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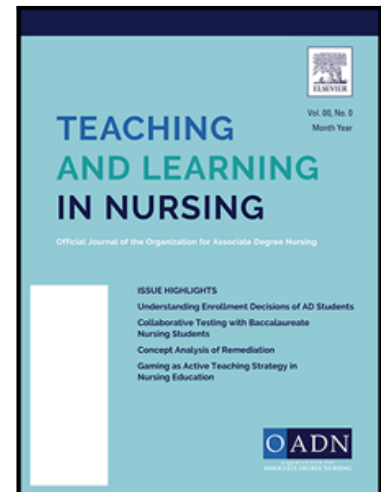
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Nursing Student Challenges During the COVID-19 Pandemic From 2020-2021: A Thematic Analysis

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Nursing Student Challenges During the COVID-19 Pandemic From 2020-2021: A

Thematic Analysis

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Highlights

- Student challenges were similar from 2020 to 2021 including issues with technology.
- Online learning as a theme did not change significantly from year to year.
- Student emotional responses shifted from a sense of loss to staying motivated.

- Collaboration in nursing education may mitigate future crises for nursing programs.

Abstract

Background: As part of program evaluation, the New Mexico Nursing Education Consortium, a consortium of eleven state-funded nursing schools, asks that students complete end-of-term surveys. In Spring 2020, a question was added to the survey to elicit challenges experienced by students during the COVID-19 pandemic: “What was the biggest challenge that you had in completing the semester/term?” This question again was asked of students in Spring 2021

Objectives: To determine challenges faced by nursing students in 2020 and 2021 due to the pandemic

Design: Qualitative

Settings: Eleven state-funded nursing schools belonging to the New Mexico Nursing Education Consortium

Participants: Students enrolled in member nursing programs. *Methods:* Braun and Clarke’s 2006 thematic analysis

Results: Eight themes were identified for each of the two years. *Conclusions:* Nursing faculty must anticipate and respond to student feedback while maintaining proficiency in face-to-face and online teaching-learning strategies. Waiting until emergencies arise that require different types of pedagogy is not sufficient to ensure instructor proficiency with online pedagogies.

Key Words: *collaboration, COVID-19 pandemic, nursing education, pre-licensure nursing students, student challenges, thematic analysis*

Background

The lockdown caused by the COVID-19 pandemic in March, 2020, triggered anxiety, stress, anger, and a host of other distress symptoms in people worldwide (Brooks et al., 2020;

Rajkumar, 2020). Healthcare workers, and especially, nurses were thrust into the forefront of caring for patients with COVID-19 and in helping to manage the pandemic. The media portrayed long hours, protective equipment and supply shortages, and the important role that nurses played when patients died alone without family at the bedside. Nursing students, in the development of their professional identities and roles, were witness to the chaos of the healthcare system. Nursing students themselves were thrust into unexpected emergent situations of completing clinical hours and courses via online learning.

With shortfalls of thousands of nurses (American Association of Colleges of Nursing, 2022), the need for nursing students to graduate and then enter the workforce was critical even prior to the pandemic. During the pandemic lockdown, nursing schools quickly adjusted their typical pedagogies to provide online learning and virtual clinical experiences to continue the progression and graduation of their students. Nursing educators wondered about the effectiveness of these new modes of learning and the unique or new challenges that prelicensure students were facing in continuing their education. Nursing students face stress with the rigor of classes and clinicals while often juggling family or financial situations even during the best of times. In New Mexico, faculty with the New Mexico Nursing Education Consortium (NMNEC) collaborated to assess the challenges that prelicensure nursing students were experiencing with their nursing education. NMNEC is a partnership model of eleven state-funded schools that share a common curriculum and admission and progression policies (New Mexico Nursing Education Consortium, 2022).

Methodology

The New Mexico Nursing Education Consortium (NMNEC) routinely collects student evaluation data from participating schools in NMNEC to assess the curriculum and help guide

future decisions. With the advent of the COVID-19 pandemic during the Spring 2020 term an additional question was added to the evaluation to assess the impact of the pandemic on pre-licensure nursing students. This question was “What was the biggest challenge that you had in completing this semester/term?”

