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The Seven C's of Teaching During the COVID-19 Pandemic

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ABSTRACT. The onset of the COVID-19 pandemic disrupted education at all levels and required educators and students to pivot quickly to distance and remote learning. This abrupt change challenged all involved. Educators scrambled to adopt new technology that would not only help them reach their students but also keep students moving forward towards achieving important learning goals. Overarching educational goals known as 21st Century Learning Skills have been in place since the early 2000s. This article shares experiences faced by two university faculty members who rooted their approach to teaching during the pandemic in the four C's of 21st Century Learning: communication, creativity, critical thinking, and collaboration. During their journey they also discovered the importance of three additional C's useful to meeting student needs: compassion, community, and consistency. This article shares tips and strategies for effective teaching during the pandemic along with ideas for future practice and research.

Keywords: 21st Century Learning Skills, remote learning, COVID-19 and post-secondary education

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The Seven C's of Teaching During the COVID-19 Pandemic

Overarching educational goals known as 21st Century Learning Skills have been in place since the early 2000s, when the National Education Association (NEA) (n.d.) and the Partnership for 21st Century Skills (P21) began conceptualizing goals they recognized that students needed to (a) develop citizenship skills in an increasingly complex, modern world and (b) be prepared to solve challenges such as "global warming, immigration reform, pandemic diseases, and financial meltdowns" (NEA, n.d., p. 5). The 4 C's of 21st Century Learning Skills include communication, creativity, critical thinking, and collaboration. This article tells stories of how two post-secondary educators who prepare students to work with individuals, families, and communities capitalized on the four C's of 21st Century Learning Skills and introduced three new C's: compassion, community, and consistency. As they worked to adapt their curriculum and teaching strategies to respond to challenges the pandemic presented, the three newly discovered C's emerged as especially pertinent during this unprecedented time in modern history, the COVID-19 pandemic.

The Four C's of 21st Century Learning

Technological literacy is paramount in the ability to be a contributing member of society and achieve success in a career (NEA, n.d.). This became even more apparent in the early days of the pandemic when lockdowns and stay-at-home orders required individuals to rely on technology to communicate, collaborate, and educate. As educators pivoted to teaching remotely, the use of technology became vital to the ability to continue preparing students to communicate, collaborate, and think critically and creatively.

Communication

Possessing the skill of complex communication, which involves the ability to explain, negotiate, and interpret human behaviors, contributes to job security in a meaningful way because skillful communication is not likely to be automated (Levy & Mundane, 2004). In this era of advancing technology, college educators must prepare students with complex communication skills that will allow them to remain relevant in the job market (France & Weikel, 2014; National Association of Colleges and Employers, n.d.). During a period of remote education, students can still practice these skills through professional written and verbal communication. Methods of practicing written communication could include sending emails to instructors and internship supervisors and participating in online class discussions. Fine tuning verbal communication could occur through online presentations or by using video as a means of online discussion with apps such as Flipgrid (Microsoft, 2021a) and VoiceThread (2021).

Collaboration

Even before the pandemic, the global job market required co-workers to work in teams, either in-person, remotely, or both. Telecommuting to work has expanded greatly, testing workers' technology skills as they had to shift quickly to communicating via Zoom (2021), Microsoft Teams (Microsoft, 2021b), Google Meet (Google, 2021), Skype (Microsoft, 2021c), and other platforms to conduct business and complete projects. Connecting with colleagues from around the world in digital platforms will likely remain commonplace even in the post-pandemic

world. It is important for post-secondary educators to model and integrate use of collaboration tools to prepare them for contemporary work environments (Khan, 2006; Miller, 2015; Welch, 2000; White, 2015).

Critical Thinking

Critical thinking contributes to success in higher education and careers (Papathanasiou et al., 2014). Educators should provide students with opportunities to apply their knowledge to solving problems (NEA, n.d.). Asking students questions that require more than “Yes” or “No” responses, such as engaging in debate or taking multiple perspectives, also encourages them to think deeply about their learning.

