ View of Effectiveness of Social Media for Enhanced Learning

Social Media	Responses	Effectiveness Rating
Facebook	7	2.571
Twitter	9	2.444
Snapchat/Instagram	5	2.800
YouTube	74	1.257
Blogs	20	1.800
Google Docs	35	1.114
LinkedIn	22	1.727
Wikis	8	2.250
Google+	8	1.875

RQ 4: Have students found that social media has been used to violate academic integrity?

When asked if students knew of Facebook, Twitter or Snapchat/Instagram being used to violate academic integrity policies, more than 93% said that they had not observed, nor did they know of, other students having used Facebook to cheat. Eighty-nine students (94.68%) “never” observed anyone using Twitter to cheat. Eighty-five students (90.43%) “never” observed anyone using Snapchat/Instagram to cheat. Responses differed when asked if smartphones, texting or the use of screenshots were used to cheat. Table 4 presents the results.

Students, when asked how they felt about cheating or any type of academic dishonesty, replied that it was always wrong (75 or 79.79%) Eleven (11.70%) responded that they did not cheat themselves, but did not really care if others did. Four students (4.26%) said that they had no opinion, while one (1.06%) said it was ok if you did not get caught.

Independent samples t-tests were run on the questions related to the types of technology used for cheating in the student survey based on gender and enrollment status (full-time v. part-time). There were statistically significant differences at the .05 level based on enrollment status for the observed use of smart phones (.047, equal variances not assumed) for screenshots/videos/audio (. 033, equal variances not assumed). There were no statistically significant differences based on gender.

Table 4. Students' Observations re Instances of Academic Dishonesty

Response	Facebook	Twitter	SnapChat Instagram	Smartphones	Texting	Screen Shots Recordings
	N=92	N=92	N=91	N= 93	N= 92	N= 93
Never	88/93.62%	89/94.68%	85/90.43%	64/68.09%	63/67.02%	67/71.28%
A few times	3/ 3.19%	3/3.19%	6/6.38%	24/25.53%	25/26.60%	22/23.40%
On a regular basis	1/ 1.06%	0	0	3/3.19%	4/4.26%	4/4.26%
Every term, 1+ courses	0	0	0	1/1.06%	0	0
Extensively	0	0	0	1/1.06%	0	0

Conclusions

There have been several studies of academic dishonesty [27, 28], including the prevalence of plagiarism in academia [29] and the difficulties instructors and administrators encounter when trying to enforce the precepts of academic integrity at their institutions [30]. Faculty members have been surveyed [31], as have students [32, 33, 34].

Styron and Styron [35] point out that cases of academic dishonesty are nothing new, tracing the history of, and views toward, academic cheating back to the 19th century. While others see an almost certain increase in instances of academic dishonesty due to emerging technology, Styron and Styron maintain that there is no evidence to support that claim.

Chertok, Barnes, and Gilleland [24] concluded that in order to change student attitudes and action, educators and their institutions have the responsibility to educate students on what is and is not acceptable in a culture of academic integrity. In their study published the following year, Manly, Leonard, and Riemenschneider [36] found that shifting generational attitudes and widespread adoption of technology confounded the challenges instructors face in maintaining academic integrity in the classroom. Their study examined business students' awareness of two tenets of academic integrity, respect and responsibility.

In this study, instructors reported that both stressing the importance of ethical behavior and following up on policy violations were critical to countering academic dishonesty. Respondents also cited anti-plagiarism software, not reusing tests and setting tight timeframes for exams. In addition, they mentioned banning electronic devices from test sites as helpful in preventing academic dishonesty in the classroom. Perhaps facetiously, one reader suggested using a Faraday cage.

Similar recommendations for countering academic dishonesty were made by students: establishing tight deadlines for test-taking to discourage cheating; embargoing smartphone devices during exams with a strict penalty for those who violate the prohibition; and avoiding multiple choice questions. One student suggested substituting a pass/fail system in place of the standard grading system as one way to minimize cheating since "getting a good grade" would not be an issue.

The questions examined in this research focused on how best to use technology, specifically certain social media, to enhance learning while maintaining a culture of academic

integrity. Results were inconclusive due to the limited use of technology, specifically, social media for instructional purposes.

International and Managerial Implications

The internet has reshaped how universities deliver education world-wide. E-learning, the framework for this research, would not be possible without the internet and what the World Wide Web offers to users. It has been noted that online education has the potential to both expose new audiences to learning and to transform learning delivery. Volery and Lord [37] recognized early on that online education could expand access, alleviate capacity constraints, capitalize on emerging market opportunities, and serve as a catalyst for institutional transformation.

