

Gen Z College Students, COVID-19 Courses & Beyond

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Abstract

The pandemic thrust the usage of Learning Management Systems, LMS, on teachers in all levels of education. Some students and faculty, especially at the college level, were experienced in using it but many were not prepared to the degree needed when schools were forced to go online. This paper reviews undergraduate Generation Z (born after 1996) opinions and experiences of positive learning effects from doing coursework with an LMS and their eagerness to continue with flexible online educational supplements. A small case study of Human Resource students compares perceptions of Academic Year (AY) 2020-2021 with online synchronous courses and AY 2021-2022 with in-person courses.

Keywords: Canvas, COVID-19, Gen Z, LMS, Online

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Introduction

The 2020-2021 academic year was extraordinary and unprecedented for teachers, staff, administrators, and students. Announcements/changes on testing, safety protocols, and restrictions became the norm. Students adapted to hybrid classes with half the students meeting on campus for certain days and online for others; entire classes that could fit students with appropriately distanced space in lecture rooms; online WebEx or Zoom synchronous lecture classes; or totally online asynchronous courses. The mixture was sometimes confusing; there could be internet access problems, or computer, sound, and/or camera glitches. Students also had a patchwork of teachers; those who could navigate the technology and the Canvas learning management system (LMS) or those who lacked experience despite years of offered training that continued into Spring 2020. By 2021-2022, the vaccine enabled campus courses, though masked until March. This paper reviews some of the COVID-19 school-year issues and reports on a survey of two courses in Spring 2021 and two courses in Spring 2022 of business students' opinions of their experiences with online learning.

The COVID-19 College

Major changes to the classroom setting were forced by the pandemic and perhaps there was some good in it. The pedagogy of lecturing to captive students for over an hour and quizzing them on the contents every few weeks has been questioned as a productive way to learn (Barsoti, 2020). Online LMS systems, often unused by many faculty before COVID-19, allowed students to ask questions on chat lines; respond to presentations with emojis and/or comments; and view recorded lectures. There is a concern for adequate connectivity on and off-campus, as well as technical skills, more so for faculty than students. For schools with their LMS in the cloud, it can remain available to students and faculty even if there is a system breach like that at Brown University in March 2021 (Brown, 2021). LMS enabled sustainability for education during the pandemic (Alturki & Aldraiweesh, 2021). Using LMS for classes is not new but it is now expected.

LMS Usage

Just as new technology has enhanced the entertainment industry beyond CDs and cable tv, so too can the constructive usage of the LMS and technical tools boost students' learning and interest in courses as it can "reimagine an old model that has fallen behind the times" (Smith, 2020). Keeping students engaged will be critical as the high cost of education, which increased 154% in 20 years (Fong, 2020), could make consumers question the need for a campus experience if online is a credible, less expensive option. Incorporating the excitement and flexibility of capable online learning with enriching campus activities will be essential to retaining student populations.

The design of online course material should be done with consistency and simplicity. Assignments, places for uploads, and example materials should be found through a clear path. "Keeping your home base simple decreases cognitive load and increases working memory" (Schroder, 2020). The students need to see the online component as a complement and a learning aid to their courses. According to the Technology Acceptance Model by Davis (1989), ease of use and perceived usefulness can be critical components of successful education incorporating technology.

Recent Studies

The Sykes company, a customer engagement service, surveyed 1500 college students about their fall 2020 semester with some or all coursework online due to the pandemic. An important finding was that over 85% felt they learned just as well in the online class format and only 14.2% did not during this time of challenge for their learning (Figure 1) (Pike, 2021).

