

### **Service-Learning in the Hybrid Classroom**

Nicole A. Graves  
South Dakota State University

**ABSTRACT.** The purpose of this article is to share the experience of a non-tenure track college instructor who transformed the student learning experience by redesigning two face-to-face courses with service-learning components into hybrid courses based on the Multimodal Model. The author shares unique scheduling ideas along with examples from freshman direct-service and senior project-based service-learning experiences.

*Keywords:* hybrid learning, blended learning, service-learning

---

Direct correspondence to Nicole A. Graves at [nicole.graves@sdstate.edu](mailto:nicole.graves@sdstate.edu).

### **Service-Learning in the Hybrid Classroom**

Service-learning has been a component in the traditional face-to-face classroom for decades. As a Human Development and Family Studies educator, I am deeply invested in providing students hands-on, real-world learning experiences that encourage them to make positive differences in their local communities. However, when asked to teach freshman and senior level courses in a Human Development and Family Studies (HDFS) program at a university satellite location that mainly served a non-traditional student population, I had to think about unique ways of structuring the courses. In the summer of 2009, I was introduced to hybrid/blended courses and believed these would be a good fit for students' learning needs and schedules. I also saw hybrid/blended as a format that could align successfully with course objectives and allow service-learning to remain a vital component of the student learning experience.

### **Literature Review**

The percentage of post-secondary students who complete at least a portion of their degree requirements online is on the rise. After tracking online enrollment in colleges for more than five years, Allen and Seaman (2007) reported that 3.5 million American students had taken a fully online course in 2006-2007. By 2014, nearly six million (5,750,417) students were enrolled in distance learning courses at the post-secondary level (U.S. Dept of Ed., National Center for Educational Statistics, 2016a). Online courses are more popular among post-baccalaureate students, with 32.7% of that population taking online courses as compared to 27.7% of undergraduate students. Those seeking degrees beyond the bachelor's degree are also more likely to complete their entire degree programs online: 24.9% of post-baccalaureate students took distance education courses exclusively, compared to only 12.1% of undergraduate students who chose to do the same (U.S. Dept. of Ed, 2016a).

Americans of all ages are enrolled in post-secondary institutions, with the rate of enrollment of students 25 and older projected to increase eight percent between 2015 and 2026 (U.S. Dept. of Ed., 2016b). Students over the age of 24 are often referred to as "non-traditional" students, although other variables such as race, gender, employment status, living situations, and non-degree seeking status are also used for defining this student population (U.S. Dept. of Ed., n.d.). There are several reasons why "non-traditional" students seek higher education. They may be "seeking advanced graduate degrees, completing undergraduate programs from which they dropped out when they were younger, upgrading their professional and job skills, or simply interested in life-long learning and intellectual growth" (Picciano, 2009, p. 12).

Non-traditional students come to higher learning with a unique set of circumstances and learning needs. These students are often juggling career, family, and other responsibilities and therefore prefer the flexible learning formats that online or blended/hybrid courses provide. Given the busy and complex lifestyles of these adult learners, who are often referred to as non-

traditional students, it is not surprising that they have shown a high degree of acceptance of, and even preference for, e-learning and at-a-distance study opportunities (Ausburn, 2004, p. 1).

### **Hybrid/Blended Learning**

Adult learners prefer to be self-directed, to seek information that is immediately relevant to their lives, and to highly value options and variety in learning (Ausburn, 2004). Hybrid or blended courses, which are a purposeful blend of face-to-face and online instruction designed to enhance the student learning experience (Laster, Otte, Picciano, & Sorg, 2005), have been found to meet unique needs of the non-traditional student population (Skopek & Schuhmann, 2008) and those of traditional-aged undergraduates (Mansour & Mupinga, 2007). In a study of 61 master's level students designed to investigate the challenge of meeting the needs of traditional and non-traditional students in the same classroom, non-traditional students were slightly more satisfied with hybrid/blended learning than were traditional students. Blended/hybrid formats helped mitigate the effect of conflicting student needs. The researchers concluded that bringing students together in a face-to-face learning environment for at least a portion of the course helped minimize the drawbacks inherent in a fully online course (Skopek & Schuhmann, 2008). One qualitative study of undergraduate students enrolled in hybrid courses revealed that students felt the hybrid model fit their learning style, attention span, and lifestyle (Mansour & Mupinga, 2007). There have also been notable benefits of hybrid learning in relation to student learning. In one comparison of traditional face-to-face classroom settings and hybrid settings, students in the hybrid course earned higher grades, which was used as a measure of retention of course material (Potter, 2015).

