

## **Virtual Learning Environments in Higher Education: Online Pedagogical Techniques Implemented in Accredited American Teacher Education and Nursing Programs**

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### **Abstract**

The purpose of this paper is to share pedagogy implemented in virtual learning environments in American professional programs in higher education. Practical applications utilized in implementation of online course models in accredited teacher education and nursing programs at both the undergraduate and graduate levels are highlighted along with strategies for developing collaborative online learning communities that foster meaningful online discussion. Research on best practices in distance learning instruction to support pedagogy utilized in multiple virtual learning environments and suggestions for managing online learning communities in ways that promote mutual respect are presented. Authors share challenges faced in creating both hybrid and complete distance learning course modules, along with lessons learned. Educational technologies and multimedia applications utilized in the programs are presented. Although recommendations of practical applications and instructional strategies for virtual learning environments stem from professional programs in teacher education and nursing, techniques discussed may be adapted for use in other fields of study.

### **Introduction**

The variable intricacies of modern learning environments in higher education warrant consideration of use of educational technologies to enhance the teaching-learning process to better meet the needs of digital learners. Educators' willingness to explore new modes of pedagogy, including technology integration, is vital to connecting with learners living in a highly digital society. Effective communication necessary for meaningful learning can be constrained without use of technology. Requiring students to shift gears from their lives as digital learners to adapt to learning environments without technological components creates an instant and unnecessary barrier between the student and the instructor. With the rapid onset of new advances in technology, how might educators connect with students and find some common ground with learners on this front? Use of virtual learning communities can bridge the technological divide. For the purposes of this manuscript, the terms virtual learning communities and online learning communities are used interchangeably.

Technology has massive potential to transform the processes of teaching and learning, but not necessarily replace the uniquely multifaceted role of the teacher. Commonly, a disproportionate amount of educators avail themselves of the wealth of resources at their disposal to help extend learning beyond the confines of the classroom walls and constraints of the allotted class meeting time. A natural and potentially seamless link for educators, particularly those who might be new to the use of educational technology, is implementation of virtual learning communities to foster high quality discussion and collaboration. Traditional methods of skillful questioning designed to promote critical thinking and deep reflection can

merge with techniques that utilize newer modes of technology. One step toward that end is the use of virtual learning communities to support course content online or to serve a complete distance learning models.

The suggestions for use of virtual learning communities presented throughout this paper are based on professors' reflections on self-efficacy, along with student testimonials. The majority of experiences shared stem from teaching and learning experiences in virtual learning environments during the past five years from a small, private, liberal arts college in New York City that offers graduate professional programs in Business, Education and Nursing. The college requires students to complete three intensive and mostly interdisciplinary learning communities, each linked with an experiential learning practicum for civic engagement. Therefore, the development of online learning communities in professional programs was a natural extension of students' comprehensive experiences with face-to-face learning communities.

Additional recommendations are based on experiences with students from another institution of higher education with an established online program. The virtual learning experiences presented range from undergraduate and graduate hybrid learning course modules in teacher education and nursing, to full distance learning models. The hybrid models include complete face-to-face regularly scheduled courses with additional online components and others with blended face to face and online components that replaced selected in class sessions, whereas the full distance learning models did not entail any in person class sessions. Most full distance learning formats were used in condensed summer sessions only, while others were implemented in full semester courses.

### **Virtual Learning Environments in Professional Programs**

Recommendations for careful consideration of pedagogical choices by instructors teaching in virtual learning environments have been a recurrent theme across the current literature on the effectiveness of online pedagogy. Rosenberg (2001) suggested strategies for delivering learning in the digital age that included developing a receptive culture toward e-learning and technology, communicating its value, and leading through the change. Jackson, Jones & Rodriguez (2010) identified faculty actions that positively influenced student satisfaction in online learning environments, such as clear directions, accessibility of the instructors, timeliness, enthusiasm for student learning, and creation of positive learning environments. The benefits of well-structured versus ill-structured online asynchronous learning environments were reported by Zheng, Flygare & Dahl (2009). Examination of emerging quality standards in online distance education by Endean, Bai & Du (2010) revealed that the mere existence of

quality standards in online education is insufficient without rigorous application of such standards for improvement of students' learning experiences.