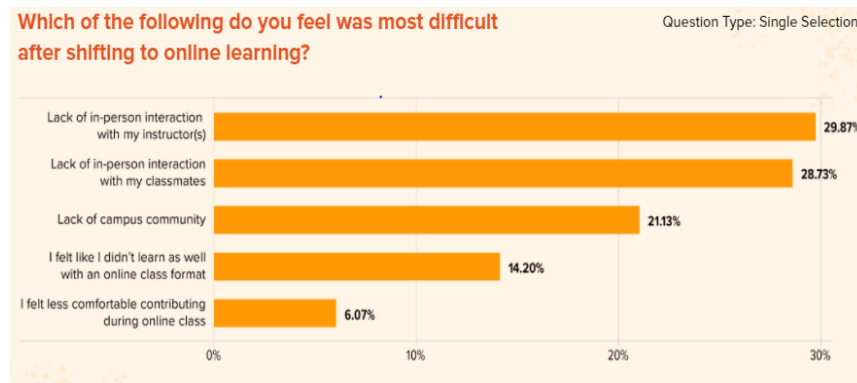


Figure 1. Source: Sykes Survey 2020 (Pike, 2021).

Of this population, 45% wanted more support to develop virtual collaboration skills with their classmates and 44% wanted more support for tech issues during class (Pike, 2021). Despite a strong need for more support, remarkably 54.2% of students felt the online experience was somewhat or much more effective (Figure 2) (Pike, 2021).

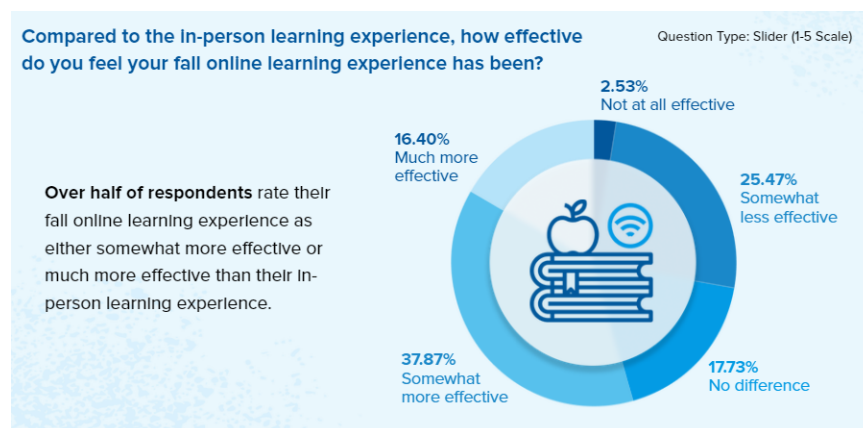


Figure 2. Source: Sykes Survey 2020 (Pike, 2021).

A 2006 survey of 4538 Australian university students who used Blackboard reported expectations for higher quality design, more usage among teachers, and improved consistency across courses. They liked access to PowerPoints and other course material but felt more training was needed for teachers who underutilized the LMS and were the cause of navigation problems in the course (Steele, 2007).

In a study published in 2022, a sample size of 370 students using the LMS Moodle, found that 100% strongly agreed/agreed that they felt comfortable using Moodle and that it helped the learner become active in the learning process (Bawa, Imam & Bello, 2022).

Survey Results

In Spring 2021, students in two synchronous online undergraduate courses were surveyed on their experiences and perceptions of usage in Canvas. All 40 respondents were Gen Z: 10 were 18-19; 27 were 20-21; and; 3 were 22-23. Canvas was highly favored by students such as strongly agree/agree by 100% who would want course material in Canvas; 97.5% that having accessible feedback was beneficial; and 97.4% would like teachers to have assignments in Canvas. Although over 90% of students agreed/strongly agreed that teachers could use Canvas well, 80% felt teachers could improve the course content; 82.5% thought teachers should have more material available; 94.9% would prefer reading teachers' feedback in Canvas; and 97.5% who want teachers to have clear assignment dates in it (Appendix A).

In Spring 2022, students in two on-campus undergraduate courses with the same extensive Canvas elements were surveyed on their experiences and perceptions of Canvas. All 39 were Gen Z: 6 were 18-19; 27 were 20-21; 6 were 22-23.

Responses of strongly agreed/agreed of 2022 – 91.3% and 2021- 92.5% were received on how Canvas “has increased my understanding of the course material”; 2022- 92.2% and 2021- 95% noted “chapter quizzes in Canvas helped to understand the topics”; 2022- 94.8% and 2021- 90% stated it was “easy to access course material” and 2022- 96.4% and 2021- 97.5% appreciated that “PowerPoints were good guides to chapter topics” (Appendix B). This opinion of the LMS as an assistance to learning reinforced the larger previously noted Australian study.

