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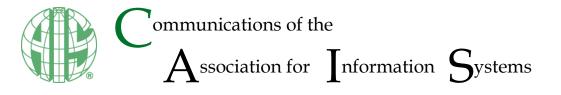
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How the Thread was Lost: Misaligned Expectations between Students and Professors

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Abstract:

We argue that many difficulties and frustrations that occurred during the transition to remote learning in early 2020 due to the coronavirus disease of 2019 (COVID-19) pandemic occurred due to misaligned expectations between students and professors. Many expectations that both professors and students had about the other did not account for the change in circumstances that the pandemic caused. Given the unique circumstances of learning from home, professors also needed to deal with misalignments in expectations from student families as well. We discuss these important differences and offer suggestions on how to best approach policies going forward as we inevitably have to make accommodations for students forced to make the switch in the coming semesters.

Keywords: Expectation Misalignment, Remote Learning, COVID-19, Online Courses.

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* These authors contributed as joint first authors on the paper.

1 Introduction

When universities around the country began sending students home in response to the coronavirus disease of 2019 (COVID-19) pandemic, students and educators had to resume the semester in an online format at a scale never before experienced. Professors suddenly had to convert courses that they had designed and delivered successfully in the classroom to allow for a virtual delivery. Many professors and students found the experience uncomfortable, disappointing, and frustrating (Friedman, 2020) often due to misaligned expectations (O'Keefe, Rafferty, Gunder, & Vignare, 2020). Extant literature on higher education highlights the need for aligned expectations between students and professors, especially in courses delivered via an online format (Bork & Rucks-Ahidiana, 2013; Chametzky, 2016; Songer, 2020). This literature recognizes misaligned expectations as a major impediment to online learning's success. To better understand where these misalignments occurred in early 2020, we collected data via comprehensively surveying 154 undergraduate business students about their overall experience with online learning.

This paper proceeds as follows: in Section 2, we discuss the context in which these misalignments occurred. In Section 3, we discuss specific misalignments and, in Section 4, how professes can address them in the coming semesters. In Section 5, we conclude the paper.

2 Understanding the Context

First, we note that what we all experienced in early 2020-that is, an unplanned and abrupt switch to online teaching in crisis mode-did not represent the standard experience of creating and delivering an online course. Many of both students' and professors' failed expectations seem to originate from not understanding this difference. Online courses typically follow a careful design, feature meticulous organization, and come with clear expectations about what resources students who voluntarily sign up for the course require (Ferran, González, Esteves, Gómez Reynoso, & Guzman, 2019). The individuals who design the courses spend months, if not longer, organizing and preparing the material for online consumption. They design the courses with the expectation that students will have the needed resources and characteristics to succeed-most notably, a computer, reliable high-speed Internet, a physical environment where learning can take place, and an ability and desire to learn using this content-delivery method. By enrolling in online classes, online course designers reasonably expect that students will make the arrangements needed to gain access to the required resources even if students cannot readily access them at home (e.g., by going to a public library, coffee shop, etc.). However, in the chaos that ensued when all courses had to make the switch to an online delivery, the fact that students did not sign up to conduct the classes via online instruction may have been lost. Professors cannot simply apply best practices learned from decades of online classes under these circumstances.

Second, we note that, going forward, we must be prepared for the events that occurred in 2020 to happen again at varying levels of scale. For the foreseeable future, we need to prepare for the reality that, at any moment, one, many, or all of our students who have signed up for in-person classes will have to make the transition to remote learning. Again, we need to understand that students who make the transition will not be operating under normal circumstances; thus, our expectations need to reflect that reality.

Third, we note that, for students who return to their parents' home to resume courses, the potential for increased involvement from parents exists. In cases where parents financially support students in particular, they now have a unique opportunity to listen in, ask questions, and raise concerns about course content and delivery at a level that is not possible when student instruction occurs in the classroom. In an effort to obtain a more complete picture of the challenges incurred when switching to remote learning, we supplemented our student survey data with institutional review board (IRB)-approved,1.5-hour interviews with eleven individuals in senior leadership positions at our university (Appendix A presents the interview questionnaire). Given we did not prompt the individuals for such feedback, we did not expect to discover how often parents actively voiced criticism to senior leadership about stay-at-home teaching approaches. We learned that school administrators faced added pressure from students' parents who had differing expectations about what remote learning should look like. For example, one administrator reported:

Teaching became very public in the spring, because it wasn't [just] a professor and students; it was a professor, and students, and all of their family members who cared to listen in...and so, if you were a faculty member not reaching out...or not responding..., the parent knew much more quickly...of what was happening in the classroom.