### **Service-Learning**

Service-learning is a “course-based, credit-bearing educational experience” (Bringle & Hatcher, 1995, p. 112). Service-learning separates itself from a traditional volunteer experience by having students intentionally use their skills and knowledge in their academic disciplines to address community needs and then reflect on their experience (Cress et al., 2005; Bringle & Hatcher, 1995). According to Bringle and Hatcher, service-learning allows students to “gain further understanding of course content, a broader appreciation of the discipline and an enhanced sense of civic responsibility” (p. 112). Therefore, cognitive, affective, and psychomotor processes as defined by Bloom's Taxonomy (Huitt, 2011) are recognized as important to the service-learning experience.

**Types of service-learning.** There are two distinct types of service learning: direct service and project-based. In direct-service, students work in partnership with a community organization to meet the direct needs of persons who seek support from that organization. Project-based service learning is unique because students set a goal and work throughout the semester to develop a project that will ultimately lead to achievement of that goal (Cress et al., 2005).

Meaningful service-learning that is purposefully tied to course learning objectives can transform the student learning experience. Students have the opportunity to grow professionally and personally. Students benefit from development of leadership skills, of networking opportunities, and of community partnerships. When students have a chance to fully immerse themselves in the community they begin to see how information learned in class can be applied to solve real-world problems. Theories become less abstract as students begin to observe how theories can help explain what they observe in their surroundings and use them to guide professional decision making. Many students enjoy the opportunity to give back to the community and, in turn, gain a better sense of how to meet diverse needs of the local community (Cress, et al. 2005).

### **Course Redesign**

The process of redesigning a freshman-level course and a senior-level course for non-traditional students began with the question, “Is there a better way to offer undergraduate coursework for non-traditional students to efficiently and effectively maximize institutional space, student time, and learning outcomes?”

From the perspective of higher learning institutions, hybrid and online courses are more cost effective to offer than are traditional courses (Lorenzetti, 2004; Mansour & Mupinga, 2007); they also free up classroom space and provide access to a wider audience via technology (Mansour & Mupinga, 2007). Students have reported benefits of hybrid courses, such as flexibility in class schedules and instructor availability (Lorenzetti, 2004). Hybrid courses are also inherently student-centered because they allow the instructor to “flip” the classroom by providing students with information prior to class, so that in-class time can be used for more in-depth processing activities (Lorenzetti, 2004; McLaughlin et al., 2014).

### **The Multimodal Model**

Picciano (2009) proposed a Multimodal Model approach to learning that could serve as a guiding structure for hybrid/blended courses. The model is based on the premise that today’s post-secondary learners represent different generations, different learning preferences, and different personalities. In response to the diversity of learning needs, post-secondary instructors should design courses to include face-to-face learning and online technologies. According to Picciano, “A major benefit of multiple modalities is that they allow students to experience learning in ways in which they are most comfortable while also challenging them to experience and learn in other ways as well” (p. 7).

Learning objectives for each course should drive the instructional approaches that faculty take. Because students learn in a variety of ways, this calls for application of multiple approaches. The Multimodal Model outlines several components of instructional design that faculty should consider when developing hybrid courses: content, social/emotional, dialectic/questioning, synthesis/evaluation, collaboration/student generated content, and reflection.

