Online Graduate Education: Developing Scholars through Asynchronous Discussion

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Considerable effort has been placed on understanding and enhancing online interaction to increase student learning, examine teaching strategies, and build learning communities. This research explored another aspect of interaction: the emergence of scholarship by graduate students through asynchronous discussion. Qualitative analysis of archived discussion postings found that graduate students rely on their experience, expertise, and each other. Three major aspects of scholarship emerged: (1) recognizing task difficulty; (2) posing difficult questions; and (3) applying information to other fields. Overall, graduate students welcomed the opportunity to express their knowledge and competencies, showing signs of learning and scholarship.

People associated with postsecondary institutions would agree that technological advancements, particularly the computer, have created tremendous opportunities for education. As LaPidus (2001) indicated, the computer profoundly affected the way work gets done in postsecondary institutions. He concluded, however, that the computer had little effect on how people interacted with each other. The Internet helped solve that problem. With it considerable effort has been placed on understanding and enhancing interaction to increase student learning, examine teaching strategies, and build learning communities (e.g., Bender, 2003; Ko & Rossen, 2004; & Palloff & Pratt, 1999). Additionally, the Internet is seen as the primary means to deliver "the master's degree and postbaccalaureate certificate programs" (LaPidus, 2001, p. 257). In doing so, developing online communities have become a major focus of study (e.g., Allen, 2005; Hopkins, Thomas, Meredyth, & Ewing, 2004; Hudson, Hudson, & Steel, 2006; Joe & Lin, 2008; Sorensen, Takle, & Moser, 2006; Wisker, Robinson, & Shacham, 2007).

As important as online communities are to learning (Liu, Magjuka, Bonk, & Lee, 2007), graduate education represents the process of students becoming scholars (Gardner, 2008). Students need to be engaged in educational processes, enabling them to reflect a greater sense of scholarship, which is viewed as "creative work carried on in a variety of places, [where] its integrity [is] measured by the ability to think, communicate, and learn" (Boyer, 1990, p. 15). Boyer's concept serves as a general theoretical framework for the study. In recent years scholarship has come to mean much more than that. For example, it has developed into a product expressed as artifacts, such as presentations and publications (e.g., Major & Palmer, 2006; Nicholls, 2004; Trigwell & Shale, 2004). Fundamentally though, scholarship is a process whereby people interact with the intellectual community. The quality of this interaction helps develop future scholars who

seek advanced studies in graduate schools (Wulff & Austin, 2004).

Purpose of the Study

When approaching this topic, there are five major issues that give rise for this type of study. First, current research is deficient in demonstrating a connection between the online environment and quality of graduate learning as a whole. Second, it specifically lacks information about graduate students developing as scholars through online education. Third, empirical references are insufficient to demonstrate how asynchronous discussions might lead to scholarship. Fourth, much of the literature reports online undergraduate knowledge and skill development, but it does not discuss graduate education. Fifth, graduate work is often the process of becoming a scholar (Gardner, 2008), but the literature on scholarship is void with regard to the online environment. Thus, this research serves, in large part, as exploratory inquiry.

The graduate experience is to be a transition to an independent scholar (Gardner, 2008). As more and more students seek their graduate studies online, institutions are faced with challenges to produce skilled scholars. Unfortunately, the research is lacking in the area of graduate online learning as it engages students' development as scholars. How this might be accomplished is the premise for this study. It explored how an online environment engaged students toward becoming scholars. Particularly, the study focused on their interaction during asynchronous discussions.

Literature

Since 1990 when Ernest Boyer challenged the academy to rethink its traditional roles of teaching, research, and service, academics have generated a tremendous amount of speculation, interpretation, and application about his ideas of scholarship. One of the

better recognized definitions of scholarship has been developed by Glassick, Huber, and Maeroff (1997). They assert that scholarship is demonstrated according to six criteria: (a) clearly stated goals, (b) knowledge of literature and skills, (c) effective application of methods, (d) added knowledge to the field, (e) clear results with integrity, and (f) value of the work as critically reflected upon. However, what is the expectation among emerging scholars? Posed another way, how do graduate students reflect scholarship in their academic work?

Scholarship

One might expect that for graduate students to reflect scholarship, faculty would need to reshape their teaching. Major and Palmer (2006) found that pedagogical strategies are often based on one's subject matter. More specifically, faculty teach according to the way they were taught. This suggests, then, that if an academic's approach to teaching does not reflect elements of scholarship, it may be difficult for students also to reflect scholarship, as they would have no distinct model to emulate.