Another administrator mentioned:

[Before COVID-19] teaching in many ways was this private thing [between the instructor and students], but now parents were seeing it and it became kind of a value question of like, well, why am I paying all this money if they're just pre-recording lectures.

Our findings from these interviews regarding administrators' interactions with students and parents, the student data, and our own experiences suggest that, just as professors underestimated the challenges that students faced, students and parents also underestimated the challenges that professors faced during this time. The expectations that students and parents held often did not account for the fact that professors also had to now work from home, lacked the usual resources they had access to, and faced a barrage of other distractions.

3 Expectation Misalignments

As we note in Section 2, we gained insights into students' experience after they had begun attending online courses from an IRB-approved, online survey that we administered to students across multiple undergraduate MIS courses in May, 2020. In the survey, we used open-ended questions to elicit the aspects they liked and did not like about their experience. We provide details about the questions we asked in the survey in Appendix B. We summarize the survey participants' characteristics in Appendix C. From reviewing these collective responses, we found that student experiences varied drastically and no single solution to any challenge that we discuss in this paper will work in all cases for all students exists. Thus, our findings primarily suggest the need to display empathy and flexibility with the specific circumstances you and your students face in challenging times.

When we discuss the expectations professors had of students, we draw on our own personal experiences, conversations with peers, and the interviews we conducted with senior leadership that we mention above. Based on this qualitative data and anecdotal support, we identified various professor expectations that concurred with experiences that students shared and that we believe have broad generalizability among all college professors. Accordingly, we discuss the key areas in which we found misaligned expectations in Sections 3.1 to 3.4.

3.1 Motivation

Knowing students may not wish to continue the semester given the new environment in early 2020, universities across the United States extended withdrawal deadlines. Doing so may have given professors the impression that the students who did not withdraw from classes would remain motivated (Shroff, Vogel, Coombes, & Lee, 2007) and driven to finish their coursework. Yet, 40 percent of students reported difficulty in keeping themselves motivated to do schoolwork once sent home. Students cited many sources for this lack of motivation, such as the loss of "positive peer pressure" they normally experience when on campus, general anxiety and depression that the COVID-19 pandemic caused, the loss of routine and structure in their lives, and the additional responsibilities they had to take on when returning home. Looking to the future, we can reasonably expect students to suffer from similar motivation issues if they again need to leave campus and resume courses remotely.

3.2 Learning Habits and Styles

While the prevalence of online courses and degrees, especially at the graduate level, continues to increase, most undergraduate students have limited experience with the learning style that occurs with this delivery method (Snyder, Brey, & Dillow, 2019). Instead, they have grown accustomed to the classroom and developed a taste for that learning style. Two thirds of the students we surveyed had never taken an online course. To these students, learning happens in the classroom. Roughly 30 percent of the students in our sample pointed out that they preferred in-person classes and struggled learning material presented in an online format. Knowing these preferences, these students likely would not be inclined to sign up for online courses, yet they found themselves suddenly taking a full course load of such courses.

Professors, on the other hand, felt that, by providing the necessary materials to the students via written notes, lecture videos, and detailed instructions, they had set their students up for success. They assumed that students remained "quiet" because they were studying and viewing the prepared material. Meanwhile, students struggled without sufficient face-to-face time with professors. In turn, students, not realizing the

significant work that their professors had put into recording lectures or preparing written materials, did not feel that their educators supported or cared for them.

3.3 Home Environment

As we discuss in Section 2, professors inherently expect students who sign up for an online course to have access to the resources that they need to complete the course. As professors made the switch to remote learning, most likely did so with similar expectations; namely, that students would have adequate access to reliable Internet, computers, and a space conducive to learning. However, nearly half of the students mentioned that their home did not constitute the ideal environment they needed for effective learning. Many students competed for resources with family members who all had to work from home as well. Additionally, many experienced poor Internet connections, had to share computers, and lacked a quiet space to work. However, due to their misaligned expectations, many professors did not really factor in this variability in home environments when assigning work and deadlines. As a result, students felt overworked and professors wondered why students did not complete assigned work on time.