As to preferences in the delivery of the class, in the 2022 small focus study, fewer students stated preferences for completely online, but many still wanted a combination of online and on-campus courses, 2022 – 46.2%; 2021- 52.5%, (Figure 3).

all students present class style preference	2021 N=40	2022 N=39
completely on-campus course	32.0%	37.3%
a 2-day a week course that meets 1-day on-campus and 1-day online	35.0%	32.2%
completely online course	17.5%	9.7%
occasional online class but mostly on-campus	17.5%	19.0%

Figure 3. Undergraduates' choice for method of classes.

The average time spent on a course in Canvas was 3-4 hours per week (2022-50%; 2021- 40%); 5-6 hours for 2022-10.5%; 2021- 30% of students (note some 2021 students attended synchronous classes in Canvas though outside of course time was clarified for the item); 2022-29% and 2021-20% claimed 0-2 hours; and 2022-10.5% and 2021-10% declared more than 6 hours of Canvas usage per course. This related to the question about studying on a regular basis with a 2022-18.9%; 2021-20% response that it was very characteristic to do so; 2022-51.4%; 2021- 42.5% characteristic of them (the average); 2022-21.6%; 2021-27.5% moderately characteristic; and 2022-8.1%; 2021-10% not characteristic at all to study on a regular basis.

Conclusions

The case study surveys reinforced previous results of the benefits to learning using the LMS in courses as reported by students. The usage can allow for more activities in class by, for example, taking a chapter quiz before the class that aids in understanding the material (Nicholas, 2019). It is certainly a message for faculty to incorporate this pedagogical tool into courses. Educators should always be proponents of continuous learning for themselves as well as students. Advancing knowledge in subject matters and methods of communicating to foster understanding is an ongoing challenge and a mission of pedagogy. Technological tools including calculators and computers have enhanced education and the Learning Management System is an innovation needed for today's courses.

Michael Smith (2020) professor of information technology and marketing at Carnegie Mellon observes “We have a chance today to reimagine an old model that has fallen far behind the times. If we do it right, we might even usher in a new golden age of education.” There can now be an advanced amalgamated practice for instruction (Peters, 2021).

On a social justice level, education could be “much more open, inclusive, and available and allow people who'd previously been excluded to participate” (Barsoti, 2020).

Institutions of higher learning “have a once-in-a-generation chance to reconfigure their use of physical and virtual space. They may be able to reduce the number of large lecture halls, for example, and convert them into flexible working pods or performance spaces. Or they could reimagine the academic calendar, offering instruction into the summer months” (Dua, Law, Rounsaville, & Viswanath, 2020). Innovation encompasses “recognizing that no institution can be successful and sustainable without placing students' success at the center, which includes understanding how and why to equitably incorporate technology into learning and the student experience.” (Grajek, 2022). So much is possible; teachers need to embrace the constructive methods of the LMS.

APPENDIX A

Opinion of teacher usage of Canvas.	STRONGLY AGREE		AGREE		DISAGREE		STRONGLY DISAGREE	
	2021	2022	2021	2022	2021	2022	2021	2022
	N=40	N=39	N=40	N=39	N=40	N=39	N=40	N=39
many teachers use it well	25.6%	30.8%	64.1%	61.5%	10.3%	7.7%	0.0%	0.0%
many teachers have slides and/or papers accessible in it	40.0%	46.0%	55.0%	48.7%	5.0%	2.7%	0.0%	2.7%
many teachers have quizzes/exams in it	47.5%	46.2%	47.5%	51.3%	5.0%	2.6%	0.0%	0.0%
I would like teachers to have course material such as slides, example papers, quizzes in Canvas	67.5%	74.4%	32.5%	25.6%	0.0%	0.0%	0.0%	0.0%
I would like teachers to have assignments in Canvas	69.2%	72.5%	28.2%	27.5%	0.0%	0.0%	2.6%	0.0%
I would like teachers to have clear assignment dates in Canvas	77.5%	74.4%	20.0%	25.6%	2.5%	0.0%	0.0%	0.0%
many teachers could improve their course content in Canvas	32.5%	32.5%	47.5%	50.0%	20.0%	17.5%	0.0%	0.0%
I would like more course material accessible in Canvas	45.0%	41.0%	37.5%	48.7%	17.5%	7.7%	0.0%	2.6%
many teachers use the edit papers/feedback in Canvas	25.6%	35.9%	64.1%	48.7%	7.7%	7.7%	2.6%	2.6%
many teachers recorded the class meetings	22.5%	15.0%	50.0%	32.5%	25.0%	35.0%	2.5%	17.5%
I prefer reading the teacher feedback in Canvas	30.8%	47.4%	64.1%	50.0%	5.1%	2.6%	0.0%	0.0%
taking into consideration the differences in course material, it would be helpful to have consistent basic templates in Canvas	42.5%	55.3%	52.5%	36.8%	5.0%	5.3%	0.0%	2.6%