**Content.** Course content is at the foundation of classroom learning experiences. The hybrid model allows for content that was once shared only in classroom settings via lectures to be accessible in multiple formats. Course Management Systems allow instructors the opportunity to share content with students before class, during class, and after class. Student learning has been noted to occur regardless of the format (e.g., traditional lecture, virtual, e-lecture) in which content is distributed (Stephenson, Brown, & Griffin, 2008). One benefit of using a hybrid format is that it allows for the possibility of “flipping” the classroom by moving instructional content online, thus freeing up instructors to have more time for one-on-one engagement with individual students (Lorenzetti, 2004; Roehl, Reddy, & Shannon, 2013; McLaughlin et al., 2014).

**Social/Emotional.** According to Picciano, “instruction is not always just about learning content or a skill but is also about supporting students socially and emotionally” (2009, p. 14). Faculty charged with the task of preparing the next generation of Human Development professionals not only need to make sure that students have the appropriate knowledge base and skill sets, but also that students embody affective characteristics expected of such professionals. Human Development professionals are held to a standard of being good judges of character, generous, humble, compassionate, and empathetic (Fowers, 2008; Goddard & Marshall, 2015).

**Dialectic/Questioning.** Asking questions is an art form in which teachers carefully craft questions not only to elicit information about what students currently know, but also to challenge students to think beyond their current levels of understanding. In the hybrid classroom, rich discussions that used to take place only in face-to-face classroom settings can span more time and space because of the online environment. Synchronous and/or asynchronous online discussion threads make it possible to extend student conversations beyond traditional classroom settings (Picciano, 2009). Pair-and-share activities in which students work together to answer discussion questions or solve problems are student-centered and encourage interactive learning in classrooms and online environments (McLaughlin et al., 2014). It is important that instructors maintain a presence in classroom discussions (either online or face-to-face). Students’ abilities to adequately and accurately respond to discussion questions are enhanced when discussion with fellow students is coupled with instructor explanation (Smith, Wood, Krauter, & Knight, 2011).

**Synthesis/Evaluation.** Instructors assess student learning and their ability to synthesize and apply content in multiple ways including but not limited to papers, tests, portfolios, and projects. Hybrid classrooms allow for assessment of student learning to occur in face-to-face as well as online settings. A clear benefit of collecting assignments digitally is that it can allow for more timely feedback since instructors do not need to wait until the next class period to communicate with students about assessment (Picciano, 2009).

**Collaboration/Student Generated Content.** Students benefit from being active learners who can engage with fellow learners who have different skills sets, knowledge, and perspectives. Cooperative/collaborative learning has been shown to enhance student comprehension by engaging higher order thinking skills. Students also learn to work together in an interdependent

fashion while simultaneously teaching and learning from others (Johnson & Johnson, 2006; Alstrom, 2011). A benefit of the hybrid format is that students can meet fellow classmates in face-to-face settings and establish a shared sense of purpose for group collaboration. The beauty is that once this relationship is established, much of the group processing can be moved to the online environment.

Many factors influence effectiveness and efficiency of group learning. As defined by Johnson and Johnson (2006), essential elements of effective teams are (a) positive interdependence, (b) individual and group accountability, (c) promotive interaction, (d) collaborative skills, and (e) group processing. Instructors cannot assume students are skilled in these five elements and should teach the process of teamwork for the best learning outcomes (Alstrom, 2011).

Group size also impacts collaboration. According to DeLozier and Rhodes (2017), the issue of group size is not yet resolved. However, Michaelson and Sweet (2011), recommend groups of five to seven members when groups must address challenging intellectual tasks.

A student-centered classroom not only allows for teachers to share information, but also for students to generate content. McLaughlin et al. (2014) applied a “learning-by teaching” model (Carberry & Ohland, 2012) by having groups of four to five students prepare summaries of class readings and create presentation materials. Students not only led in-class discussions but were also responsible for answering other students’ questions. This instructional strategy aligned with the old adage “the best way to learn something is to teach it”.