Creativity

“In today’s world of global competition and task automation, innovative capacity and a creative spirit are fast becoming requirements for personal and professional success” (NEA, n.d., p. 24). We need people who can think outside the box if we are going to solve complex problems now and in the future. Creativity cannot be fostered in classrooms that only include testing of cognitive skills (Markham, 2018). Therefore, college educators should be open to including alternative and authentic forms of assessment that allow students to stretch their creative bounds (MacMahon & Mongroo, 2021).

The Three C’s of Teaching During a Pandemic

As noted above, the four C’s are still relevant to teaching during a pandemic. By building elements into the curriculum that allowed students to practice digital communication, collaborate via distance, ponder complex questions, solve problems, and expand their creativity, educators were still able to help prepare students for future careers. However, when faced with the reality of having to prepare students to work with individuals, families, and communities in a pandemic and post-pandemic world, the authors found three additional C’s – compassion, community, and consistency – to be crucial elements at the post-secondary education level. To prepare Family and Consumer Sciences (FCS) and Human Development and Family Studies (HDFS) students to be compassionate, to recognize the importance of community, and to understand benefits of consistency, the authors sought to model these elements in their teaching during the pandemic.

Compassion

The quote “Relationships before rigor, grace before grades, patience before programs, love before lessons” from educator Brad Johnson (2021) has become a mantra for several educators during the pandemic. For many years, research has shown that students are more successful when they are taught by caring, supportive educators (Klem & Connell, 2004). The importance of expressing empathy and encouraging self-compassion received extra attention and focus as the pandemic began affecting teachers, students, families, and communities. Educators at all levels faced the additional challenge of expressing compassion via technology. Seeking ways to model compassion for students was seen as crucial by the authors, who understood that FCS and HDFS professionals would be most effective in their careers if they were humble, positive, and compassionate (Goddard & Marshall, 2015).

Community

Feelings of social connectedness contribute to students' sense of social belonging and are critical components of student satisfaction, retention, and overall academic success. Students with social connectedness are more likely to have better social and academic experiences during college, including higher emotional wellbeing and better mental and physical health (Jose et al., 2012; Walton et al., 2012). The abrupt switch from in-person learning to all digital learning platforms at the onset of the pandemic was disorienting for many students and educators. It presented the challenge of needing to simulate the connectedness and social belonging that is usually created in shared classroom spaces within digital environments.

Consistency

In a time of constant change and turmoil, consistency is a must. Consistency has been associated with academic success and trust. According to Moore (2009), student motivation can be impacted positively by consistency in a classroom, which can ultimately lead to trust between students and teachers. Post-secondary students' ability to build trust with future students and/or clients will also be important. Consistency in course design coupled with contact with course instructors and discussions with classmates have been recognized as successful components of online learning for many years (Swan et al., 2000). Teachers who had to switch from face-to-face classes to online courses during the pandemic used various methods to help keep everyone on the same page. These methods included posting weekly announcements, sending daily reminders, and enhancing course structures in the designated Learning Management Systems (LMS) to allow students to navigate each course easily.

Implementing the C's: Two Instructors' Experiences

This section outlines the authors' educational approaches to teaching during the pandemic and their discovery of the importance of "compassion, community, and consistency" to meeting students' needs during a tumultuous time while equipping students with skills sets beneficial to career success. The authors felt that the best way to equip students with compassion for others and emphasize the importance of community and consistency when working with future clients of all ages was to model these values while teaching. This section outlines approaches that each author took to address these needs during the Spring 2020 and Fall 2020 academic terms.

Instructor One (teaches at a public land-grant research university in the Midwest)

In Spring 2020, I faced the same challenges that millions of educators around the world did when the pandemic forced the closure of my university and the switch to all online courses. I was supervising ten student teachers at the time. Not only did I need to adjust my own courses, but I also needed to support each student teacher in moving their secondary courses from a face-to-face format to a fully online experience. Below is a recounting of how I kept my focus on the four C's of 21st Century Learning skills while incorporating elements of compassion, consistency, and community.

As a Family and Consumer Sciences (FCS) teacher educator, my task is preparing students to teach college to career life skills in middle and high school settings. When the pandemic hit, not only did I need to make adjustments to classes I was teaching for a college

audience, but I also faced the challenge of helping my teacher candidates who were student teaching in middle school and high school classrooms to completely retool their classes so they could deliver content via digital means.