Duncan (2005) suggested that to comprehend the complexities of online teaching, instructors should have firsthand experience as learners in an online environment. Similarly, Lauria and Preskill (2011) stressed the importance of online instructors' prior experience as online learners as a beneficial factor toward effective pedagogy in virtual learning environments. Additionally, they identified three essential domains of behavior for successful collaboration in online learning communities. They reported that a democratic learning environment, collaborative climate and a sense of mutual accountability led to high levels of satisfaction for both students and faculty in online learning communities.

Results of technology integration implemented in professional programs in higher education, specifically teacher education and nursing, also have been reported. A case study of online education for practicing professionals revealed that most participants in the graduate level students sample appreciated the extra time for reflection provided by the asynchronous discussion element Duncan (2005). Ryman, Burrell, Hardham, Richardson & Ross (2009) noted that as learners establish connections with one another, they discover the value of their own contributions within the group and how those contributions enhance the collective group knowledge.

Duncan and Barnett (2009) stated the need for pre-service teacher education programs to prepare the next generation of teachers with the skills required to teach 21<sup>st</sup> century students with a variety of media that accommodate a diversity of learning styles. The same call for supporting candidates seeking teaching certification was stressed by Lambert and Cuper (2008) who acknowledged the challenges of teacher preparation in light of increasing demand for authentic use of educational technologies in today's classrooms as teacher educators seek new ways to integrate digital learning. Robinson and Latchem (2003) expressed concern regarding the demands on new teachers to learn how to use new teaching technologies due to the new educational possibilities innovative technologies have created. Through comparison of students' learning styles in online distance learning modules and equivalent on-campus courses, Diaz & Cartnal (1999) examined students' learning styles and reported that online students responded well to collaborative activities when the instructor provided enough structure and guidance, and did not assume the online students would be self-directed and autonomous.

### **Learning Styles**

Research on learning-style responsive pedagogy reported the effectiveness of aligning instructional techniques with students' learning styles in traditional classroom environments.

Grasha (1996) defined learning styles as “personal qualities that influence a student’s ability to acquire information, to interact with peers and the teacher, and otherwise to participate in learning experiences” (p. 41). Similarly, Dunn and Dunn (1998) maintained that learners have individual learning-style strengths and preferences that affect how well they concentrate on, process, internalize and remember new and difficult information. Learning style also can be classified simply as a preferred way of using one’s abilities that varies to suit different tasks and situations (Sternberg 2003). It was noted by Dunn and Griggs (2000) that concentration occurs differently for different people as dictated by a variety of stimuli, which creates the need for educators to identify individuals’ learning styles to trigger their concentration, energize their processing, and to increase their long-term memory. Additionally, learning style research findings in higher education professional programs support the need for consideration of nursing students’ learning styles (Hermann 2010). In alignment with such research, Dunn & Griggs (2000) stressed the need for a shift in focus from the *content* of what is to be learned to the individual learning style characteristics of students – which should dictate the *process* of learning. More research on learning-style responsive instruction was conducted by Honigsfeld & Schiering (2004) who described a variety of strategies that accommodate diverse learning styles in teacher education.

Further experimental research with diverse college student populations documented significantly higher achievement in professional programs. Positive effects of learning-style presentations of course content in ultrasound and anatomy on the achievement and attitudes of allied-health college students were reported by Miller et al. 2000-2001. Similarly, O’Hare (2009) noted an increase in achievement and more positive attitudes about learning when nursing students’ learning styles were accommodated. Likewise, Rundle, Honigsfeld & Dunn (2002) reported that when college students utilized suggested learning-style responsive approaches, they gradually honed and became adept at strategies that enhanced their communication, concentration, and team interactions.

As a natural extension of acknowledgement and accommodation of students’ learning styles in curriculum design and pedagogy, educators need to critically reflect on their teaching styles. Honigsfeld and Schiering (2004) have documented that when teachers have the opportunity to reflect on their teaching practices, they developed (a) a better understanding of the teaching process, (b) stronger pedagogical skills, and (c) improved attitudes toward the teaching-learning process and their diverse students. Similarly, Harr, Hall, Schoepp, and Smith (2002) described the need for both teachers and students to recognize that they perceive, process, and communicate information in unique ways. Such a belief system is crucial to the establishment of an optimal instructional environment conducive to quality teaching and learning.