**Reflection.** Reflection is the process of deriving meaning and knowledge from experience. The role reflection plays in service-learning is rooted in theories of John Dewey and David Kolb (Bowen, 2007). As noted previously, reflection is a key component of the service-learning experience (Bowen, 2007; Cress et al., 2005). The process of reflection encourages students to critically evaluate community learning experiences in the context of concepts and theories they are learning in class.

### **Online Components**

Since hybrid courses include an online component, principles of good online course design also apply. According to Garrison, Anderson, and Archer (2000), online learning occurs at the intersection of social presence, cognitive presence, and teaching presence, which supports deep and meaningful learning. In other words, effective online learning requires development of an online community. The social/emotional aspects of learning that Picciano (2009) pointed to in his Multimodal Model supports this idea of a learning community. Instructor presence in face-to-face and online discussions and group processing can enhance student learning (Smith, Wood, Krauter, & Knight, 2011).

### **Applying the Multimodal Model**

When I was introduced to hybrid teaching, I was teaching an introductory freshman level course in Human Development and Family Studies (HDFS 150) and a senior capstone course (HDFS 441) to non-traditional students. The institution where I taught sought solutions for course offerings that allowed efficient use of classroom space and students' time because most students worked during the day and therefore required evening classes.

I embraced the Multimodal Model and used it as the guiding force in redesigning both courses. From my teaching experience with 100% online courses, I took lessons I learned about the importance of establishing a supportive learning community and wove them throughout my course redesign. The first course I redesigned was a freshman-level course. Once I learned more about the Multimodal Model, I applied the same concepts to redesigning a senior-level course. Along with integrating the Multimodal Model, there were adjustments made to the course schedules and in plans to orient the students to the hybrid design.

“Education is a social process. Education is growth. Education is a process of living and not preparation for future living” (Dewey, 1897, p. 77-78). As an educator, I am charged with the task of assessing and evaluating students' professional growth via educational, real-world experience such as service-learning. Following the Understanding by Design<sup>®</sup> (UbD) framework (Wiggins & McTighe, 2011) and the MultiModal Model (Picianno, 2009), planning courses and curriculum should begin with the course objectives. In other words, instructors should begin with the end in mind and identify what they want students to be able to do at the end of lessons, units, and/or semester-long courses.

Some course objectives that already existed for the face-to-face version of the freshman class were (a) become familiar with roles of professionals in HDFS through observation, participation (service-learning), and analysis; (b) increase ability to make professional contacts; (c) increase knowledge of career choices available in HDFS. Two objectives for the senior capstone course were to (a) develop professional ethics and skills such as leadership, working in teams, volunteerism, and professional communication; (b) integrate one's education across courses with experience-based learning/practice.

Following the UbD framework, once course objectives were identified the next step was to determine the assessment and the last was to determine the teaching strategies (Wiggins & McTighe, 2011). I knew I wanted to be able to assess student learning in all domains of learning: cognitive, affective, and psychomotor (Huit, 2011). Based on course objectives, it was also clear that service-learning experiences would need to be retained when the classes were redesigned. Journaling is a vital required part of the service-learning experience because it helps students cognitively and affectively process their thoughts and feelings about their experiences (Cress et al., 2005). Therefore, I knew journaling would be an important part of assessment for both courses. Psychomotor domains of development were associated with students' abilities to synthesize content learned in classes and directly apply their knowledge and skills sets to meet

community needs. In addition, psychomotor skills could be evaluated by observing students actually completing service-learning projects and interacting with community partners. Cognitive domains of learning were addressed via course content, questioning, and evaluation. In addition, cognitive processes were assessed by having students explicitly identify how information they learned in other college courses was applied during their service-learning experiences.

The last step of the UbD framework was to decide on the best form of service-learning experiences based on unique needs of my freshman and senior students. Based on course objectives and anticipated skill sets related to teamwork, it was determined that freshmen would complete direct service-learning and seniors would complete project-based service learning.