What I discovered quickly was that each school where my teacher candidates were placed had different approaches to responding to the pandemic. Only a couple schools had a school-wide Learning Management System (LMS) in place that allowed for easier transition to remote learning. Overall, most teacher candidates and their clinical educators were left to come up with their own ways of reaching students who were no longer in the classrooms. Some had already been using elements of Google Classroom or Schoology before the pandemic to share digital resources with students. Therefore, they were able to capitalize on those platforms to extend learning beyond the classroom. In some cases, the school systems opted for different approaches, which included having teachers develop learning projects that were then printed on paper and picked up by students' parents or guardians. While certainly less efficient and sustainable than digital approaches, this did ensure that students without access to digital devices or Internet in their homes could continue learning outside the halls of the school building.

To help my teacher candidates, I began seeking alternative learning activities. I quickly discovered that some savvy FCS teachers from across the country were starting to implement *choice boards*. These were subject-specific grid formats that allowed students some choice and voice in their learning from home. For example, a choice board for a nutrition and wellness class might give students the option to find food products in their homes and analyze their nutritional values by reading the labels. Another option might be to prepare a healthy lunch, submit a picture of that lunch, and describe why it was healthy. Choice boards gave students a wide range of options and allowed them to customize their learning at home while still meeting learning objectives. When I learned about choice boards, I quickly shared the idea with my teacher candidates.

Along with supervising teacher candidates, I had to adjust other courses I was teaching. One of these, Adult Education, was already online but required modification of field experiences. Traditionally, the course required students to attend two adult learning events and analyze the educational experience by applying course concepts, terms, and theories. Due to the pandemic, students who had planned to attend in-person adult education programming had to start searching for online options such as virtual conferences and webinars.

Unfortunately, the pandemic continued to plague education into the fall 2020 semester and posed unique challenges with changes in course offerings and formats. One of my face-to-face classes was switched to an online course and two of my courses were identified as hybrid courses. The course that got switched to online included introductory field experiences for sophomore education students. The loss of in-person field experiences was particularly challenging; guiding students in how to connect with teachers digitally was complicated. To communicate with students and support their needs, I added check-in synchronous Zoom (Zoom Video Communications Inc., 2021) meetings to fill the void of being able to establish rapport with students in that class. Not only did I host individual meetings, but I also hosted a small group meeting so students would also not miss getting to know their fellow classmates. To further fill that gap, I included a discussion board to help students discover what they had in common with their classmates. I also collaborated with a fellow faculty member to host mid-semester check-ins and small groups/teams. This provided students yet another chance to communicate with their classmates and presented a united front among teacher educator faculty

in support of student success. In the end, students lamented the loss of the in-person field experience but still learned a great deal about the teaching profession by connecting with teachers via videos, Zoom (Zoom Video Communications Inc., 2021), and other platforms.

Community, Communication, and Collaboration

Just a few short weeks into the pandemic, my students and I came to the acute realization that Zoom (Zoom Video Communications Inc., 2021) fatigue was a real thing. When we needed a break from synchronous Zoom (Zoom Video Communication Inc., 2021) sessions, I incorporated several tech apps that also focused on skill development related to community, communication, and collaboration. Whiteboard.fi (2021) is a great tool to give each student the opportunity to “show” their work to the instructor and classmates. I also gave students the opportunity to collaborate by digitally mind mapping with tools like Padlet (2021), MindMeister (MeisterLabs, 2021), and Bubbl.us (LKCollab, 2021).

Compassion and Creativity

Because the 24/7 news cycle only seemed to report “gloom and doom,” I knew that students and I needed opportunities to have some fun. Kahoot and Quizizz are assessment tools with a game show twist. Students absolutely loved competing with their classmates while demonstrating their knowledge of classroom content. These activities lightened the mood of what could have been dull and boring synchronous Zoom (Zoom Video Communications Inc. 2021) lectures. I also encouraged students to practice creativity by summarizing course information in the form of WordArt (2021) or an infographic they could develop by using a tool like Canva (2020).

