Adapting to the Nontraditional Classroom: Lessons Learned from Agribusiness and Applied Economics Classes
Erik Hanson\textsuperscript{a} and Cheryl Wachenheim\textsuperscript{a}
\textsuperscript{a}North Dakota State University

JEL Codes: A22, Q00
Keywords: Classroom, distance learning, hybrid-flexible, teaching

1 Introduction
As rumors and reports about the suspension of face-to-face classes first entered conversations in March 2020, it was difficult to anticipate all the ways in which university life would change in the upcoming months. Like many of our colleagues in the North Dakota State University (NDSU) Department of Agribusiness and Applied Economics, we quickly went from hoping for a minor interruption to coping with an extended period of distance (or remote) learning. By the end of the spring semester, we began to ponder how new policies and hybrid-flexible delivery methods would shape our teaching in the fall and beyond.

Despite the challenges of the spring and summer months, there were plentiful growth opportunities. For example, like many instructors, we received a crash course in distance learning strategies and technologies. Generally, the semester’s unusual circumstances caused us to reflect on our course objectives, instructional methods, classroom environment, and the alignment among those components. The purpose of this commentary is to present our experiences and reflections during this time, which we have condensed into five key areas: building and maintaining the instructor-student connection; building and maintaining student relationships; providing relevant and timely feedback; creating an adaptable class schedule; and understanding students’ nonacademic commitments.

We explore four classes we taught in spring 2020. These classes represent a variety of instructional settings and topics common to many departments of agribusiness and applied economics. The first is an elective agricultural lending class, which is generally taken by juniors and seniors. The second is a capstone course in agricultural management, which is generally taken by juniors and seniors. The third is a large introductory agricultural finance class, which is required for agribusiness and applied economics majors and taken by many others pursuing agricultural or business degrees. The fourth is an elective agricultural sales class, which is generally taken by juniors and seniors.

The move to distance learning was truly an experiential learning exercise for us. Although we still have plenty to learn, we hope that the some of the lessons learned through our experiences and conversations are useful to others as they plan or adjust instruction for the 2020–2021 academic year.

2 Building and Maintaining the Instructor-Student Connection
Instructor-student connections create a foundation for learning. Rapport between instructors and students may be developed through immediacy behaviors, which are verbal and nonverbal signals of
availability and interest in student success (Anderson 1979). Although opportunities to display immediacy behaviors may be reduced if instruction is not face-to-face, students still value these behaviors from instructors (Russo and Benson 2005). In our experience, demonstrating concern and care for students is a valuable approach in distance learning settings. Making students feel appreciated can be reassuring amid uncertain circumstances like those likely to exist in the upcoming months.

Two of our classes were surveyed 4 weeks into distance learning during spring 2020. When asked about what had gone well in the transition to online learning, many students commented positively regarding instructors that were accessible and accommodating. Nearly half of surveyed students noted the importance of communication from their instructors, with several expressing that communication helped them feel a connection to the instructor and the class. However, there may be diminishing returns to instructor communication in online settings. One of our students noted that, “Our inboxes are constantly full, and it is almost impossible to keep up.” According to another student, “The situation is constantly changing. By the time I read one email about how we will do things (going) forward, it has already changed.”

Encouraging formative feedback from students may create greater student engagement (Aultman 2006). In spring 2020, we empowered students to provide feedback on distance learning instruction they had experienced and enjoyed in other classes. Although this approach has been used in the past, it was particularly well received during the initial stages of distance learning and created the additional benefit of rapidly expanding our list of distance learning ideas. The process not only explicitly recognized student feedback is valued, but increased student ownership in the class experience. For example, in the agricultural sales class, the move to distance learning threatened to nullify the capstone experience in which groups of four students meet with an industry sales professional and role-play a sales call. The instructor asked the students and participating sales professionals to envision how they could retain the capstone experience. Feedback clearly identified videoconferencing as an option, and the sales professionals were quick to communicate with their assigned student groups about this opportunity. By asking students to aid in identifying potential solutions, recognizing their feedback, and asking them to implement the solution, students assumed ownership of their role in the event. For the first time in two decades, student feedback on the capstone experience was unanimously positive.

Face-to-face instruction may be interrupted permanently or temporarily for some students, instructors, or institutions during the 2020–2021 academic year. Accordingly, it may be wise to prioritize the development of instructor-student rapport early in the semester when instruction is more likely to be face-to-face or when attendance may be higher. This approach is relevant in any semester, as Wilson and Wilson (2007) find that students who have a positive first day experience are more motivated and achieve higher grades at the end of the semester.