This qualitative study assessed the student responses to this question, initially using evaluation data from Spring 2020 when the pandemic first necessitated emergent pedagogic changes impacting prelicensure nursing student education. Next, the evaluation responses from Spring 2021 were analyzed, giving insight into what challenges nursing students identified a year into the pandemic. Finally, the themes elucidated by the researchers from the evaluations from both time periods were compared to each other to identify similarities and differences.

The methodology used to analyze the data was from Braun and Clarke’s 2006 publication on use of thematic analysis. The process they proposed includes the following six phases: “familiarising (sic) yourself with your data, generating initial codes, searching for themes, reviewing themes, defining and naming themes, and producing the report” (pp. 16-23). To prevent the possibility of the four researchers influencing each other’s initial interpretation of the data, the researchers conducted the first three phases of Braun and Clarke’s (2006) process independently. The four researchers then came together with their research assistant, to compare impressions and findings and complete phases four through six.

Before analysis of the data commenced, this study was reviewed by the University of New Mexico Institutional Review Board (IRB) and received exempt status. Additionally, all NMNEC schools have data sharing agreements which allow the faculty at each participating school to access these student evaluation data compilations, all of which have student and school identifiers removed. Data from Spring 2020 (n=58 comments) were evaluated first, with each of

the four researchers familiarizing themselves with the data and then identifying student comment commonalities and groupings. Quoted student comments were supplied by each researcher to substantiate their groupings and perceptions of themes. Each researcher then proposed themes for the groupings they had identified. The team then came together to complete phases four through six by comparing their independent findings, and determining themes agreed upon by all on the team.

Subsequently, the student data from Spring of 2021 (n=107 comments) were independently evaluated by each of the four researchers using the first three phases of the process. The team again regrouped to compare independent findings and establish consensus on the 2021 themes. The final analysis completed was to place the agreed upon 2020 and 2021 themes side-by-side to establish similarities and differences. The researchers then worked together to whittle down the numerous student quotes to identify those that best exemplified each identified theme.

Results

Eight themes were identified for each of the two years. (See Table 1.) For 2020, these eight themes were identified: Technology Issues; Concerns with Online Learning Methodology; Student Emotional Responses; Faculty Actions/Reactions; Communication; Student Concerns about Not Ready to Go Out and Practice; Adapting to Change; and Living with the Pandemic. For 2021, the eight identified themes were: Technology Issues; Student Emotional Responses; Teacher/Program Issues/Challenges; Communication; Critical Thinking/Reasoning; Online Learning: Clinical and Didactic; Student Personal Issues; and Excessive Workload. We found that overlap exists among the three themes of Technology Issues, Student Emotional Responses, and Communication; and each of the remaining five themes was found to be unique.

Themes and Exemplars for the Year 2020

Theme 1: Technology Issues

Technology issues were prevalent in many identified student challenges. The responses from 2020 included concerns about their ‘computer crashing,’ ‘their battery dying,’ or ‘interference from the weather.’ Connectivity was a prominent theme. One student stated, “I appreciate the effort that the university did to accommodate students but it still did not suffice. Internet connection was another big hurdle. Though I do have internet services at home, I live on the reservation and the weather often interferes with my service. In addition, teachers required use of media through zoom and I constantly exceeded my internet allowance. Prior to the pandemic, I would utilize the university’s computer and printer; I was not able to do so during the pandemic. . . I did the best I could with what I had.”

Another student stated:

“I live on the reservation and it was difficult to get great WIFI because ours was not the greatest. I had to continuously travel to do my homework, which is quite difficult with COVID-19 and lacking money from losing my job especially when the nearest town is about an hour away. The local libraries were also closed, so I would be sitting outside a building that had WIFI in order to do homework.”

Theme 2: Concerns with Online Learning Methodology

Many student comments related to online learning methodology were based on students identifying that they did not learn well with an online methodology. Some students stated they had taken online courses in the past but never have had all courses and clinical experiences

presented using online methodologies. Students commented that nursing is an interactive and tactile profession, and that while they learned some material, learning online did not allow them to learn the interaction and hands-on-skills required to be a successful nurse. Some students stated they need the interaction and stimulation from faculty and fellow students in in-person classes to be successful. Students shared the following statements:

”The biggest challenge I endured this semester is going fully online. I have never been, nor will I ever be, an online learner. The pandemic affected my learning ability.”