The element of compassion was also expressed in e-mail communication. A colleague of mine shared a template for e-mail communication with students regarding COVID-19 that I quickly adapted and adopted. A portion of the e-mail read, “I am sorry to learn that you have been exposed to COVID-19. I’m sure you are experiencing several emotions right now, which is completely normal.” Other templates thanked students for being proactive for getting tested and offering support while they were waiting for results. A key statement in all e-mails was, “As a teacher, I am always concerned for the health and well-being of my students.” And then I included a list of questions about how they were feeling, if they had a safe place to isolate/quarantine, and if they had a way to get food or medicine. Another goal of this messaging was to calm students and attempt to reduce stress if possible. For example, a statement such as, “As for attending my class during the next few days, please do not stress over it, you have enough on your plate. Physical and emotional health and well-being should always take top-priority. You can catch up on the Zoom (Zoom Video Communication Inc., 2021) recordings posted in D2L when you are feeling better”.

Consistency

As the chaos of the pandemic swirled around us, it became apparent that students needed additional reminders and support to keep them attuned to learning during a time of disruption. I found myself posting more frequent course announcements, sending more e-mails and texts, and scheduling more phone calls and individual Zoom (Zoom Video Communications Inc., 2021) sessions.

Instructor Two (teaches at a public land-grant research university in the mountain west)

I imagine my spring 2020 semester mirrors those of most other academics' – the first half was meticulously well-planned, suggested a familiar rhythm and comfortable predictability, and had progressed at a tempo that I and my students had anticipated. And then the pandemic hit. I taught five courses in the spring; here, I will focus on what I considered my biggest course, a 100-level individual and family development course. This course had 150 students, so it was big simply in terms of numbers, though it was also big because it included mostly freshmen, both majors and nonmajors, and had many moving parts and lots of content since we covered development across the entire lifespan in 15 weeks. I was confident in my ability to deliver content in a meaningful and engaging way through video-recorded lectures with embedded activities, learning checkpoints, and opportunities for application and reflection. What I was most concerned about, however, was losing students – having them disappear from the course, feeling disconnected, or feeling lost or overwhelmed. To keep students with me and meaningfully engaged in the course for the next six weeks, I interwove elements of the four Cs of 21st Century Learning, communication, collaboration, critical thinking, and creativity, with my students' additional needs for compassion, community, and consistency, by implementing the following teaching practices.

Compassion

Practicing compassion was one of the more intuitive teaching practices for me to implement. To varying degrees, everyone's lives were impacted by the pandemic. Acknowledging this unwelcome yet common thread, along with feelings of uncertainty, fear, and ambiguity that accompanied the ever-changing situation, seemed the only imaginable response. I made an effort to include a sentiment of "how are you doing?" in my emails and expressed genuine care for their replies. If a student requested an extension due to needing to move back home, I offered one and encouraged them to prioritize their needs. It seemed a small accommodation on my part and relieved enormous amounts of stress for students.

In times where accommodation was not appropriate or fair to other students, such as allowing a student to take an exam after the testing window had closed, I continued to practice compassion through encouraging *their* self-compassion and self-kindness. For example, I would say something like, "I know you may feel disappointed or frustrated that you missed the exam testing window. I hope you can be kind and gentle to yourself and forgive yourself for making a mistake during this really stressful time. I hope you can recognize that this is a difficult time and you are doing the best you can." Even though their score remained a 0, I found that offering empathy and warmth was appreciated by students.

I also interwove elements of self-compassion and self-care into my weekly announcements and email responses to individual students. In my announcements, I often included a self-help tip generally related to self-care or self-kindness. For example, rather than focusing on questions they may have gotten wrong, I encouraged students to take a moment to notice all the questions they got right. Essentially, I made intentional efforts to offer strengths-based feedback that promoted students' acknowledgement of their successes while couching the feedback in a growth mindset. We had discussed growth mindset throughout the semester, so my comments such as, "This is hard and incredibly challenging. I will give you the tools and resources you need to be successful in this course. You have the ability to make it through this..." were not new to students. Sometimes students expressed such anxiety, depression, or feelings of

being overwhelmed or stressed that encouraging self-care seemed insufficient. Perhaps more so than at any other time in my teaching career, connecting students with Student Affairs offices became a larger part of my role. Saved to my desktop were lists of virtual mental health resources and contact information for financial, housing, and food resources that could easily be sent to students in need. While I do believe that connecting students to available supports on campus exhibited compassion, it also demonstrated the need for collaboration across university offices and programs, which I discuss in the next section.