Seaman, Allen, and Seaman [2] report that online education in the United States has increased for the 14th year in a row, countering the overall decrease in enrollments in many higher education institutions. As U.S. colleges and universities explore alternatives to the traditional on campus learning experience to attract students, many are looking to the advantages of e-learning to attract not only American students, but also those from countries with growing college-age populations.

With the hoped-for growth in international enrollments in US institutions, there come additional challenges for managing course delivery consistent with the precepts of academic integrity. As an example, collaborative learning may be viewed in some cultures as appropriate in all instances; yet, it may violate academic integrity policies in a culture that considers individual learning as a critical element in attaining the requisite knowledge for a degree.

Students will continue to rely on emerging technology in every aspect of their lives, including learning -- online as well as in the classroom. It is clear that educational institutions will need to adapt their policies and procedures to the needs and expectations of people born in the digital age [38, 39]. It can also be said that the deployment of technology and social media for the enhancement of learning will grow in significance. How that deployment is managed will be the key to its success and thus a critical challenge to instructors and institutions.

Instructors as well as their students should be able to take advantage of what the new technology and social media has to offer in an environment that fosters academic integrity. That having been said, additional studies need to be completed on students' learning behaviors and instructors' instructional models to determine how best to manage technology for learning while fostering a culture of academic integrity in the learning environment.

References

1. Jurkiewicz, C. (2018). Big data, big concerns: Ethics in the digital age. *Public Integrity*, 20, S46 -S59. doi: 10.1080/10999922.2018.1448218.
2. Seaman, J.E., Allen, I.E., & Seaman, J. (2018). Grade increase: Tracking distance education in the United States. *Babson Survey Research Group*. <http://www.onlinelearning.survey.com/highered.html>.
3. Jung, J., & Gilson, T.A. (2014). Online threaded discussion: Benefits, issues, and strategies. *Kinesiology Review*, 3, 241-246.
4. Spaulding, M. (2009). Perceptions of academic honesty in online vs. face-to-face classrooms. *Journal of Interactive Online Learning*, 8(3), 183-198.

5. Solomon, M. A. (2018). Promoting academic integrity in the context of 21st century technology. *Kinesiology Review*, 7(4), 314-320.
6. Cole, M.T., Shelley, D.J., & Swartz, L.B. (2019). In re launching a new vision in education and e-Learning: Fostering a culture of academic integrity in e-Learning. In V. Uskov, R. Howlett, L. Jain, & L. Vlacic (Eds.), *Smart Education and e-Learning 2018. KES SEEL-18 2018. Smart Innovation, Systems and Technologies*, 99 (pp. 151-164). Cham, Switzerland: Springer International Publishing.
7. Cole, M.T., Swartz, L.B., & Shelley, D.J. (2014) Students' use of technology in learning course material: Is it cheating? *International Journal of Information and Communication Technology Education*, 10(1), 35-48. doi: 10.4018/ijicte.2014010104, 2014.
8. Cole, M.T., Swartz, L.B., & Shelley, D.J. (2013). Enhancing online learning with technology: A survey of graduate and undergraduate business students on their use of social media in course work. *Proceedings of the 11th Hawaiian International Conference on Education (HICE 2013)*, 3745-3809.
9. Huang, W.D., & Nakazawa, K. (2010). An empirical analysis of how learners interact in wiki in a graduate level online course. *Interactive Learning Environments*, 18(3), 233-244.
10. Greenhow, C., Robelia, B., & Hughes, J.E. (2009). Learning, teaching, and scholarship in a digital age: Web 2.0 and classroom research: What path should we take now? *Educational Researcher*, 38(4), 246-259.
11. Kerner, N.K., & Gunderson, B. (2012). Integration of technology into undergraduate education via cross-disciplinary pollination. *Sloan-C*. Retrieved from http://sloanconsortium.org/effective_practices/integration-technology-undergraduate-education
12. Johnson, L., Adams Becker, S., Estrada, V., Freeman, A., Karpys, P., R. Vuorikari, R., & Punie, Y. (2014). *NMC horizon report Europe: 2014 schools edition*. Austin, Texas: The New Media Consortium. Retrieved from <https://www.learnlib.org/p/182011/>.
13. Fox, A., & Bird, T. (2017). The challenge to professionals of using social media: Teachers in England negotiating personal-professional identities. *Education and Information Technologies*, 22(2), 647-675
14. Lupton, D. (June, 2014). 'Feeling better connected': Academics use of social media. *News & Media Research Centre*, University of Canberra. Retrieved from <http://www.canberra.edu.au/research/faculty-research-centres/nmrc/publications/documents/Feeling-Better-Connected-report-final.pdf>
15. Forbes, D. (2017). Professional online presence and learning networks: Educating for ethical use of social media. *International Review of Research in Open and Distributed Learning*, 18 (7), 175-190.
16. International Center for Academic Integrity (2014). T. Fishman (Ed.). The fundamental values of academic integrity. Retrieved from <http://www.academicintegrity.org/icai/resources->
17. Robinson, J.A., & Glanzar, P.L. (2014). Building a culture of academic integrity: What students perceive and need. *College Student Journal*, 209-221. P. Feldman (Ed.).