“I am not a person that learns well online. Physical class and clinical time gives me the motivation I need to get the work done. I was having to force myself to do the homework and online simulations. I have to have hands on practice to fully understand some of the concepts.”

“online classes that I didn't sign up for...because I knew I was never good at them and had trouble keeping up in previous online classes”

“Nursing for me is very tactile and hands on so I feel that I lost that being in front of a computer for long hours.”

“...It is impossible for me to read about a technique or situation and comprehend it when I can't physically do the technique or observe the situation first hand.”

Theme 3: Student Emotional Responses

Lowering one's expectations for academic accomplishments, missing faculty and friends, teaching oneself, and uncertainty of what lie ahead for the remainder of the semester characterized this category for the year 2020. One student stated that “I felt robbed of my education” while two additional students shared the following:

“Personally, I lowered my expectations of myself so as to make space for myself to process, adjust, adapt, and provide the self-care needed for life during a crisis...”

“I had to teach myself and could not learn in real patient settings which was very disappointing.”

Theme 4: Faculty Actions/Reactions

Student statements distinguished between those they identified as *Good Professors* compared to *Bad Professors*. Students shared the following with regard to *Good Professors*:

“Professors really tried to bridge the gap created by the pandemic”

“Instructors did what they could to help us understand the concepts”

“Not blaming the teachers who worked tirelessly to get us graduated”

On the contrary, these are example statements that characterized *Bad Professors*:

“No feedback on any skills”

“Lack of consistency and fairness in grading”

“Instructors changed the test questions; and, students were able to cheat as a result.”

Theme 5: Communication

Students conveyed that a lack of clarity, feedback, and rationales occurred. One student commented that “a lot of busy work” was assigned for purposes of “filling up time and having something to grade.” Concern was voiced about being taught by an instructor with insufficient teaching experience as well as fearfulness when interacting with one faculty member. One student shared that:

“Our lives were literally crumbling yet we were expected to shift into online courses as if everything was normal. Many of us lost jobs, couldn’t be with family, were displaced from home, and those were our priorities...”

Another wrote that “sifting through an overwhelming amount of irrelevant emails” was a communication concern.

Theme 6: Not Ready to Go Out and Practice

Many students had concerns about missing out on in-person opportunities to develop the hands-on skills required by nursing. Because of this, some students had concerns about their skills, confidence, and whether they were being adequately prepared to graduate and enter practice. Missed opportunities that students mentioned ranged from missing in-person simulation experiences, clinical rotations, practicing skills such as IV starts, and having to complete their capstone experience online instead of in-person. Included here are responses representing students as they consider their readiness to practice as licensed nurses.

“Losing confidence as a new graduate in skill performance.”

“Having clinicals online was a drag and of course I had nursing skills weakened but I will bounce back. I know all the implementations were for all of our health and well beings.”

“It makes me unsure of my abilities in the future and I am going to have to work so much harder to make sure my skills meet the standards....”

Theme 7: Adapting to Change

The difficulty of adapting to change was mentioned frequently by students in 2020; especially, that changing from in-class to online learning was difficult. Two responses that vividly illustrate adapting to change are:

“Everything changing what seemed like on the daily [was a challenge]. It was difficult to keep up with constant changes and waiting for more information to arise as the semester went on.”

“...the biggest challenge was just facing the change and the disappointment. Because we were in our final semester we had been looking forward to doing capstone and graduating and this was a difficult loss. I think this in turn was a lesson about how nurses have to be flexible and champion change.”

Theme 8: Living with the Pandemic

Students noted changes in priorities and that many students “lost jobs, couldn’t be with family, were displaced from home” during the pandemic. Students shared about “keeping my will to stay and not transfer out to another school, even if that meant having to start a nursing program all over” and – as mentioned earlier as part of *Communication* – “Our lives were literally crumbling...”

Themes and Exemplars for the Year 2021

Theme 1: Technology Issues

Technology issues continued to be a prevalent concern from student responses in 2021 with parallel similarities to the 2020 responses. Students voiced concerns about not being able to “control the WIFI and Internet issues,” having a “stable WIFI connection” or having “access to a printer.” A student response that illustrates technology issues from 2021 is:

“The biggest challenge that I had during this semester was slow internet at times...I live in a very rural community, and internet out here is scarce...it is not fast... one day, it was really windy, and knocked out the internet. My assignments did not submit on time and I was very upset. They finally submitted half an hour after the deadline.”