The freshman-level HDFS 150 course was designed to give students the opportunity to complete 30 hours of direct-service, service learning in the local community. Along with service-learning experience, students in the freshman-level class explored career opportunities and developed starter professional philosophy statements, professional portfolios, and résumés. Students also learned how to analyze journal articles and utilize American Psychological Association (APA) style. Last but not least, students explored ethical scenarios and considered the importance of professional conduct.

The Multimodal approach was used in the freshman introductory class in several ways. Students watched short video clips about the impact they can have on the lives of others in the helping profession, which ties into the *social/emotional* component of the hybrid model. Students also wrote in journals about their feelings about their service-learning experience, which addressed the importance of *reflection*. Students *generated some of the course content* by investigating career opportunities and posting information they gathered to the shared class wiki and/or discussion board. Students were asked *questions* and encouraged to ask their own questions via online course discussions. Students completed journal entries that addressed several components of the Multimodal approach and wrote a final reflection to tie together their learning experiences from the semester long course, which ultimately addressed the importance of *synthesis/evaluation*.

The senior level HDFS 441 course was developed as a professional capstone course. Students were encouraged to *synthesize* what they learned in all their previous HDFS courses and to focus on making the transition from college to career. This course gave students many opportunities to *reflect* on how they had grown as individuals and professionals over the course of four or more years. Students in this course participated in a group, project-based service-learning experience. The course began with exploration of local community needs. Once students identified community needs they wanted to address, they sought a partner organization for collaboration. Students were divided into teams of no more than six members for the most efficient *collaborative* experience. Students were directed to clearly assign roles to each group member and develop projects that would ultimately address the community needs they had identified. Students had to clearly link what they learned in previous courses to the development



of their projects. Past projects focused on educating elementary aged children about healthy nutrition, the dangers of bullying, character, and team work. Students partnered with the Girl Scouts and with a couple of after-school programs in the local area.

In relation to the Multimodal Model, the senior students generated course content, reflected, collaborated, evaluated, and discussed. Structurally speaking, the use of online technology created opportunities to meet face-to-face with this group of students about every other week. When we were not meeting face-to-face, students collaborated with their groups via online discussion boards and group lockers. Discussion boards allowed for synchronous and asynchronous conversation with group members, while group lockers served a course management system tool that allowed students to share information (e.g., journal articles and drafts of documents) collected for the project. Students also completed reflection journal entries and various assignments related to their transition from college students to HDFS professionals.

### **Adjusting the Schedule**

Traditionally, students in face-to-face courses would spend from anywhere between one to three days per week in physical classrooms. Within the hybrid structure, students spend less time in classrooms but still learn the same amount of material. This flexibility in scheduling was a benefit to students. Switching two of my introductory HDFS courses (150 and 241) to a hybrid format allowed me to teach two classes during the same time frame and in the same classroom. Below, I explain how I achieved this.

The structure of the HDFS 150 class was designed for students to attend face-to-face class sessions for the first six weeks of the semester. During the last 10 weeks of class, students were scheduled to be in the community completing their 30 hours of direct service-learning and submitting reflection journal entries via the online class platform. This structure also allowed students enrolled in HDFS 150 to start another class, HDFS 241, during the seventh week of the semester. HDFS 241 included three hours of face-to-face course time per week for 10 weeks along with Internet supplement hours. Therefore, two classes were taught using the same classroom and same time-frame, which was an efficient use of classroom space, resources, and students' time (see Figure 1). Since most of the students who enrolled in HDFS 150 also chose to take HDFS 241 during the same semester, there was an additional opportunity for them to be exposed to HDFS content, research, and theories they could apply to service-learning experiences and reflections.

	Weeks 1-5	Weeks 6-16
HDFS 150: Early Experience in Human Development	Face-to-Face classes Th 5:00-6:45 pm Focus on: introduce the major, ethics, philosophy, find service-learning location(s), participate in class activities, etc.	Online only Students spend this time completing their 30 hours of service-learning and submit their journals (3 @ 10 hours each) to the course management system.
HDFS 241: Family Relations	No Class	Accelerated hybrid begins Th 4:00-6:45 pm Students spend 3 hours in class and additional time during the week online.