3 Building and Maintaining Student Relationships

Relationships among students are also important in developing a classroom culture. Students with a sense of belonging may exhibit increased motivation, engagement, and learning (Osterman 2000). During fall 2020, restrictions on student attendance or proximity, hybrid-flexible course designs, and planned or unplanned periods of distance learning may influence student interactions. Nevertheless, even in a distance learning format, there is evidence that students are more satisfied with their learning when they perceive the presence of their classmates (Russo and Benson 2005). Collaborative learning activities can help to build a sense of community in online classes (Chaterjee and Correia 2020). However, they must be well designed so students view online group projects as a learning experience that also builds a classroom community rather than just a requirement for earning a grade (Cameron et al. 2009).

Just as prioritizing the instructor-student relationship early in the semester is advisable, so too is providing opportunities for constructing student relationships. These relationships may enhance remote collaborative learning, which will occur if face-to-face interactions are not possible later in the semester. Thoughtfully planning student interactions at the beginning of the semester is a proactive strategy. The
agricultural lending and management classes offer a case study on the importance of student relationships for collaborating in an online setting. Although these classes included many of the same students, group projects in the agricultural lending class generally went smoothly while there were more instances of free-riding, poor communication, and reduced project quality in the agricultural management class. This contrast may be explained by the agricultural lending class’s smaller size, well-defined expectations, and the inclusion of industry professionals in project evaluation.

The introductory finance and agricultural sales classes presented challenges with creating student-to-student interaction because of large class sizes and reliance on impromptu groups for in-class activities prior to distance learning. The group forming process had not occurred when distance learning began, and therefore assigning students to groups remotely was less likely to be effective. To overcome this issue, rather than having students work in groups, the instructor employed student polls to create student connectiveness when class sessions were offered synchronously.

Many learning management platforms and commercial videoconferencing software products offer break-out rooms, which can be used for a particular activity or to hold a discussion based on a prior reading or content. In the hybrid-flexible model that will be employed at NDSU this fall, where some students will be in the classroom and others join the class remotely, in-person students can be formed into groups, and distance learners can be placed in groups with other distance learners using the videoconferencing platform.

4 Providing Relevant and Timely Feedback

Some traditional avenues for feedback such as informal classroom question and answer, in-class discussions, and office hours were altered, unavailable, or more time-consuming in the distance learning format. Quickly returning grades to students also became more challenging in spring 2020 because instructor time was consumed by other activities related to distance learning. Despite our best efforts to provide grades and other feedback, several students correctly noted that our feedback was different than in the typical face-to-face format. Student concern over feedback on assignments and assessments in online courses is not unusual (King 2014).

Grading rubrics are one method for providing feedback in the nontraditional settings that may be commonplace this fall. Although rubrics are widely used, they may be particularly useful for efficiently generating feedback in online settings (Zsohar and Smith 2008). Technology advances also facilitate meaningful feedback. For example, many grading platforms now allow for easy annotating, including smart learning of common feedback comments used by the instructor.

Student peer reviewing is another feedback tool that can be leveraged in hybrid-flexible or distance learning settings. If consistently used, giving and receiving peer feedback can develop a classroom’s culture (Boud 2000). The agricultural management class regularly used formative peer review. These activities gave students rapid feedback on their major class project (a business plan), while also sparking reflection and learning by the reviewer. As a result, valuable revisions occur before the instructor has returned formal feedback to the entire class. The agricultural sales class has also employed peer review of papers for several years. The instructor found the process became more effective during distance learning because peer reviewing was done using the reviewing features (e.g., track changes and comment boxes) in Microsoft Word, and students were required to talk each other through the suggestions. Because it seemed to generate social interaction between students, the instructor will expand this practice in the future. Some of the same learning benefits of peer reviewing can be gained by selecting high quality peer examples for students to observe (Sadler 2002).

Distance learning created two opportunities for additional feedback in the agricultural sales class. First, in the capstone experience, the sales professionals were asked to provide both oral and written feedback to students when in the past this was limited to oral feedback. The additional feedback reinforced important lessons from industry. Second, students were asked to practice self-reflection on their work after it was graded. In the future, regardless of the class’s delivery method, self-reflection
statements will be included in each major exercise. Furthermore, given instructor time constraints, students will be encouraged to improve and resubmit their work, providing another opportunity for thoughtful reflection and additional exposure to concepts and their application.

It is imperative we keep in mind that students often require positive feedback as much as critical feedback. In spring 2020, the desire to provide positive feedback became more prominent because it was clear some students were struggling with course content and lack of social interaction.

5 Creating an Adaptable Class Schedule

Many instructors thoughtfully construct class schedules based on learning objectives and past instructional experiences. However, in the 2020–2021 academic year, it may be unrealistic to assume that what worked in the past will work today. With hybrid-flexible instruction encouraged at many institutions and contingency plans for fully remote instruction on the minds of instructors, it is worth considering the opportunity cost of time devoted to following a schedule at a distance for both instructors (e.g., sending reminders to students, grading, and revising the schedule) and students (e.g., seeking clarifications from the instructor and coordinating deadlines between multiple classes).