The transition from traditional teaching modes of instruction in higher education, predominantly comprised of lecture style direct instruction, to incorporation of technological enhancements to support the teaching-learning process creates the need for careful attention to students' learning styles. In light of the increased use of technological applications in the learning process, Zheng, Flygare, and Dahl (2009) stressed the importance of educators' understanding of relationships among learners' cognitive styles and their interaction with different instructional strategies utilized in online learning. In the online teaching realm, it becomes even more important for instructors to acknowledge students' diverse learning styles and select corresponding teaching strategies to respond to preferred modes of learning due to the lack of a face to face element. Class size also has an impact on learning in virtual environments. Burrell, Billings, Brownrigg, Skiba and Connors (2009) noted that the literature suggests that as class size increases, the challenges for promoting active learning, ensuring interaction and dealing with students' diverse learning needs increase.

### **Online Learning Communities**

Collaborative learning communities, both traditionally designed and electronically formatted models, can serve as powerful and highly effective vehicles for enhancing the processes of teaching and learning. Lauria and Preskill (2011) found that when these two models are combined into a single and cohesive educational experience, the benefits for learners were multiplied. The term *learning communities* can be defined in several ways ranging from professional learning communities of scholars, to student learning communities organized around a particular theme or course of study, or even communities of like-minded individuals supporting mutual causes, just to name a few. "Learning can be profoundly and personally transformative when it occurs within a community" (Ryman et al. 2009, p. 32). Similarly, Light (1992) reported that students who grow the most academically, and who are the most satisfied, organize their time to include interpersonal activities with faculty members and fellow students built around substantive academic work. Finally, establishing learning as the primary focus and nurturing a culture that supports and values the participants' learning through respectful relationships, are key components for developing a successful, collaborative hybrid online learning community.

Creating virtual learning environments online allows instructors to establish some very important learning conditions appropriate for students with a variety of diverse learning styles. Lauria and Preskill (2011) recommended the use of online learning communities for helping students come together as a cohesive group through which learners can reap several benefits, including developing a sense of belonging through identifying common purpose, thriving on intellectual stimulation, and honing critical thinking skills.

Online learning communities can serve as appropriate virtual learning environments for students whose learning styles are not best suited for the traditional classroom setting. Learners raised in a digital age often have to adapt to less preferred traditional learning environments. Additionally, some established pedagogical techniques and teaching tools utilized in prior generations may not be appropriate for modern students due to effects of coming of age in the technology era. Although digital learners might perform better in an online format, they still need to learn vital skills taught in more traditional class settings. Therefore, by combining the benefits of an online learning community with the strengths of more traditional classrooms, a highly effective hybrid virtual learning environment can be designed to support an otherwise struggling learner.

The use of hybrid online learning communities that combined both online and face to face learning to support existing courses was successful in differentiating instruction in professional programs while simultaneously allowing students with limited technological proficiency to improve their technology-related skills. This additional modeling of effective use of technology and differentiated instruction helped prepare teacher candidates to do the very same with young learners in their own future classrooms. More important is the realization that both the classroom and online learning environments are now filled with students who are from varied generations with a wide range of technological proficiency.

### **Multigenerational Learners: Four different generations and learning characteristics**

In nursing education, the faces of the students in the classroom are changing. There is a generational transformation taking place at a very rapid pace; one that educators must keep up with to be able to engage the broad variety of thinkers in the classroom at the same time (Table 1). According to Clipper (2012) both Generation Y students, also known as Millennials (born 1982-2000) and Generation X students (born between 1961 and 1981) are now attending classes together and are being taught by a large number of Baby Boomer faculty (born between 1943 and 1960).

Faculty need to be comfortable teaching with and using technology in the classroom. Baby Boomer students have had to adapt to the use of Information Technology (IT) in their classrooms, yet Generation X and Y students are more than comfortable navigating systems. The American Nurses Association (ANA), in the Scope and Standards of Nursing Informatics, maintain that all nurses need computer and information literacy (American Nurses Association 2008). The ANA has begun this process of identifying informatics competencies for nursing education for both nursing generalists and informatics specialists. Integration of technology is now a large part of the academic faculty role and good communication with students and college IT staff is key to engaging a multi-generational classroom.

Table 1. Characteristic of the 4 Generations

Generation	Birth Year	Proportion of Nursing Workforce	Characteristics
Traditionalists	1925-1942	5%	Dedicated, hard-working, loyal
Baby boomers	1943-1960	40%	Optimistic, productive, workaholic
Generation Xers	1961-1981	40%	Cynical, independent, informal
Millennials	1982-2000	15%	Confident, impatient, social

Source: Clipper 2012. Understanding the generations. In *The Nurse Manager's Guide to an Intergenerational Workforce*. Indianapolis, Ind. Sigma Theta Tau International; 2012: 17-50.