\*Note: The hybrid schedule allows students to take 2 courses in the semester, during the same night, same time, and in the same classroom.

Figure 1. Hybrid Schedule Allowed For Efficient Use of Student Time & Classroom Space.

In regard to re-design for the senior level course (HDFS 441), I looked back at course objectives and considered student needs. The course required students to work in collaborative teams to identify community needs, find community partners, and develop programming to meet those needs. Based on objectives of the course, which included a high level of teamwork, I ultimately decided that an every-other-week, face-to-face format was most appropriate. (See Figure 2).

	Weeks 1-2	Week 3	Week 4	Week 5	Week 6	Week 7-9
HDFS 441	F2F – Intro, Identifying Community Needs, Guest Speakers	Online Service-learning discussion, Individual Project 1	F2F – Individual Project 1 In-class presentation	Online – Transition Journal #1 SL Group plans	F2F – SL Planning & Draft 1 Content activities	Online – Individual Project 2, Transition Journal #2
	Week 10	Week 11	Weeks 12-13	Week 14	Week 15	Week 16
HDFS 441	F2F – Individual Project 2 collaboration	Online – SL planning, Transition Journal #3	F2F- Group Project planning and presenting	SL project onsite!	F2F- Group presentations	Online – Final Reflect

\*Note: The schedule should be designed with course objectives in mind. (This course happens to meet face-to-face 50% of the time)

Figure 2. Hybrid Scheduling Blends Online and Face-to-Face Learning Experiences

### Orienting the Students

The best piece of advice I received while learning about the hybrid model and working to redesign my classes came from a member of the instructional design team at my university. He suggested I spend adequate time on the first day of class explaining the “new” course design to students. He also recommended that I include information about the hybrid design in my syllabus. The following are statements I developed to include on the first page of my syllabus.

- ***What is a hybrid class?*** Hybrid classes are a purposeful blend of face-to-face and online instruction.
- ***How are hybrid classes different than traditional face-to-face classes?*** As a student in a hybrid class, you will spend less time than in a traditional classroom. However, you can expect the same rigor and requirements of a traditional face-to-face class. The major difference is that instead of spending all of your time in the classroom, you will be spending at least half of your time engaged in online learning experiences.
- ***What types of learning experiences can I expect?*** A Multimodal Model of instruction will be utilized. Student are expected to be active learners both inside and outside of the classroom. Learning objectives will be met through a variety of learning experiences to include (but not limited to): interactive slide presentations,

discussions (online and face-to-face), hands-on activities, student-generated content and/or activities, reflection, collaborative work, and service-learning experiences.

- ***Will I need special skills to succeed in a hybrid class?*** Students enrolled in a hybrid class should learn to utilize Desire to Learn (D2L) as it is the course management system that will be used for the online components of this course.

Along with these statements, students received information about how to log in to their D2L courses and contact university technology help desk staff if they encountered technical difficulties. Providing this information in plain language was invaluable to helping explain how these classes would be different from previous classes that students had taken.

### Discussion

The process of converting traditional face-to-face classes to hybrid courses was definitely a journey. When I embarked on this journey, I underestimated the amount of work it would take. One lesson I learned quickly was that it is imperative to have the entire course planned in advance because there is little room for error; the scheduled face-to-face times are set and cannot be adjusted. It took a while for me to adapt, since I was used to being able to say something like, “We ran out of time today, but we will pick up where we left off during the next class period” when I taught face-to-face classes. The hybrid schedule was less flexible because I had to be sure students met the learning objectives of face-to-face class sessions so they could succeed with online work and vice versa. Aligning course objectives with the course schedule and considering which objectives would be best met in the face-to-face environment versus the online environment posed a unique challenge. The Multimodal Model was a useful construct to follow because it encouraged me to lead my design with clearly defined learning objectives. From there, I had to tier the learning objectives so that they built on one another in a constructivist manner.