Schedule adaptability is important. For example, after distance learning began in spring 2020, the instructor of the agricultural management class attempted to maintain many low stakes formative assessments and made those assessments due at dates aligned with normal class meeting days. After students struggled to juggle these varied deadlines without the typical in-person prompting from the instructor, the class schedule was quickly revised to make most assignments due on a single deadline each week. Indeed, Zsohar and Smith (2008) recommend that online classes use consistent deadlines (i.e., the same day and time each week) to encourage assignment completion and to simplify schedules for students taking multiple online classes. Looking to fall 2020, the instructor is making all assignments due on the same day and at the same time each week. The idea is to create a clear understanding of the class’s rhythm and expectations from the outset of the class, thereby reducing confusion and revisions if some or all students are required to learn remotely later in the semester.

In contrast, the other instructor did not change the due dates for assignments, regardless of whether class was offered synchronously or asynchronously on that day. The rationale was to reduce the number of schedule changes in the class, ensure students were prepared for each synchronous class period, and facilitate the potential resumption of face-to-face class meetings. The instructor experienced the same issues noted by the first instructor. It is not clear whether maintaining the planned schedule or adopting a simpler schedule for assignment deadlines would have resulted in less complexity in the already turbulent situation. However, clear scheduling is important, and this must be adaptable to the uncertainties surrounding future classes.

6 Understanding Students’ Nonacademic Commitments

Hybrid-flexible or distance instruction allows students to alter their nonacademic lives. Specifically, places of residence, family responsibilities, and work hours may all change for students not required to attend class in person. In spring 2020, some of our students responded to the cancellation of in-person classes by working more hours. Many students with agricultural backgrounds were burdened by nonacademic workloads when they returned home to help with farm activities. When asked about the most challenging parts of the move to online learning, one student stated that, “I live on a farm and when I am home, I work outside.” Another student added that, “I’m not much of a computer person, so it’s really hard to get myself to do the homework and even harder to make time to study, and it’s only going to get worse when we get in the field.”

Many of our students indicated that asynchronous instruction was preferred to synchronous instruction in spring semester 2020 because of the flexibility it provided for nonacademic responsibilities. In fact, students that elect to take online classes often do so because of that flexibility (Jayaratne and Moore 2017). However, asynchronous instruction has drawbacks, including reduced
development of classroom connections (Moallem 2015). Furthermore, students’ expectations and preferences for distance education may have changed after their experience in spring 2020. The advantages of synchronous learning do not preclude students participating asynchronously when necessary. Carefully considering the trade-offs between asynchronous and synchronous online instruction is recommended.

Just like students’ nonacademic responsibilities can create challenges, they can also provide instructional opportunities. If students react to hybrid-flexible instructional methods at NDSU by spending more time working in fall 2020, those students may contribute to agribusiness or agricultural economics classes by sharing real-world applications of class concepts. These students could also expand and personalize their knowledge through experiential learning. Finally, students may also have opportunities to benefit from others’ perspectives if they are living away from campus. For example, in spring 2020, the instructor of the agricultural finance class was able to engage many students and their families in a discussion about farm succession planning because many students had moved home at the end of the semester (Wachenheim 2020). Having family members participate in the discussion moved the lesson from defining succession planning to facilitating its implementation.

7 Final Thoughts
The topics discussed above are some of the ways in which we can plan for success in the 2020–2021 academic year. Although the lessons learned from the past few months will vary by institution, course, and instructor, reflections on this time period will likely be beneficial. Perhaps our most important realization is just how much we appreciate interacting with our students in the classroom. Many students echoed this sentiment. Sharing our enthusiasm with students and harnessing their back-to-school excitement may be the top priorities as instruction resumes.

Accommodations for individual students and learning environments can improve learning for many students. Recently, the focus on accommodating students with disabilities has evolved toward the Universal Design for Learning. This approach suggests changes for a student with a specific disability also improve accessibility for other students. For example, adding video captioning to accommodate deaf students may fit the learning preferences of other students. The same concept applies to designing accommodations for both students learning remotely and those in the classroom. Over the next academic year, our classes will likely require more flexibility to accommodate a multitude of circumstances. Even if we return to full-time face-to-face instruction, there will be some students who require continued distance learning. We have a great opportunity to redesign for flexibility and to rethink how our courses can best serve the multitude of student characteristics and personal circumstances present in a classroom.

About the Authors: Erik Hanson is an Assistant Professor in the Department of Agribusiness and Applied Economics at North Dakota State University (Corresponding Author: erik.drevlow.hanson@ndsu.edu). Cheryl Wachenheim is a Professor in the Department of Agribusiness and Applied Economics at North Dakota State University.
References