Along with nursing students adapting to the use of web-based, hybrid or full online technology, there are many nurse faculty who have been modifying their teaching practices to include these new technologies. According to the National League for Nursing (NLN), the nurse educator demographics indicate that there is a very high percentage of Baby Boomer educators (ages 46-60) in all ranks of college educators (The NLN Annual Survey of Schools of Nursing, June 2013). Along with clinical simulation, the use of hybrid and full online courses in nursing education has becoming a more integral part of the nursing education landscape.

### **Educational Technologies Utilized in Hybrid and Full Distance Learning Formats**

Hybrid models of online learning communities, comprised of a mixture of face to face and web-enhanced instruction, along with full distance learning models, were utilized in selected courses in professional teacher education and nursing programs. In one graduate nursing course, a web-enhanced hybrid model was used to assist the students to become familiar with the use of online learning blended with face-to-face classroom time. Since the course was about teaching and learning methods, it made complete sense to utilize a web-enhanced format rather than strict face-to-face format to prepare this group of nurse educator track students for their future roles. Additionally, the theme within learning communities is learning by doing therefore, the graduate nursing students now had a chance to learn how to participate in a web-based course yet also learn about the instructor's role as well. They were learning to "teach and to learn by doing" in this course format. Approximately one half of the course time was met through online discussion groups, chats and the assignment paired with that discussion for the week via the Moodle course management system ([www.moodle.com](http://www.moodle.com)) and the other half of the course time was met in the face-to-face format with pre-assigned readings and discussion on the day the class regularly met.

After the web-enhanced format was explained to the students, there was some initial fear of leaving the face-to-face format that the majority of the students were comfortable with. The class size was 10 students and the ages ranged between 26 and 57 years, so it was evident that there were multiple generations represented in the room. In total there were two (2) Millennials, four (4) Generation X and four (4) Baby Boomers in the group and all generations and learning styles were in need of accommodation.

A second example of use of virtual learning environments within professional programs has been regularly implemented in the undergraduate and graduate level teacher education courses in childhood education. Selected courses followed a hybrid instructional model during the past five academic years, comprised of a combination of all the regularly required face-to-face class sessions and additional online collaborative learning experiences designed to enhance the weekly face-to-face course format. Required weekly course meetings were not replaced by the online learning experiences. Rather, students participated in additional learning experiences online in between the weekly face to face class sessions and already were required to complete assignments with several online components as part of the normal course tasks. Therefore, it wasn't unreasonable to include the extra online elements as students already were submitting all assignments online and participating in virtual group discussions based on required readings, assigned supplemental videos, field experiences and topics explored in class. The Moodle course management system ([www.moodle.com](http://www.moodle.com)) was the primary vehicle for organizing online learning experiences in the virtual learning community and was used for interactive forum discussions, video modules, blog posts, reading reflections, virtual group presentations, course assignments, peer evaluations of microteaching lessons, instant messaging and email communication amongst learning community members. In addition, the *Google Documents* (now Google Drive) application of *Google Mail* ([www.google.com](http://www.google.com)) was used for small group cooperative learning experiences, which allowed both students and professors to monitor contributions to group projects and provided a way for students to collaborate on developing their projects together online without the need for meeting face-to-face for collaboration when applicable. Students also created web pages and WebQuests for use in reviewing content learned amongst three partnered methods courses and utilized their original technological resources to support instruction in linked professional field placements.

A third example of the use of online learning communities occurred in the full distance learning format during condensed four-week summer courses in childhood teacher education at both the undergraduate and graduate levels, along with a full semester graduate nursing course at another institution. All were full distance learning experiences through virtual learning communities during which there were no face-to-face class sessions. All learning experiences transpired strictly online. However, professors built on opportunities for virtual



face to face interactions with students through video chats on Skype for PC, tablet and android cell phone users and FaceTime for students using Mac computer devices, iPads or iPhones. Participants were required to video chat at least once with the professor, although more video interaction was encouraged. Students also were required to collaborate with peers through video chatting to complete assigned cooperative learning activities. Video learning modules prepared by the instructor also were utilized as supplemental resources for simulation modules of instructional methods to be implemented in linked field placements. The distance learning format had prescribed learning assignments and corresponding assessment rubrics, discussions, instructor virtual office hours, group assignments and student conferences. In addition, students used the Show Me iPad application to demonstrated knowledge and skills mastered through creation of narrated tutorials on various topics to share with cooperating practitioners in professional field experience placements.