When I began teaching hybrid courses, it was a new concept at my university and none of my students had experience in taking hybrid courses. There was definitely a learning curve for all those who were involved but preparing courses well in advance and taking time to orient students to course design and learning experiences helped tremendously.

Due to positive responses on course evaluations and efficient use of classroom time and space, the administration encouraged me and other faculty to convert more course offerings to hybrid courses. I offered the courses outlined in this paper in the hybrid format for seven years before accepting a new teaching position. During that time, I found that courses with service-learning components lend themselves particularly well to a hybrid structure. The students and I appreciated the flexibility in the course schedule and the ability to communicate in face-to-face class sessions and online. Time away from the classroom also allowed for opportunities to collaborate more effectively with community partners by visiting actual agencies and programs

in the local community. Non-traditional students enjoyed the flexibility that the hybrid schedule allowed because many of them were juggling school, work, and family responsibilities.

This paper outlines reasons for redesigning courses using the Multimodal Model and the process of designing hybrid courses. There needs to be special attention to learning objectives, scheduling, and orienting students to hybrid learning. Future studies should examine barriers to offering hybrid courses that faculty may face and outcomes for student learning.

### **Conclusion**

In summary, as the post-secondary student population continues to change, instructors will face the task of adjusting their teaching styles and methods to accommodate new learners. Hybrid classes have been recognized as a potential solution by making college level courses more accessible to non-traditional student populations. Hybrid courses are also more cost effective for higher learning institutions because they can allow for more efficient use of classroom space and faculty time. When designing hybrid courses, course learning objectives should steer the decision making process. The Multimodal Method can be particularly useful when designing hybrid courses with service learning components because the method supports the vital components of service learning, such as reflection, social/emotional aspects of learning, collaboration, and student generated content.

---

Nicole A. Graves is an Assistant Professor of Family and Consumer Sciences Education in the Department of Teaching, Learning, & Leadership at South Dakota State University, Vermillion, SD 57069.

### References

- Allen, I. E., & Seaman, J. (2007). *Online nation: Five years of growth in online learning*. Retrieved from [http://www.sloan-c.org/publications/survey/pdf/online\\_nation.pdf](http://www.sloan-c.org/publications/survey/pdf/online_nation.pdf)
- Alstrom, C. (2011). Why student group work does not work and what can be done about it. American Association of Family and Consumer Sciences Webinar. Retrieved from [www.aafcs.org](http://www.aafcs.org)
- Ausburn, L. (2004). Gender and learning strategy differences in nontraditional adult students' design preferences in hybrid distance courses. *The Journal of Interactive Online Learning*, 3(2), 1-17. doi 10.1.1.539.4714.
- Bowen, G. (2007). Reflection in service-learning. Barbara A. Holland Collection for Service Learning and Community Engagement at Digital Commons @ UNO. Retrieved from <https://digitalcommons.unomaha.edu/cgi/viewcontent.cgi?article=1023&context=slceeval>
- Bringle, R. G., & Hatcher, J. A. (1995). A service-learning curriculum for faculty. *Michigan Journal of Community Service Learning*, 2, 112-122.
- Carberry, A. R., & Ohland, M. W. (2012). A review of learning-by-teaching for engineering educators. *Advances in Engineering Education*, 3, 1-17.
- Cress, C. M., Collier, P. J., Reitenauer, V. L., & Associates (2005). *Learning through serving: A student guidebook for service-learning across the disciplines*. Sterling, VA: Styles.
- DeLozier, S. J., & Rhodes, M. G. (2017). Flipped classrooms: A review of key ideas and recommendations for practice. *Educational Psychology Review*, 29, 141-151. <https://doi.org/10.1007/s10648-015-9356-9>.
- Dewey, J. (1897). My pedagogic creed. *The School Journal*, LIV(3), 77-80.
- Fowers, B. J. (2008). From continence to virtue: Recovering goodness, character unity, and character types for positive psychology. *Theory & Psychology*, 18, 629-653. doi: 10.1177/0959354308093399
- Garrison, D. R., Anderson, T., & Archer, W. (2000). Critical inquiry in a text-based environment: Computer conferencing in higher education. *The Internet and Higher Education*, 2, 87-105. [https://doi.org/10.1016/S1096-7516\(00\)00016-6](https://doi.org/10.1016/S1096-7516(00)00016-6)
- Goddard, W., & Marshall, J. P. (2015). The art of family life education: Getting our hearts right. In M. J. Walcheski & J. S. Reinke (Eds.), *Family life education: The practice of family science* (9-16). Minneapolis, MN: National Council on Family Relations.