One of the most meaningful practices I implemented in the area of compassion is one I believe I will continue to use long after the pandemic is behind us and I teach this class face-to-face again. That is, I now include an optional check-in question at the end of every exam. My question is this: “I just want to check in with you; please tell me how you are doing – share some good news, share a self-care strategy that is working for you, let me know if there is something you are struggling with (personally or specific to this class), or let me know if a conversation would be helpful.” Student feedback on this has been incredible. I have learned when students get a new pet or tattoo, I have learned that many students practice meditation or take a relaxing bath for self-care, and I have learned that some students are really struggling and need of resources. I respond to every single student who chooses to answer this question; throughout the semester, about 75% of students have consistently chosen to answer it. Many students even thanked me for including this check-in question; though I am glad to have received such affirming reactions, I also take pause and wonder if perhaps no one else is asking students how they are doing and what they are needing.

Collaboration + Communication = Community

Practicing compassion remained a theme throughout my teaching practices during the pandemic, serving as the underlying emotion that fueled the other C's, including collaboration, communication, and community. The four Cs of 21st Century learning include collaboration and communication; in my experience of “going remote,” the learning environment and student experience I aimed to create was more accurately encompassed by the idea of building community. To me, building community means creating a sense of belonging in the classroom – whether the “classroom” is face-to-face or online. Part of building community means creating opportunities for student-to-student collaboration and encouraging and modeling effective student-to-student and instructor-to-student communication.

Nurturing our class community was my biggest concern, and therefore my biggest priority, when we shifted online. During the first half of the semester, when we were meeting in-person, I attempted to create community by discussing principles of community put forward by our university, including statements of inclusion, respect, and safety in my syllabus, offering multiple opportunities for students to think-pair-share or turn and talk in each class session, and often beginning the class by showing a picture of my kids being silly, a funny meme, or interesting headline I had read online. While I could continue to implement some of those same practices in a fully online class, albeit with some modifications, I worried that first-year students may feel removed from our course, that I was “invisible,” or that they were otherwise disconnected from me or their peers, particularly because they did not *choose* to take this course online; that choice was made for them.

To preemptively address my concerns about students feeling lack of community, I increased the frequency of check-ins in the course. Each week, I would randomly select a small

group of students (generally 10-15) to reach out to for the sole purpose of checking in and being visible. Perhaps this would be top-scoring students on an exam, or all students who were earning below a 70%, or maybe students who completed the extra credit opportunity, or a handful of those who did not. By prioritizing instructor visibility and making individual connections, I believe I was successful at showing students that I saw them and I cared, and that each student mattered.

I also tried to strengthen instructor-to-student relationships through weekly announcements. With each Monday morning announcement, I included a video message; sometimes this was a tip for success on a particular assignment or a bit of a pep talk, sometimes this was sharing something funny that happened over the weekend, and sometimes this was reminding students to practice self-care and highlighting some of the pandemic-related mental health resources available on campus. It was important to me that students got to know me as a person and recognized my announcements were not just canned and copied from semester to semester. I also ended each Monday morning announcement with an invitation to join me in my virtual office hours (e.g., "let's have coffee together Thursday at 10am!"); I would ask them to hop in to share pictures of their pets dressed up in costumes or invite them to share an interesting TED Talk or favorite podcast. These beginning conversations that were not related to content often led to course questions or general course feedback.

Encouraging student-to-student rapport was a bit more challenging, as I had not created the course to include group work. I also opted out of requiring weekly online discussions, as I assumed students were inundated with such discussions in their other courses. However, I did want to offer students a space where they could go to connect with one another. Though the result still took the form of weekly online discussions, the online discussions were optional. Students were assigned to small groups of no more than ten students. Each discussion included content-related prompts and community-building prompts (e.g., sharing their weekend plans, what they are watching on Netflix, the last thing they ordered online). This was also a space for students to ask questions about the course they didn't want to directly ask me or the Graduate Teaching Assistant. Students were encouraged to reach out to their small group discussion peers to get clarification on an assignment, study for an upcoming exam, or seek peer review on their papers. Perhaps not surprisingly, optional discussions were not used to the extent I had hoped. It was also discouraging for students who did post but did not receive replies from peers. To further promote use of the discussion boards, I turned the online discussions into extra credit opportunities and included reminders in the weekly announcements, which resulted in greater engagement in online discussions.

