

# Lessons Learned From The Pandemic: New Modes of Tech-Supported Instruction in First-Year Writing

Angel Chang, Ph.D.<sup>1</sup>, Amanda Emanuel Smith, Ph.D.<sup>2</sup>, Ryan Skinnell, Ph.D.<sup>3</sup>

<sup>1,2,3</sup> *San José State University, USA.*

*Email: <sup>1</sup> [hsiao-chi.tzeng@sjsu.edu](mailto:hsiao-chi.tzeng@sjsu.edu), <sup>2</sup> [amanda.smith@sjsu.edu](mailto:amanda.smith@sjsu.edu), <sup>3</sup> [ryan.skinnell@sjsu.edu](mailto:ryan.skinnell@sjsu.edu)*

## Abstract

The COVID-19 pandemic created challenges and prompted changes across the educational system, and higher education has been no exception. In particular, the pandemic has had a significant impact on the instructional modes and course learning outcomes in first-year writing programs. According to the FYW program exit survey, 95% of students in the FYW program at San José State University found that their courses gave them the time and support that they needed to be successful before the pandemic. During the Spring 2020 semester, however, that percentage decreased to 75%. Then in the post-pandemic Fall 2021 semester, it went back up to 94%. During the Spring 2020 semester, students had to change from in-person to online instruction mid-semester. This change elicited new types of instructional modalities in the post-pandemic era, including hybrid, fully in-person, and fully online. Online modalities, it should be noted, can be asynchronous and synchronous. Hybrid modalities either blend in-person and asynchronous instruction or in-person and synchronous instruction. In the Fall 2020 semester, all FYW courses at SJSU were offered online with three types of instructional modalities from which to choose. A revised exit survey was distributed to students at the end of the semester to explore their learning satisfaction and modality preferences. This study represents some preliminary research from that survey on how students are coping with the new modes of instruction the pandemic necessitated. It hopes to provide some insights into how students are adapting to post-pandemic teaching and learning.

**Index Terms**—COVID-19 pandemic, First-Year Writing Program, instructional modality, post-pandemic teaching and learning, student satisfaction.

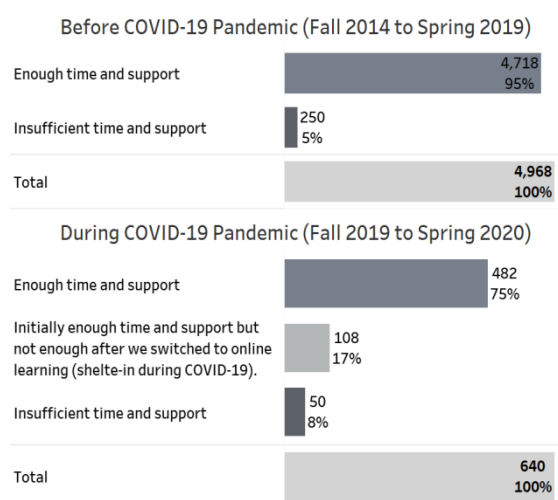
## I. INTRODUCTION

The COVID-19 pandemic created challenges as San José State University moved from in-person to a virtual environment during the Spring 2020 semester. This transition created a new normal where teaching and learning took place in a virtual environment compared to an in-person setting. The transition happened in the middle of semester where instructors had one week to switch from in-person to online instruction and students also had a mere week to prepare for the new virtual learning environment. This swift transition impacted student learning as well as student satisfaction in that semester.

When students had to change from in-person to online instruction in the middle of the semester, they did not have the chance to choose their preferred modality. This changed in Fall 2020, when students were allowed to choose between hybrid, fully in-person, and fully online courses. Online modalities, it should be noted, could be asynchronous and synchronous. Hybrid modalities either blended in-person and asynchronous instruction or in-person and synchronous instruction.

The First-Year-Writing (FYW) program exit survey showed that before the pandemic 95% of students felt their courses gave them the time and support that they needed to be successful.

That decreased to 75% during pandemic, as shown in Fig. 1.



**Fig. 1** *Pandemic and Learning Time and Support*

To investigate the differences in exit survey responses before, during, and post-COVID-19 pandemic, a revised exit survey was distributed to students at the end of the Fall 2020. This survey intended to capture students' learning experience and satisfaction, modality preference, and their reasons for choosing the modality they did. It also reflected how well students performed in their chosen modality? This study explores how students are now coping with the new modes of instruction that the pandemic necessitated. It hopes to provide some insights into how students are adapting to post-pandemic teaching and learning.