### **Fostering Collaboration in Virtual Learning Communities**

In order to foster meaningful collaboration in online learning environments, instructors need to take initial steps for establishing a quality online teaching and learning experience. Conclusions drawn from prior experience with creating effective virtual learning communities with various populations of participants led to the development of the following checklist of seven essential elements that need to be in place to promote effective collaboration in online learning communities. Consistent reflection on the effectiveness of collaborative learning activities and results of interactive discussions helped to identify variables that needed improvement. The seven essential elements apply to virtual learning communities used to supplement courses, as in hybrid models, as well as full distance learning formats during which instructors and students do not meet in person.

<b>Seven Essential Elements for Fostering Meaningful Collaboration in Virtual Learning Communities Online</b>	
1.	Clear Objectives and Expectations for All
2.	Effective Virtual Classroom Management
3.	Mutual Respect
4.	Academic Rigor
5.	High Quality Interactive Discussion to Promote Critical Thinking
6.	Encouragement of Authentic Student Participation
7.	Flexible Teaching Styles and Differentiation for Diverse Learning Styles

Table 2. Seven Essential Elements for Fostering Meaningful Collaboration in Virtual Learning Communities Online

The seven essential elements listed above are crucial for development of the type of online learning environments needed for authentic learning. The seven essential elements are interconnected and mutually dependent as follows:

## **1. Clear Objectives and Expectations for All**

Clear goals and objectives for all participants - It is imperative for the instructor to establish a clear vision for the intended goals of the learning community and course learning outcomes at the onset before any specific learning activities or assessments are designed. Without a definitive course of action, it is very difficult to evaluate whether or not learners have been successful because instructors will not know *how* to measure attainment of course learning outcomes if they are not clear on *what* they are seeking to measure. Expectations for student participation and evaluation must be clearly stated and shared with all students through a variety of modes. Measures of performance and accountability, along with required levels of participation must be clearly delineated.

## **2. Effective Virtual Classroom Management**

As in a typical face-to-face classroom setting, it is crucial that instructors in virtual learning environments create a climate that is supportive, safe, and fair, which is tantamount to fostering meaningful collaboration in a virtual learning community. Students need to feel supported by the instructors and fellow learning community members if they are to be expected to take the risks necessary to participate meaningfully. Otherwise, many students will tend to participate at a basic level and lose out on more authentic learning experiences.

The teacher is typically not a constant physical presence in an online learning community as in a more traditional learning space, although in rare scenarios, the teacher might be “live” on the site some of the time. The nature of students working at unusual hours of the day makes that makes this scenario difficult. However, without the physical authoritative presence of the teacher to supervise cooperative learning activities, facilitate discussions, or redirect behavior issues, it is essential that substantial effort goes into establishing such checks and balances in the virtual learning environment. A successful strategy for doing so is leading by example rather than assuming students will know how to treat fellow learning community members appropriately online.

As the educational leader of the virtual learning communities, the instructor must model rules for professional discourse to help guide student participants, most of whom are new to use of professional dialogue. For instance, the instructor needs to model appropriate language for use in expressing oppositional opinions in a respectful manner in order to help developing professionals learn how to communicate professionally with peers, particularly

regarding controversial subjects or minority positions on key topics. Although it is recommended that instructors in virtual learning environments list basic ground rules for appropriate online behavior, types of participation expected and required actions, a list alone is insufficient without the types of modeling described.

### **3. Mutual Respect**

Instructors must establish a climate of mutual respect amongst members of the learning community, just as one would need to do in a traditional face to face learning environment, in order for the members of the learning community to develop into a cohesive and collaborative group. In a traditional classroom setting, an instructor can easily use non-verbal cues, such as a firm look or circulating around the classroom periodically to be in close proximity to students who might need guidance in use of appropriate classroom language or behavior. However, in the online learning environment this technique takes a bit more effort. The teacher must model the target respectful behavior and provide examples for students of appropriate alternative behaviors that demonstrate compassion, empathy, acceptance if they hope to achieve this goal of mutual respect online. When the instructor sets a respectful tone in the learning community by demonstrating respectful behavior toward all participants, students tend to follow suit as they realize parameters of acceptable online behavior. The instructor earns the respect of the participants by initially setting the tone of demonstrating respect for the members of the online learning community through thoughtful word choice in responses to students' questions and comments that model respectful dialogue for the group. A caring disposition from the instructor in a virtual learning environment fosters the development of trust as the students begin to realize the instructor genuinely wants them to succeed, which leads to the emergence of mutual respect in the virtual learning community. Once mutual respect is established, students tend to want to work harder and make better choices out of growing respect for themselves, their peers, and teachers (Lauria 2014).