Theme 2: Student Emotional Responses

Whereas student emotional responses for the year 2020 concentrated on lowering one's expectations and the uncertainty of what the semester held, student emotional responses for the year 2021 tended towards difficulty staying focused and motivated when learning online. Time management also was a concern. A few of the student statements that demonstrated these thoughts are as follows:

“Online learning is unmotivating.”

“It's not engaging. Simply put. Doesn't feel like a worthwhile investment. “

“There was a lot of pressure and time management situations where I experienced anxiety and burn out.”

Theme 3: Teacher/Program Issues/Challenges

Students voiced challenges with their nursing programs, courses, and instructors. Concerns included changing dates of assignments, disorganization with the faculty, inconsistency of material on exams, and instructors taking unreasonable amounts of time for grading and feedback. One student stated:

“Staff and professors all told us students different things and no one seemed to be on the same page. It became very frustrating and extremely difficult for us student to figure out what was going on. “

Another stated that:

“The biggest challenge was the lack of organization. While I understand that everyone was affected by everything going on, I still think the school of nursing could have been more organized. We always found out about things happening very last minute and there did not seem to be effective communication from the leaders of the school down to the students.”

Theme 4: Communication

Concern was shared about difficulty mitigating student-faculty interactions as well as how inconsistencies occurred between learning materials and subsequent questions asked of students based on the materials. Student responses included the following:

“learning how to answer questions that didn’t go along with (the) learning material”

“sometimes the instructor would not clarify or say that you need to be checking your emails...Only if multiple students complained...(then) it would be addressed.”

Theme 5: Critical Thinking/Reasoning

Some students wrote comments that addressed the challenges they faced in developing and applying critical thinking/reasoning to their patient care. Some of the students expressed success in developing a holistic, comprehensive patient view using critical thinking/reasoning, while others expressed frustration about needing more assistance in being able to see the whole picture and applying it to not only their patients’ care, but even to exams. Some commented on their

faculty being very helpful in teaching this ability, while others commented that they needed more assistance from faculty in developing this ability. Responses specific to this category include:

“My biggest challenge was getting the critical thinking going with holistic patient care. Seeing the big picture and putting together the problems as a pt has. Questioning every little detail (sic) the pt has a concern about. Overall i have really learned to see the big picture and holistic pt care.”

“My professors do a great job at explaining procedures to be done in certain situations, how and why it would be done and realizing how to organize critical thinking...Nursing is complex and at times chaotic and I have been learning how to compose my thinking into actions that will provide care in a purpose.”

“My biggest challenge was ‘applying’ the information for exams and in general for all of my courses. I think that if instructors are going to push the fact that we need to learn to apply information then we should be taught on how to do so. I feel as though it would be less of a struggle if we were aided in applying the information that they want us to.”

Theme 6: Online Learning – Clinical and Didactic

The inability to gain hands-on, in-person experiences at the clinical setting concerned students. The same may be said about the lack of opportunities to develop emotional connections with patients in real life versus online, the latter of which felt like a “video game” to some students. Exemplar statements are as follows:

“The most difficult part of this semester was doing clinicals online. I felt as if I were playing a video game and I could not emotionally connect with the patients.”

“...not being able to go into in-person clinical to practice the skills that I learned...Also, not being able to go into the lab to practice these skills...caused a challenge for me because it is different watching videos on how these skills need to be done properly and how to do them in person.”

Theme 7: Student Personal Issues

Anxiety, financial difficulties and personal losses such as the loss of a parent before the start of the semester were conveyed. Students wrote that:

“(t)here was a lot of pressure and time management situations where I experienced anxiety and burnout”

“Staying focused...some circumstances are out of our control. Hopefully, someday we can go back to how it was or at least a little bit of what it was like.”

Theme 8: Excessive Workload

Some of the student comments mentioned their experiences of an excessive and overwhelming workload and managing their time. Students mentioned that there were so many assignments and homework that it was very difficult to keep up. They also mentioned difficulty in balancing school, family, and work responsibilities. Students shared the following:

“Sheer level of workload was overwhelming several times throughout the semester.”