## II. REVIEW OF LITERATURE

### *Digital Transformation during COVID-19 Pandemic*

The transition from in-person to online instruction during Spring 2020 created some challenges to teaching and learning. Many students were unable to fully set up their homes for virtual learning. Previous research suggests that low-income students are more likely to suffer due to a lack of internet access and to fall behind in the virtual learning environment (Fishbane & Tomer, 2020), and this was surely the case for some FYW students at San José State University. Other research found that the traditionally underrepresented groups did not do

as well during the pandemic compared to before (Chang & Baer, 2021).

The digital transformation also created several logistical challenges and modifications in learning behaviors (Ribeiro, 2020), especially within certain fields. Leszczyński et al. (2018) found that social science and humanities were more compatible with online learning compared to other disciplines. But while FYW courses were perhaps better suited for the transition, the abruptness of the change in modality clearly disrupted instruction and learning.

Universities across the country also faced other types of challenges related to the Spring 2020 transition to online instruction. For example, the Colorado School of Mines had to quickly acquire new licenses and update current ones as many users needed to use e-learning tools for the virtual setting (Manfuso, 2020). This imperative to swiftly adapt to change learning conditions affected other institutions as well.

### *Teaching and Learning during the COVID-19 Pandemic*

During Spring 2020 semester, the migration process proceed swiftly unlike the adequate planning as online education normally required. The COVID-19 pandemic forced the higher education sector to undergo various forms of operational changes in addition to making adjustments to course delivery methods (UNESCO, 2020). The sudden transition in Spring 2020 showed how universities could adapt to such a transition (Zhaohui, 2020). Universities then had adequate time to plan and prepare going into the Fall 2020 semester. Students also could choose their preferred instructional modality unlike their peers in Spring 2020. In view of these differences, the research questions of this study are:

1. To what extent did instructional modality affect student learning?
2. Did students perform significantly different based on their chosen modality?
3. Why did students choose the modality and whether that met their expectations?

## III. METHODOLOGY

This study aimed to explore student learning, paying careful attention to how students performed in the various instructional modalities that resulted from COVID-19. The Institutional Review Board (IRB) approved the collection of data and its purpose. Tableau was used to analyze the data of this study. The following section will introduce the instrument, population and how data to be analyzed in this study.

#### Population

The total enrollment for Fall 2021 ENGL 1A was 1,913 students. Among these students, 1,185 students responded to the survey; thus, the response rate was 62%. The actual enrollment and survey response rate by instructional modality is shown in Table 1:

**Table 1.** Survey Response Rate by Modalities

Fall 2021 ENGL 1A Survey Response Rate			
Modality	Enrollment	Respondents	Response Rates
In-person	761	556	73%
Online	598	369	62%
Hybrid	554	243	44%
<b>Total</b>	<b>1913</b>	<b>1168</b>	<b>61%</b>

#### Instrument

The voluntary exit survey was built in the Canvas Learning Management System (LMS). Exit survey data was joined with the grade distribution data. Students who enrolled and completed the course but did not respond the exit survey are not included in this study. The total number of participants is 1,168 students in the fall semester. The exit survey is comprised of 17 items through which students comment on their course choices, acquired skills, and learning satisfaction.

#### Data Analysis

Tableau was applied to analyze two datasets collected for this study: the exit survey data and the course grade data. Course completion rates consist of the following three categories:

- Pass Rate: percentage of students who earned a grade of C- or above.

- Fail Rate: percentage of students who earned Ds or Fs or who received a WU (unauthorized withdrawal).
- Withdrawal Rate: percentage of students who received a W (withdrawal) or I (incomplete).

## IV. RESULTS

#### Modality & Learning

*“To make it as simple as possible: Online = without a doubt, way more convenient. In-person = get to meet new people. Both = learn the same stuff equally as effective (you can teach this class through a screen since nothing about it was hands-on).”*

—a student’s comment

The above comment shows how some undergraduates perceived the different advantages of the three modalities. The question was then whether there was a direct correlation between modality and learning. Ultimately, student learning was assessed by the pass rates within each modality. The pass rate reflects two categories of students: those who did and did not complete the exit survey. The results from these two groups are slightly different, as shown in Table 2.

**Table 2.** Student Learning by Modalities by Enrolled Students and Survey Participants

Fall 2021 ENGL 1A Pass Rate			
Modality	Course	Exit Survey	Difference (%)
In-person	95%	98%	3
Online	90%	98%	8
Hybrid	89%	96%	7
<b>Average</b>	<b>91%</b>	<b>97%</b>	<b>6</b>

The pass rate differences among three modalities by enrolled students in the courses ranged from 1% to 4%. The pass rate differences between exit survey participants are within 1%. Thus, there is no significant difference among students who chose different modalities. In other words, a particular modality

did not affect student learning within this sample population.