18. McNair, M., & Haynie, L. (2017). Academic dishonesty: A multi-discipline view of faculty and students' perceptions. *International Journal of Caring Services, 10*(1), 294-302.
19. Sendag, S., Duran, M., & Fraser, M.R. (2012). Surveying the extent of involvement in online academic dishonesty (e-dishonesty) related practices among university students and the rationale students provide: One university's experience. *Computers in Human Behavior, 28*, 849-860.
20. Colnerud, G., & Rosander, M. (2009). Academic dishonesty, ethical norms and learning. *Assessment & Evaluation in Higher Education, 34*(5), 505-517.
21. Chapman, K.J., Davis, R., Toy, D., & Wright, L. (2014). Academic integrity in the business school environment: I'll get by with a little help from my friends. *Journal of Marketing Education, 26*(3), 236-249. doi: 10.1177/0273475304268779.
22. Hinman, L.M. (2002). Academic integrity and the world wide web. *Computers and Society*, (March, 2002), 33-42.
23. Selwyn, N. (2011). Social media in higher education. *The Europa World of Learning*. Retrieved from www.worldoflearning.com.
24. Chertok, I.R., Barnes, E., & Gilleland, D. (2014). Academic integrity in the online learning environment for health sciences students. *Nurse Education Today, 34*, 1324-1329.
25. Cifuentes, L., & Janney, A. (2016). Protecting students' integrity and reducing academic dishonesty in online learning. In *United States Distance Learning for Educators, Trainers and Leaders, 13*(4), M. Simonson, C. Schlosser, J.G. Flores (Eds.). Charlotte, N.C.: Information Age Publishing.
26. Osborne, N., & Connelly, L. (2015). Managing your digital footprint: Possible implications for teaching and learning. In A. Mesquita & P. Peres (Eds.). *Proceedings of the 2nd European Conference on Social Media ECSM 2015* (pp. 354-361). Porto, Portugal.
27. Ghaffari, M. (2009). Instant gratification and culture of academic disintegrity: Implications of trinity paradigm of intelligence in developing a culture of integrity. *The International Journal of Interdisciplinary Social Sciences, 3*(10), 89-101.
28. McCabe, D.L., Trevino, L.K., & Butterfield, K.D. (2001). Cheating in academic institutions: A decade of research. *Ethics and Behavior, 11*(3), 219-232.
29. Thomas, E.E., & Sassi, K. (2011). An ethical dilemma: Talking about plagiarism and academic integrity in the digital age. *English Journal, 100*(6), 47-53.
30. Kidwell, L.A., Wozniak, K., & Laurel, J.P. (2003). Student reports and faculty perceptions of academic dishonesty. *Teaching Business Ethics, 7*, 205-214.
31. McNabb, L., & Olmstead, A. (2009). Communities of integrity in online courses: Faculty member beliefs and strategies. *Journal of Online Learning and Teaching, 5*(2), 208-221.
32. Cole, M.T., Shelley, D.J., & Swartz, L.B. (2013). Academic integrity and student satisfaction in an online environment. In H.H. Yang & S. Wang (Eds.), *Cases on Online Communities and Beyond* (pp.1-19). Hershey PA: IGI Global.
33. Miller, A., Shoptaugh, C., & Wooldridge, J. (2011). Reasons not to cheat, academic-integrity responsibility, and frequency of cheating. *Journal of Experimental Education, 79*(2), 169-184.

34. Thakkar, M., & Weisfeld-Spolter, S. (2012). A qualitative analysis of college students' perceptions of academic integrity on campus. *Academy of Educational Leadership Journal*, 16, 81-88.
35. Styron, J., & Styron, R.A. (2010). Student cheating and alternative web-based assessment. *Journal of College Teaching & Learning*, 7(5), 37-42.
36. Manly, T.S., Leonard, L.N., & Riemenschneider, C.K. (2015). Academic integrity in the information age: Virtues of respect and responsibility. *Journal of Business Ethics*, 127, 579-590.
37. Volery, T., & Lord, D. (2000). Critical success factors in online education. *The International Journal of Educational Management*, 14(5), 216-223.
38. Suresh, D. (2018). 8 top eLearning trends for 2019. eLearning Industry. Retrieved from <https://elearningindustry.com/elearning-trends-for-2019-8-top>.
39. Jasmini, V. (2017). Online learning statistics and trends. eLearning Industry. Retrieved from <https://elearningindustry.com/online-learning-statistics-and-trends>.