“There were so many assignments all the time that it was almost impossible to keep up sometimes. It is great how it gives me the opportunity to apply the knowledge we have, however, it was so time consuming that it got hard to take time to just study.”

“Trying to manage my time and balance my jobs and school work.”

“I would say having enough time between school and family life.”

Discussion

The purpose of this study was to identify challenges faced by pre-licensure students from associate degree and baccalaureate degree nursing schools belonging to the New Mexico Nursing Education Consortium during the pandemic. Surveys were collected in 2020 and 2021 allowing the researchers the unique opportunity to determine how students adapted from year to year, 2020 to 2021, in response to the necessary pedagogical changes due to the pandemic. Our study's categorical findings were strikingly parallel to Michel et al.'s (2021) categories identified from undergraduate students from five United States regions: effect of the pandemic on students' psychosocial wellbeing; students' difficult adjustment to online learning during the pandemic; and, challenges to obtaining clinical experience and developing nursing skills. Many studies globally identified the profound stress and emotional toll that the pandemic had on nursing students (Aslan & Pekince, 2020; de-Diego-Cordero et al., 2021, Gallego-Gomez et al., 2020; Huang, et al., 2020, Mulyadi, M. et al., 2021). These studies also mirrored our study. The similarities in findings suggest the opportunity for national and global collaboration for successful pedagogies and student support.

The researchers from our study were surprised not to see significant changes from year to year. Though distinct themes arose, overlap existed between and among themes, and only subtle changes were discovered between the two years. For instance, technology issues experienced by students essentially were unchanged between 2020 and 2021, despite efforts by nursing programs and their respective colleges and universities to provide various resources (e.g., computers, hot-spots, Wi-Fi) that may have overlapped but were not the same. Many student comments about online learning methodology were based on students identifying that they did

not learn well with an online methodology, thereby indicating self-awareness of successful personal learning styles. Online learning, as a theme, results did not appear to change significantly from year to year. Whereas this theme for 2020 involved a sense of ‘shock’ to students about the need to learn online exclusively, students expressed more concern during 2021 about not having access to face-to-face, hands-on clinical experiences.

When considering student emotional responses for 2020 and 2021, comments made by students in 2020 alerted the researchers to the sense of loss and lowered expectations students experienced and for which students required time to process. By the next year, student focus shifted to staying motivated to learn online along with recognizing the need for improved time management. A case is made that the 2020 categories of adapting to change and living with the pandemic as well as the 2021 category of excessive workload are interwoven with student emotional responses. For instance, student comments about being able to adapt highlighted the sense of perpetual change taking place amidst limited time to process the need to adjust; and, the sense of loss (e.g., in the form of displacement) characterized living with the pandemic. Comments by students about aspects of their lives collapsing, even though certain assignments and other work perceived as inconsequential were mandatory, speak to student emotional responses in relation to excessive workload. Of note, excessive workload has been a concern expressed by students prior to the pandemic. While not part of the scope of this study, quantitative means of comparison now exist to determine if an increase in student workload occurred over time or if this group of students was more vocal about the concern. Not surprisingly, the 2021 theme of student personal issues – especially those pertaining to loss of some sort – echoes the interconnectedness of student emotional responses, adapting to change, living with the pandemic, and excessive workload.

The 2020 themes of faculty actions/reactions and student concerns about not being ready to go out and practice along with the 2021 theme of teacher/program issues/challenges likewise may be considered as interconnected. Specifically, student comments about distinguishing between good and bad professors together with comments about struggles experienced with coursework due to ineffective teaching-learning strategies of one or more nursing faculty support the idea that students continued to experience an uneasiness when moving from 2020 to 2021. Additionally, student comments in 2020 about feeling unprepared to practice as nurses created an overarching context in which students questioned their education, their readiness to become licensed nurses, and, ultimately, themselves. Similarly, from other research, most University of Seville health sciences students in de-Diego-Cordero et al.'s (2021) study indicated lack of institutional psycho-emotional aid or support, and many nursing students throughout the U.S. in Michel et al.'s (2021) study indicated faculty's ill-preparedness to teach along with unresponsiveness to student requests for help. Collectively, through collaboration of best pedagogical online practices, we can do better to support and respond to our students in emergent situations.