### **4. Academic Rigor**

It is important to maintain or even elevate the level of academic rigor in an online learning community as compared to a more traditional learning environment. Upon initial consideration of participating in an online learning experience, it may appear to be the simpler option as opposed to registering for a traditional course. However, students in both the hybrid and full distance learning formats have expressed their surprise about the unexpected level of academic rigor of virtual learning communities in professional programs. Some anticipated the online learning experience to be less demanding than a traditional course, but, afterward shared that the online elements required far more work due to the high standards and levels of accountability, along with enrichment activities.

Some students expressed that there was “nowhere to hide” in the virtual learning environment because their level of participation, or lack thereof, was documented for all to see. Student had to be prepared as there weren’t options for remaining silent during interactive online group discussions as there might have been in more traditional face-to-face class discussions. Interestingly, it was not as evident to the online learning community participants how advanced or behind a student might have been and where they ranked in ability as it might be in a traditional in-person learning environment.

### **5. High Quality Interactive Discussion to Promote Critical Thinking**

The level of interactive discussion facilitated by the instructor helps deepen the quality of discussion in an online learning community. Lauria and Preskill (2011) observed that some students who are less likely to express true opinions in a traditional class setting are more comfortable taking an opposing position in a discussion in an online learning community. They also noted that, through participation in online learning communities, students can function as reflective thinkers, take their time to consider divergent points of view, and organize their thoughts before responding, which is a luxury often not afforded in an interactive, fast-paced discussion in a traditional face-to-face class session.

Use of high quality questioning techniques encourages deeper levels of reflection to support interactive discussion in virtual learning communities. Questions that foster increased critical thinking and require use of higher levels of cognitive demand in formulating responses deepen the potential levels of online discussion. With a myriad of skills both educators and students hone through discussion techniques unique to online learning, it is recommended that instructors creating ample opportunities for students to strengthen critical thinking skills through use of effective questioning techniques. Posing the right types of questions and probing for further understanding with the carefully crafted follow-ups ignite critical thinking to help promote increased levels of student engagement (Hannel and Hannel 2005).

### **6. Encouragement of Authentic Student Participation**

Implementation of online learning communities tends to naturally encourage student participation due to the interactive nature of collaborating online. The instructor can plan creative cooperative learning tasks that require students to work with peers they normally wouldn’t interact with in a traditional classroom environment, such as creating a group podcast, WebQuest or a partnered video or narrated visual presentation to be shared with the larger group for peer evaluation.

The hybrid combination of in-class meetings supported by online collaboration and interactive discussion is ideal for extending valuable learning experiences that increase

student participation beyond the confines of the classroom. Time constraints sometimes curtail engaging interactive discussions in a face-to-face class setting, and while many will stay late to continue commenting, this may not be practical or fair to students who would like to stay late after class ending time but cannot. Further discussion online in the virtual group setting of the online learning community allows the learning experience to continue. This type of online discussion encourages students to continue thinking about course content after class session ends and before class reconvenes for the next scheduled meeting. It helps to establish smooth transitions from one topic to the next in the course curriculum as well as provides opportunities to review previously learned concepts. It fosters self-discovery of clear connections through constructivist-based strategies rather than having the teacher identifying those connections for the students. The fluidity of online collaboration that extends learning beyond the class period allows for optimal conditions for students to construct their own knowledge as active participants in the virtual learning community online.

Fostering the desire for students to continue the learning process outside of class time is a natural way to encourage student participation with minimal effort required from the instructor. Such unique learning opportunities support students in taking academic risks and guide learners to reach beyond their comfort levels in considering perspectives different than their own through carefully planned online learning activities and thoughtful development of high quality discussion questions.

Increased participation in virtual learning community tasks can help students develop cooperative learning skills and socialization strategies that enhance the learning process, which may contribute to the development of career-related skill sets necessary for professional development such as practice with responding to diverse perspectives in a non-threatening environment. Students who might not normally converse, but rather avoid contact all semester unless directed to collaborate, gain more chances to interact with fellow learning community members. Good educators create opportunities in class to allow for this type of gradual partnership, but not all teachers are skilled in doing so or even consider it a priority according to their teaching style. In a virtual learning community, it is vital that instructors commit to encouraging authentic student participation.