- Huitt, W. (2011). Bloom et al.'s taxonomy of the cognitive domain. *Educational psychology interactive*. Valdosta, GA: Valdosta State University. Retrieved from <http://www.edpsycinteractive.org/topics/cognition/bloom.html>
- Johnson, D. W., & Johnson, R. T. (2006). *Joining together: Group theory and skills* (9<sup>th</sup> ed.). Boston, MA: Pearson.
- Laster, S., Otte, G. Picciano, A. G., & Sorg, S. (April 18, 2005). *Redefining blended learning*. Presentation at the 2005 Sloan-C Workshop on Blended Learning, Chicago, IL.
- Lorenzetti, J. P. (2004, November 1). For quality and cost effectiveness, build a hybrid program. *Distance Education Report*, 8(21), 1-2,7.
- Mansour, B. E., & Mupinga, D. M. (2007). Students' positive and negative experiences in hybrid and online classes. *College Student Journal*, 41(1), 242-248.
- McLaughlin, J. E., Roth, M. T., Glatt, D. M., Gharkholonarehe, N., Davidson, C. A., Griffin, L. M., & Mumper, R. J. (2014). The flipped classroom: A course redesign to foster learning and engagement in a health professions school. *Academic Medicine*, 89, 236-243.
- Michaelson, L. K., & Sweet, M. (2011). Team-based learning. *New Directions for Teaching and Learning*, 128, 41-51.
- Picciano, A. (2009). Blending with purpose: The multimodal model. *Journal of Asynchronous Learning Network*, 13(1), 7-18.
- Potter, J. (2015). Applying a hybrid model: Can it enhance student learning outcomes? *Journal of Instructional Pedagogies*, 17, 1-11.
- Roehl, A., Reddy, S. L., & Shannon, G. J. (2013). The flipped classroom: An opportunity to engage millennial students through active learning strategies. *Journal of Family and Consumer Sciences*, 105, 44-49.
- Skopek, T. A. & Schuhmann, R. A. (2008). Traditional and non-traditional students in the same classroom? Additional challenges of the distance education environment. *Online Journal of Distance Learning Administration*, 11(1), 22.
- Smith, M. K., Wood, W. B., Krauter, K., & Knight, J. K. (2011). Combining peer discussion with instructor explanation increases student learning from in-class concept questions. *CBE-Life Sciences Education*, 10, 55-63.

- Stephenson, J. E., Brown, C., & Griffin, D. K. (2008). Electronic delivery of lectures in the university environment: An empirical comparison of three delivery styles. *Computers & Education, 50*, 650-651
- U.S. Department of Education, National Center for Education Statistics. (n.d.). *Non-traditional undergraduates: Definitions and data*. Retrieved from <https://nces.ed.gov/pubs/web/97578e.asp>
- U.S. Department of Education, National Center for Education Statistics. (2016a). *Fast facts: Distance learning*. Retrieved from <https://nces.ed.gov/fastfacts/display.asp?id=80>
- U.S. Department of Education, National Center for Education Statistics. (2016b). *Fast facts: Enrollment*. Retrieved from <https://nces.ed.gov/fastfacts/display.asp?id=98>
- Wiggins, G. & McTighe, J. (2011). *The Understanding by Design guide to creating high-quality units*. Alexandria, VA: ASCD.