Lastly, the 2021 themes of *critical thinking/reasoning* and *online learning: clinical and didactic* provide a bridge from the nursing pedagogies utilized at the height of the pandemic to present-day insights about nursing education. In both themes, students consistently shared about the desire to obtain hands-on, in-person patient care experiences. Regarding critical thinking and reasoning, some students were able to develop a holistic perspective and its application both to patient care and nursing school. During this same year, students shared about seeking emotional bonds with their patients. That said, from year to year, students directly and indirectly demonstrated their appreciation for the foundations of professional nursing.

Implications

Several implications characterize this research. First, pivoting from in-person to online course delivery at a moment's notice now is essential. Faculty training for online learning best practices and the need for students to gain regular exposure to online learning (including test-taking strategies) are necessary. Hodges et al. (2020) point out that online education is very different from emergency remote teaching in which faculty need to scramble to get materials online versus the time and effort needed to teach a quality online course. Hodges encourages the use of universal design for learning where all "learning environments are flexible, inclusive, and student-centered assuring that students can access and learn from course materials, activities, and assignments." Faculty have identified some 'new normal' innovations to keep post-pandemic including flexibility with due dates and grading, taking time to make connections, online tutoring and student support services, virtual workshops, and use of online guest speakers (McMurtrie, B., 2021).

Technology issues need to be anticipated before crises occur. Any issues need to be remediated. Likewise, development of products and strategies for online skills acquisition, best practices for timely communication, and operational policies are essential when moving forward from the height of the pandemic. The same applies to support for students, including emergency funds, hotspots for Wi-Fi access, and mental health resources.

Challenges that nursing students faced with the COVID-19 pandemic from our study were remarkably similar to student challenges on a national and global level. Involvement and collaboration with international nursing organizations such as Sigma Theta Tau International (STTI) to develop effective emergency teaching and learning initiatives would have a world-wide benefit for nursing programs. Collaboration with national nursing organizations such as the

Commission on Collegiate Nursing Education (CCNE), Organization for Associate Degree Nursing (OADN), and National League for Nursing (NLN) on teaching and learning strategies during emergent situations also could provide needed guidance for nurse educators.

Conclusion

Just as nursing and healthcare always are changing and becoming better, so, too, have the pedagogic knowledge and technologic advances available to teach nursing. We now experientially know that long-term emergencies can arise that require rapid pivoting in how we prepare new nurses to provide care to our patients. We must be prepared for the future and for the next emergency before they happen. As an example, one of the authors' schools was impacted by the northern New Mexico fires during Spring of 2022 and emergently had to revert to COVID-19 online pedagogies.

Experienced and knowledgeable faculty are indispensable for educating new nurses to enter practice nationally. Student experience is dependent upon instructor proficiency. While "good" and "bad" nursing instructors always existed from a student's perspective, unique changes required to respond to the COVID-19 pandemic merely illuminated from another angle the differences between the two types of instructors.

Nursing faculty must communicate well, anticipate, and respond to student feedback and needs, and maintain proficiency in both in-person and online pedagogical methodologies. Waiting until an emergency arises that requires a different type of pedagogy is not sufficient timewise to ensure instructor proficiency with online pedagogies. We must have 'emergency preparedness plans' for nursing education just as our patient-care facilities have disaster response plans. Just as we expect nurses in practice settings to maintain proficiency in new nursing evidence-based

knowledge and technologies, our nursing faculty not only must remain current in provision of patient care but also in nursing education pedagogies. Just as we must support our students, nursing instructors must receive administrative support to obtain required competences through proactive education and orientation. The world has evolved and continues to change, and nursing education must also do so.

Declaration of Competing Interest

None of the authors have any conflicts of interest, either direct or indirect, to disclose

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Table 1. Themes for Years 2020 and 2021 in Response to Question, "What was the biggest challenge that you had in completing this semester/term?"

2020	2021
Technology Issues	Technology Issues
Concerns with Online Learning	
Methodology	
Student Emotional Responses	Student Emotional Responses
Faculty Actions/Reactions	
	Teacher/Program Issues/Challenges
Communication	Communication
Student Concerns about Not Ready to Go	
Out and Practice	
	Critical Thinking/Reasoning
	Online Learning: Clinical and Oldactic
Adapting to Change	
Living with the Pandemic	
	Student Personal Issues
	Excessive Workload