### *Students' Expectations and Modality*

Having assessed the modality and learning, this section examines whether students' expectations were met. The following comments from students represents their experiences in the in-person, online, and hybrid modalities.

*"I learned the best in-person so this modality best suited my learning style. I didn't learn as effectively with hybrid or online learning styles. The interaction with other peers and the professor helps me learn better. Unfortunately, my self-control skills are not where they should be, so it was extremely refreshing to have an in-person class. With an in-person class, I felt a sense of responsibility to actively engage with the class material in a way that I most likely would not have if I had chosen to take the class either hybrid or fully online."*

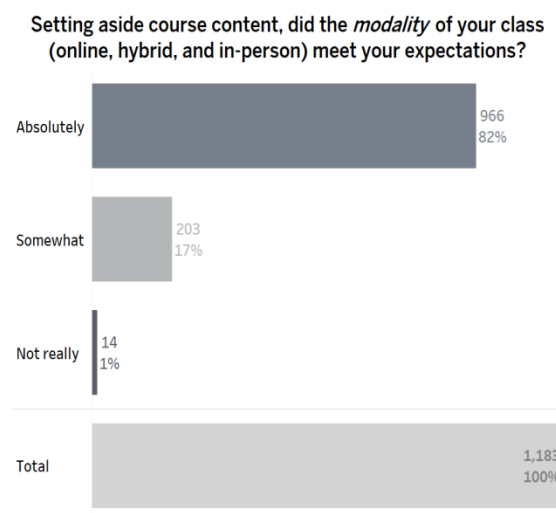
*"The modality meets my expectations because for my first semester, my parents and I thought it was best that I did fall semester fully online because of COVID-19 regulations and it was going to be a struggle for me to get to school considering I didn't have my license and my parents work full time. It was just a better choice overall and I think this class met my expectations for being a fully online class."*

*"Monday was asynchronous, which meant we had plenty of time to complete our homework/readings. Wednesday was an in-person class where we discussed our homework/readings. The hybrid modality is a good balance."*

—taken from students' comments

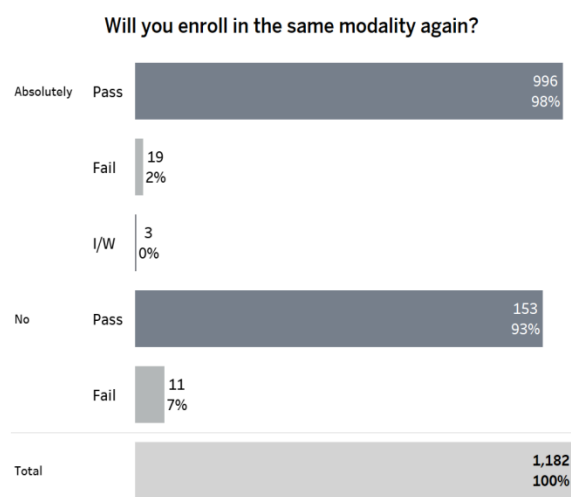
These comments indicate the general sentiment of the students sampled, most of whom were positive about their chosen modality. Fig. 2

reveals the extent to which their chosen modality met their expectations.



**Fig. 2** Instructional Modality and Met Expectation

As Fig. 2 shows, 82% of students responded that the modality met their expectations. Then, 17% of students found that the modality somewhat met their expectations. Only 1% of students responded that the modality failed to meet their expectations. In sum, most students found that their chosen modality met their expectations. Having explored expectations and student learning, Fig. 3 shows whether students would enroll in the same modality again.



**Fig. 3** Decision to Enroll Again and Learning

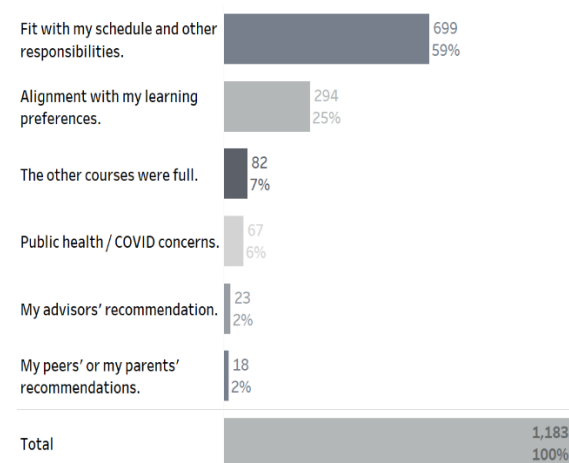
Students who responded that they would enroll in the same modality again had a higher pass rate compared to those who would not. The

pass rate difference is around 5% whether students would choose the same modality again.