3.4 Student and Faculty Availability

Professors expect students who sign up for an in-person course to attend class at the designated time (Friedman, 2020; O'Keefe et al., 2020). Similarly, students expect professors who offer courses to be available at specific times, such as in class meetings and designated office hours. However, with the stayat-home order, daycare facilities closed down, workplaces furloughed employees, and college students returned home, which made meeting these normally reasonable expectations difficult if not impossible.

Students/student families and professors had trouble adjusting their expectations of each other in this regard. Some students and student families found it difficult to understand why professors could not continue to offer classes and office hours just like they did before, while professors could not understand why all students could not simply attend designated class meetings and do class work just as they did before. These misaligned expectations created tensions that, at times, escalated to parents calling administrators to complain about what they perceived as an unreasonable drop in education quality. We summarize the misalignments we discuss above and include illustrative student and leadership responses in Table 1 below.

Professor expectations	Students' reality	Example student quotes
Students who chose not to withdraw from classes would remain motivated to complete their coursework.	40% of students reported difficulty in keeping themselves motivated once sent home.	"Staying motivated was my biggest challenge." "Staying motivated was really hard and almost impossible."
Course materials provided in an online format would effectively facilitate learning and achieving course objectives.	Roughly 30% of students pointed out that they preferred in-person classes and struggled learning material presented in an online format.	"It was really challenging to not be able to ask questions in a classroom setting because I enjoy participating in class." "Some classes needed interactions. It was hard to study them online."
Students had adequate access to reliable Internet, computers, and a space conducive to learning.	Nearly 50% of students mentioned that the home they returned to did not constitute an ideal environment they needed for effective learning.	"The lack of places to focus. I don't have an office or a desk for myself at home. [I'm] currently doing this survey from just a random chair in my house with my laptop on my lap."
Student availability would remain consistent when they returned home.	Family responsibilities, limited access to resources, time zones, and differing circumstances affected student availability.	"Something challenging was, adjusting my schedule to fit that of my family."

Table 1. Common Expectation Misalignments

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Students' expectations	Professors' reality	Example student and leadership quotes	
turned produced down. The		"Professors prepare syllabi at the beginning of th year and all of their lecture material has been prepared since then, so I don't understand why professors couldn't just record their lectures or continue their normal schedule on Zoom." (Stude	
	The COVID-19 pandemic also turned professors' lives upside- down. They lost access to resources; lost access to	"There were many parents who did not really understand the challenges and logistics associated with moving things online." (University leadership)	
Professors should be able to transition to an online format smoothly without a decrease in quality.	childcare for their children; dealt with furloughed, laid off, and/or sick family members/spouses; and had competing responsibilities that may have made them unavailable at specific times.	"I know this is the first time our professors have done something like this (teaching completely remotely) but I don't think it should have been as difficult as it was." (Student)	
		"I dealt with an email from a parent who said I don't understand what the problem is. You had faculty at school in the classroom at a given time teaching a class in front of students. Why can't we just duplicate that but do it online, same time Why do we have to have recorded material at all." (University leadership)	

Table 1. Common Expectation Misalignments

4 Realigning Expectations

Undoubtedly, students and professors currently find themselves in unprecedented times, which further underscores the importance of aligning expectations (Chametzky, 2016; Songer, 2020). In the specific context of realigning expectations during such an unanticipated crisis as COVID-19, based on our experiences stemming from interactions with students, administrators, and instructors, we offer the following advice and guidelines for dealing with the inevitable accommodations that will need to occur for students who must leave the classroom and resume learning remotely.

As we note repeatedly throughout this paper, students did not sign up for the current situation. While students that return to campuses across the country undoubtedly understand the increased uncertainty, they do so with the hope and optimism that they will be able to complete future academic terms in a structured and planned manner. Our livelihood as educators depends on that optimism. If, and when, such a future does not eventuate for some students, we need to work out the specifics in which we facilitate their remote learning with a level of empathy and flexibility that one might not expect in traditional courses. The advice that we offer below pertains to the areas that students most frequently identified as being problematic during remote learning.

4.1 Attendance and Participation

Given the level of uncertainty regarding the circumstances and environment in which students will need to work if sent home again, we advise professors to carefully consider the attendance and participation requirements for any live classes (O'Keefe et al., 2020). Streaming lectures and providing live interaction represents a great way to keep students engaged and provide structure and routine to their lives; however, requiring the same level of attendance and participation in these sessions as you would in a traditional or online classroom may not be reasonable (for the reasons we discuss throughout the paper). If resources permit, professors should record lectures and instruction and make them available for students to view asynchronously. The students we surveyed frequently identified video materials' availability as a benefit of remote learning in their responses.