### **7. Flexible Teaching Styles and Differentiation for Diverse Learning Styles**

Identification of teaching styles conducive to online collaboration is helpful to educators considering implementation of virtual learning environments. Flexibility is key to successful online teaching. Instructors need to be comfortable experimenting with new teaching strategies and a variety of technological tools to enhance the processes of teaching and

learning. Online teaching techniques have the potential to allow the instructors to assume the role of facilitator. However, the learning environment can remain student centered without the instructors removing themselves from the equation as the key players. Thoughtful design of cooperative learning activities that foster meaningful collaboration amongst learning community participants allows students to become very active participants in their own learning, which is organized and expertly implemented by the instructors as the master facilitator.

More students tend to participate when they feel close to, or in their “comfort zone”. Online discussion can provide a certain level of comfort without the intimidation of the face to face dialog element of class discussion in front of peers and professor, particularly in college where many students are trying to find acceptance and fit in. A student may be less likely to state their true opinion in class when they do not know what their peers and instructor may be thinking. The student can see the posts expressing their classmates’ thoughts before taking the risk of responding. This is important information they would not be privy to during an in class discussion unless they were very adept at reading facial expressions and body language cues. In such instances, students might choose not to participate.

In the online learning community, virtual time limits can be set on selected course requirements where students will have to chime in on the spot, which can help students in need of a very structured learning environment. Students who prefer structure while learning and lack strong time management skills might otherwise feel overwhelmed by the self-pacing that often is part of online learning. Helping students to discover their learning style strengths and preferences can provide needed guidance for participants in navigating and planning for completion of coursework requirements in the realm of virtual learning communities.

### **Reflections**

Excerpts from faculty and student reflections on the virtual learning community experience were informative. Students enrolled in professional programs courses at both the undergraduate and graduate levels often indicate the desire to learn more about concepts explored in class. This might be, in part, due to the nature of these programs in which students are dedicated to achievement of educational outcomes right from the start because coursework is directly related to experiential learning. The required professional field experiences tied to teacher and nursing education can help students establish commitments professional development very early on in their fields of study. However, now through use of

online learning communities as a pedagogical tool, instructors have the potential to motivate many more students to enhanced levels of study, critical thinking, and deep reflection.

Demonstration of appropriate dispositions and growth in professional mindsets are required elements for earning certification beyond completion of required coursework, experiential field placements and certification exams in professional programs. Participation in online learning communities, in both hybrid and full distance learning format, provided teacher education and nursing students with opportunities to develop communication skills necessary for job interviews and initial employment experiences. For instance, professional dialogue was consistently modeled by the instructor within the virtual learning community. This example sets a far different tone than the normal use of casual social media communication online, such as posts on Facebook, Twitter, or texting messages to friends that most students were more accustomed to. Regular exposure to modeling of appropriate professional discourse and respectful professional dialogue by the instructor served an immersive tutorial in professional communication that helped students develop communication skills that are required for workplace collaboration. Development of professional communication skills is extremely valuable for success in the classroom or clinical setting.

### **Conclusion**

Novice technology users might find designing and implementing an online learning community format a less threatening way to begin technology integration because of the strong foundation in effective discussion and questioning techniques. Rather than having to master a new mode of technology and demonstrate its use for the class, the teacher does not have to fear not being the “expert”. Instead, through use of online learning communities, educators can facilitate from behind the scenes at first while mastering the technology at their own pace without the pressure of not appearing to be the expert in his or her classroom, which many teachers cite as a reason for not attempting to use educational technology. Rather, they tend to stick with what the skill sets with which they are proficient, confident, and comfortable and do not make the attempt to try adding new technology.

Along with mastering technology is the addition of a multigenerational student body who all have diverse needs within an online learning community or hybrid course format. Meeting the needs of varied generations in the classroom is only part of the educator’s responsibility. The instructor must also be aware of her/his own generational and learning style to be able to accommodate others and make it all work together. Blending students together from different generations to assist each other in overcoming “weaknesses” with technology can make for a more comfortable and cohesive learning experience. Having knowledge about the differences

between generations is a valuable tool for the instructor and applying that knowledge, in whichever course format is being utilized, lends itself to a quality experience for all.

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