### Factor and Modality Choice

The next item uncovers the most important factors in choosing a particular modality.

Which of the following was the single most important factor in your choice about modality?



**Fig. 4** The Most Important Factor Affecting Modality Choice

Around 60% of students responded that they chose the modality because it fit with their schedule and other responsibilities. Then, 25% of students responded that the chosen modality aligned with their learning preferences. As COVID-19 pandemic persisted, around 6% of students chose the modality due to public health and COVID-19 concerns. Around 7% students made their decision because other courses were full.

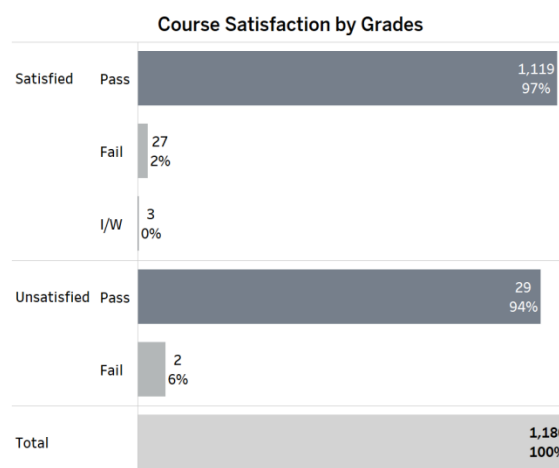
### Satisfaction and Modality

This section looks at the level of satisfaction among students who responded to the exit survey.

*“I was satisfied by the class because I learned new writing and reading techniques and it was well-paced. I also enjoyed the feedback given by the professor and it was a fun class.”*

—a student’s comment

Fig. 5 shows how student satisfaction is related to their academic performance.



**Fig. 5** Student Satisfaction and Course Outcomes

As Fig. 5 shows that students who were satisfied with their course had a higher pass rate compared to their peers. The fail rate of students who were unsatisfied with the course is three times higher than that of their peers.

## V. CONCLUSION

The COVID-19 pandemic impacted the instructional modes and learning outcomes in first-year writing programs at San José State University. At the start of the pandemic, students reported that they did not have enough time and support in their courses. But the results of this study show that students have since adapted to the new modalities in the post-pandemic university environment. When they were able to choose their preferred modalities, students generally had positive learning experiences. However, if they did have negative experiences within their modality, they were less likely to have done well in the class.

This study also found that a particular modality did not affect student learning. The decline in learning at the start of the COVID-19 Pandemic was not due to virtual learning but the lack of time and support that students and instructors needed to adjust to a virtual learning environment. When students reported that they were satisfied with the modality, they tended to have a positive learning experience and better learning outcomes compared to their peers.

Student learning is a multifaceted concept and the data collected in this study might not fully capture every aspect of it. Infinite factors could affect students' learning as well as their learning satisfaction. This study is based on the data of writing courses thus the results might not be generalized to other disciplines.

## REFERENCES

1. L. Fishbane and A. Tomer, "As classes move online during COVID-19, what are disconnected students to do?," March 20 Brookings Institution, March 2020.
2. A. Chang and C. Baer, "Academic outcomes of undergraduates learning at the age of COVID-19 Pandemic," *Docens Series in Education*, 1, 13-31, 2021
3. R. Ribeiro, "How university faculty embraced the remote learning shift. *EdTech Magazine*," April, 2020.
4. P. Leszczyński, A. Charuta, B. Łaziuk, R. Gałązkowski, A. Wejnarski, M. Roszak, and B. Kołodziejczak, "Multimedia and interactivity in distance learning of resuscitation guidelines: A randomised controlled trial," *Interactive Learning Environments*, 26(2), 151–162. <https://doi.org/10.1080/10494820.2017.1337035>, (2018)
5. L. Manfuso, "How the remote learning pivot could shape Higher Ed IT." *EdTech Magazine*, 2020
6. UNESCO, "COVID-19 Educational Disruption And Response," <https://en.unesco.org/news/covid-19-educational-disruption-and-response>, 2020.
7. W. Zhaohui, "How a top Chinese university is responding to coronavirus," *World Economic Forum*., 2020.