Professors should also consider policies that require students to have their camera on when participating in live meetings. While having students participate with their cameras on undoubtedly has advantages, it may place an undue burden on some students. Students cited issues with poor Internet connections that could not support live streaming video, issues with not having a space in their home where they felt comfortable streaming from, a reluctance to be seen by others when they felt sick, and the general uneasiness they had with being in front of a camera while trying to learn. When students cannot

participate with cameras on, professors could use other tactics, such as pop-up knowledge-check questions, to make sure that students are still paying attention.

4.2 Communication and Organization

Once students can no longer benefit from regular, in-person meetings, other communication channels become even more important. With all communication being shifted to virtual means, professors need to approach communication in a thoughtful and consistent manner (Friedman, 2020; O'Keefe et al., 2020). Students who complete their coursework remotely have a greatly increased need for their courses to use the learning management system that their university adopts. Having all course information in a centralized location helps students stay organized and up to date. Such consistency across classes will undoubtedly help all students, but it becomes vital for those students who must participate remotely. The students we surveyed frequently noted inconsistent and disorganized information as frustrating.

4.3 Assessments

Assignments, tests, quizzes, and exams will likely remain an integral part of students' coursework moving forward. Due dates should provide enough time for students to complete assignments given uncertain and unreliable access to resources. For example, rather than the traditional midnight deadline, professors can permit submissions up to 8 a.m. the day after the deadline to accommodate students who may need to wait until later in the night for their turn at the family computer. Professors should consider policies regarding late work when it comes to students completing course work remotely, especially those for students who are quarantined due to health concerns. While many students may choose to continue with their studies during such times, they surely warrant greater flexibility (Arbaugh & Duray, 2001). Professors should carefully consider timed assessments as technological issues can severely impact student performance. To allow for greater flexibility, professors should give students a reasonable timeframe to complete assessments. In designing tests and exams, professors should consider the impact that a poor Internet connection, a browser freezing, or other such technology issues may have on students. An assessment of appropriate rigor and thoroughness when administered on paper in the classroom does not necessarily translate to the same experience when taken online.

4.4 Managing Students' Expectations of Professors

We also suggest that professors proactively manage student expectations by stating upfront, in their syllabi, what flexibilities they may need from students and remind them that they may also become quarantined or unavailable and that students/families need to be flexible to deal with these circumstances as they arise. We summarize the advice we offer in this section in Table 2 below.

Table 2. Realigning Expectations

Attendance and participation

- Professors should carefully consider attendance and participation policies as requiring the same level of attendance and participation in these sessions as you would in a traditional or online classroom may not be reasonable.
- Professors should consider providing recorded lectures and instruction for students to view asynchronously (the most frequent benefit of remote learning that students mentioned).
- Professors should be flexible with policies regarding student camera usage as these requirements may place an undue burden on some students.

Communication and organization

- Professors should approach communication in a thoughtful and consistent manner.
- Professors should put all course information in a centralized location to help students stay organized and up to date.
- Professors should avoid inconsistent and disorganized communication, which students frequently cited as a frustration.

Assessments

- Due dates should provide enough time for students to complete assignments given uncertain and unreliable access to resources.
- Professors should carefully consider policies regarding late work when it comes to students completing course work
 remotely, especially for students who are quarantined due to health concerns.
- Professors should realize that an assessment of appropriate rigor and thoroughness when administered on paper in the classroom does not necessarily translate to the same experience when taken online.

Managing students' expectations of professors

• Professors should clearly communicate to students the flexibility that they require by including them in such standard instruments as the course syllabus.

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5 Conclusion

In this paper, we describe how most challenges that students experienced when asked to switch to remote learning seemed to originate from a fundamental misalignment between professors' and students' (and their families') expectations. Many professors understandably attempted to approach remote learning according to how they may envision an online course. As such, they set student expectations as they would in an online course. With time to reflect on the experience and gather feedback from students, we can now see that many mutual expectations did not align with reality. Through realigning our expectations, we can better prepare ourselves and our students for the coming semesters where we all face a greater level of uncertainty.