Consistency, Critical Thinking, and Creativity

While perhaps the most technical of the teaching practices described here, remaining committed to consistency was critical to promoting student self-efficacy in navigating the final few weeks of the semester.

Every module in our LMS course page was set up exactly the same – same organization, same labeling of materials, same deadlines each week. Students reported appreciating this predictable course structure. I was also committed to being consistent with how and when I communicated with students. Students received a comprehensive announcement Mondays at 12:00am and a reminder announcement Fridays at 12:00am. I also aimed for consistency in formatting my announcements – first a video message (described above), then a re-cap of the

previous week, an overview of the current week's topic and what they can expect to find in the module, highlighting activities/assignments that are due, addressing questions I had received that the rest of the class might benefit from, additional announcements (e.g., virtual events on campus, extra credit opportunities), and a "Looking Ahead" blurb that briefly described what we would be working on and learning about the next week, in addition to mentioning upcoming larger assignments. I ended every announcement by inviting students to drop into my virtual office hours and provided them with the Zoom (Zoom Video Communication Inc., 2021) meeting link.

I found it important to be consistent in some aspects of the course, but it was also valuable to depart from that routine and offer opportunities that promoted creativity. Given the general need/desire for accommodations and flexibility, I incorporated several opportunities for student choice in this course. I believe this speaks to my attempts to demonstrate and incorporate creativity, as students were asked to demonstrate mastery of learning objectives through assessments beyond summative exams. Students were provided three robust writing prompts to choose from for their larger course papers and could also choose which two short answer questions (out of five to seven options) they believed best suited their strengths on exams. Students also completed a Connecting-the-Dots activity at three time points during the semester and could choose from three different activities at each point. While the general paper, exam, and activity instructions were consistent, the available options allowed students to choose their own adventures in such a way that each student could self-author a unique experience in our course.

I found this unique blend of balancing consistency and critical thinking essential to students' success in the course. One of the larger projects is to complete a two-part virtual simulation exercise where students "raise" a virtual child ages 0-18 during the first half of the course and then develop a virtual adult (themselves) during the second half. The deadlines, expectations, and related assignments were consistent throughout the semester, while the virtual life simulation tool uplifted students' critical thinking about course material and what course concepts "look like" in child and adult development. In and of itself, this is not a change or modification I made to the course due to the pandemic, even though the pandemic has prompted my thinking around how and to what extent activities and assignments already embedded in this particular course adhere to the four C's of 21st Century learning.

Concluding Thoughts and Implications for Future Practice

Many teaching practices introduced during the pandemic will likely remain effective and worthy of implementation once the pandemic is over and classes return to their intended modality. Many of the tech tools adopted during remote learning may still be good choices to enhance learning in face-to-face or hybrid settings. While the Four C's of 21st Century Learning Skills serve as an excellent foundation to best practices in teaching and learning, instructors can provide a strengthened learning environment by going beyond, offering opportunities for communication, creativity, critical thinking, and collaboration to intentionally practice compassion, promote community, and adhere to consistency in course structure and delivery. Even when the pandemic recedes, many will unfortunately be left with long-lingering ramifications. Intentionally "checking-in" with students to see how they are doing and connecting them to proper resources when needed should be a pandemic practice that post-secondary educators embrace and continue moving forward. Practicing the seven Cs and seeing them modeled by instructors may serve to strengthen students' experiences in a class, while

offering a secondary benefit of preparing them for their future careers. Especially in instances where educators are working to prepare students to work with individuals, families, and communities, modeling compassion while providing an enriching learning experience should be prioritized as goals.

Since the C's of "compassion, community, and consistency" were discovered by the authors and are not officially a part of the 21st Century Learning Skills, research could be conducted to assess effectiveness and viability of adding them to the model. This paper included anecdotal evidence of the effectiveness of adding these components to teaching practices. Future work in this area could test their true effectiveness. Mixed methods research could include student surveys and interviews about perceived importance of the seven C's, impact on overall learning experiences, and any best practices gaps.

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