APPENDIX B

Responses about using Canvas.	STRONGLY AGREE		AGREE		DISAGREE		STRONGLY DISAGREE		NOT OFFERED		NEVER USED	
	2021 N=40	2022 N=39	2021 N=40	2022 N=39	2021 N=40	2022 N=39	2021 N=40	2022 N=39	2021 N=40	2022 N=39	2021 N=40	2022 N=39
has increased my understanding of the course material	42.5%	51.3%	50.0%	41.0%	5.0%	5.1%	2.5%	2.6%	0.0%	0.0%	0.0%	0.0%
easy to access course material through modules	40.0%	65.8%	50.0%	29.0%	10.0%	2.6%	0.0%	2.6%	0.0%	0.0%	0.0%	0.0%
PowerPoints were good guides for chapter topics	37.5%	48.7%	60.0%	48.7%	0.0%	0.0%	0.0%	2.6%	0.0%	0.0%	2.5%	0.0%
sample papers in course were helpful	55.0%	61.5%	37.5%	35.9%	2.5%	0.0%	2.5%	2.7%	0.0%	0.0%	2.5%	0.0%
assignment dates were clear	40.0%	61.4%	45.0%	35.9%	12.5%	0.0%	0.0%	2.7%	2.5%	0.0%	0.0%	0.0%
chapter quizzes in Canvas helped to understand the topics	37.5%	61.4%	57.5%	30.8%	5.0%	5.1%	0.0%	2.7%	0.0%	0.0%	0.0%	0.0%
uploading papers is preferred to print	62.5%	74.4%	27.5%	20.5%	7.5%	0.0%	0.0%	2.6%	2.5%	2.6%	0.0%	0.0%
virtual team area is useful	17.5%	30.8%	52.5%	41.0%	12.5%	12.8%	7.5%	7.7%	2.5%	2.6%	7.5%	5.1%
liked viewing grades	67.5%	69.2%	32.5%	28.2%	0.0%	0.0%	0.0%	2.6%	0.0%	0.0%	0.0%	0.0%
having accessible feedback was beneficial	65.0%	64.1%	32.5%	33.3%	0.0%	0.0%	2.5%	2.6%	0.0%	0.0%	0.0%	0.0%
exams on Canvas were better than on paper	61.5%	74.4%	30.8%	20.5%	5.1%	2.6%	2.6%	2.6%	0.0%	0.0%	0.0%	0.0%
enjoyed using breakout rooms	23.1%	25.6%	56.4%	30.8%	10.3%	15.4%	5.1%	15.4%	5.1%	0.0%	0.0%	12.8%
connectivity is sometimes a problem	22.5%	15.4%	57.5%	33.3%	17.5%	35.9%	0.0%	10.3%	2.5%	0.0%	0.0%	5.1%
I feel confident using/accessing material in Canvas	47.5%	68.4%	47.5%	29.0%	5.0%	0.0%	0.0%	2.6%	0.0%	0.0%	0.0%	0.0%
for	5.0%	10.3%	20.0%	20.5%	45.0%	33.3%	15.0%	18.0%	2.5%	2.6%	12.5%	15.4%

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