References

- Arbaugh, J., & Duray, R. (2001). Class section size, perceived classroom characteristics, instructor experience, and student learning and satisfaction with web-based courses: A study and comparison of two on-line MBA programs. In *Proceedings of the Academy of Management.*
- Bork, R., & Rucks-Ahidiana, Z. (2013). Role ambiguity in online courses: An analysis of student and instructor expectations (CCRC Working Paper No. 64). New York, NY: Columbia University.
- Chametzky, B. (2016). Contradictions in e-learning: The naturalness of unnaturally learning online. The Online Journal of Distance Education and e-Learning, 4(1), 15-27.
- Ferran, C., González, M. A., Esteves, J., Gómez Reynoso, J. M., & Guzman, I. (2019). AMCIS 2017 panel report: Experiences in online education. *Communications of the Association for Information Systems*, 45, 433-463.
- Friedman, J. (2020). Tackle challenges of online classes due to COVID-19. US News. Retrieved from https://www.usnews.com/education/best-colleges/articles/how-to-overcome-challenges-of-onlineclasses-due-to-coronavirus
- O'Keefe, L., Rafferty, J., Gunder, A., & Vignare, K. (2020). Delivering high-quality instruction online in response to COVID-19: Faculty playbook. *Every Learner Everywhere*. Retrieved from https://uploadsssl.webflow.com/5bf34c1b74724a4428623689/5ec438c1dbd4863bc08bbf04_Faculty%20Playbook _Final.pdf
- Shroff, R. H., Vogel, D. R., Coombes, J., & Lee, F. (2007). Student e-learning intrinsic motivation: A qualitative analysis. Communications of the Association for Information Systems, *19*, 241-260.
- Snyder, T., Brey, C., & Dillow, S. (2019). *Digest of education statistics 2018* (NCES 2020-009). Washington, DC: National Center for Education Statistics.
- Songer, S. (2020). Setting student expectations for distance learning. *Carolina Distance Learning*. Retrieved from http://landing.carolina.com/Global/FileLib/dl-content/dl_student_expectations.pdf

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Appendix A: University Leadership Interview Questions

- What were your major role(s) and responsibilities during the spring 2020 transition to stay-athome learning due to COVID-19?
- Walk us through those initial and ongoing experiences during the transition to stay-at-home learning.... What were you experiencing, what were you hearing—from faculty/staff, students, and so on?
- Could you describe some of the major challenges that you experienced during this transition?
- From your vantage point as high-level administrator, what challenges or concerns were you hearing about that other constituents of the university were experiencing/reporting either directly or indirectly?
- What surprising feedback have you received following the spring 2020 experience, either good or bad, from faculty and/or students?
- What opportunities— expected or unexpected—has this experience created for now as well as into the future?
- What changes during stay-at-home learning and teaching are likely here to stay even after the restrictions are lifted?
- What have you learned from this experience? What would you do differently going forward?

Appendix B: Student Survey Questions

Open-ended Questions

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• In 5-10 sentences, please describe your experiences with remote, stay-at-home learning (instead of being on-campus). Include anything that comes to mind; it does not have to be directly related to your coursework.

For each of the following questions, please provide about two to four examples (if you can).

- What were the things you liked **the most** about stay-at-home learning?
- What were the things you liked the least about stay-at-home learning?
- What was specifically challenging by doing stay-at-home learning?
- What was actually made **easier** by doing stay-at-home learning?
- Mention a few things you found especially helpful during the time of stay-at-home learning.
- Mention a few things that could have been done differently to make stay-at-home learning better/easier.

Demographics

- How many online courses had you taken prior to this semester? [0, 1, 2, 3, 4+]
- Gender [male, female]
- Class [freshman, sophomore, junior, senior]
- What is your major(s); if you have not decided yet, type "not declared"?
- How many credit hours did you have this semester?
- How many people are in your household?

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Appendix C: Student Survey Data

Table C1. Summary of the Student Survey Participants

	Min	Мах	Mean	Std. dev.
Previous online classes [0, 1, 2, 3, 4+]	0	4	0.71	1.19
Credit hours	2	19	14.96	2.11
Household size	1	6	4.27	1.05

Table C2. Students' Gender, Class, and Major

Gender	Count		
Male	91		
Female	63		
Class			
Freshman	0		
Sophomore	50		
Junior	77		
Senior	27		
Major			
MIS	45		
Finance	28		
Other	24		
Marketing	22		
Accounting	18		
Operations	17		

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