Emulation should be no less true of faculty working with graduate students as emerging scholars. Sharma and McShane (2008) echoed this sentiment as student learning is improved in authentic settings. Therefore, for students to emerge as scholars they should be in authentic scholarship settings. This might be better suited for on-ground programs, particularly if graduate centers are available (Brandes, 2006). It may be less easily accomplished in online programs where most interaction among students and faculty tends to be through asynchronous venues. However, the literature surrounding asynchronous discussions does not focus on the activity as scholarship, but primarily on the development of critical thinking skills.

Critical and Higher Order Thinking

Much of the literature pertaining to asynchronous online discussion suggests its purpose is to develop critical thinking skills. Havard, Du, and Olinzock (2005) stated asynchronous discussion can result in critical thinking and may lead to deep learning. This method allows students time for reflection before responding in contrast to face-to-face methods. How much more critical and higher order thinking is produced is debatable, though various studies indicated results of an increase in critical thinking ranging from 16% to 26% (Garrison, Anderson, & Archer, 2001; Gilbert & Dabbagh, 2005; Meyer, 2003; Schrire, 2006).

More recently, Bradley, Thom, Hayes, and Hay (2008) looked at how question type affected quality and quantity of posts. Bradley et al. (2008) looked at higher

order thinking defined by Bloom's taxonomy as analysis, synthesis, and evaluation based on Gilbert and Dabbah's (2005) coding scheme. The research indicated that even though asynchronous online discussions can measure pedagogical strategies, critical and higher order thinking are the major outcomes. However, this suggests that asynchronous online discussions are self limiting, and thus, restrict the range of purposes for which discussions can be used. The results of this research indicate other outcomes can be achieved from asynchronous discussion for the development of scholars.

Graduate Education and Online Learning

According to Geiger (2007), graduate education predominately is tied to research but assumes a larger role in society. In the online market approximately 85% of master's degrees are practice-oriented, and only 15% are in the traditional arts and sciences (LaPidus, 2001). Furthermore, graduate-service universities routinely provide specialized knowledge in various fields and help meet the need for student advancement in professional fields and occupational mobility. As Geiger further noted, providing this type of graduate education is in keeping with the traditions of American higher education as it learns from its environment and makes itself useful.

Being useful is one thing, and being effective is quite another. Singh and Pan (2004) stated there is debate about the effectiveness of online education, particularly with rapid growth. The number of institutions offering online education has increased over 800% from 1993 to 1997 (93 to 762) (Hankin, 1999). Singh and Pan concluded that for online courses to be effective the importance of participation must be emphasized. Since students do not meet face-to-face because of place and time constraints (Charalambos, Michalinos, & Chamberlain, 2004), information quality significantly influences a student's satisfaction and intention to participate (Lin & Lee, 2006). Consistent with on-campus delivery systems, graduate education must impart a deep awareness of participation, even scholarship. But how? More specifically, how can online delivery of graduate courses create an environment of scholarship?

Description of the Setting

This study began serendipitously. A faculty member, an assistant dean of curriculum, and an assistant dean of faculty were designing an online graduate level course in higher education governance. At the risk of overwhelming students with too many regular discussion assignments, a decision was made to alter a discussion format. The assistant dean of faculty

suggested a different type of student interaction—the Muddiest Point (Angelo & Cross, 1993). Once the course was designed and integrated into the curriculum, each faculty member teaching it could not change activities or assignments.

The Muddiest Point is a classroom assessment technique in which faculty solicit feedback from students about points they find confusing or difficult. Since the format could not be applied directly online as it could on-ground, the activity was modified to accommodate the online environment. The online version was based on the concept of Knowles' (1980) assumptions of andragogy, in particular, that adults bring a wealth of experience to learning, and they focus on problem solving more than subject matter.

The role of a faculty member for the modified version was to be a monitor for interaction. Monitoring simply involved checking to make sure students dealt with the subject matter among themselves and acted professionally. Students were provided detailed guidelines, but in essence, the faculty member stipulated that students were to use the discussion to assist each other with written assignments. The Muddiest Point corresponded to written assignments with the first of five assignments being less difficult in order to allow students to adjust to the format. Ultimately, the discussion was a platform for students to clarify written assignments where they compared faculty senate models with administrative models to establish shared governance characteristics at colleges and universities.

After the initial course was taught, it appeared that the function of the discussion had exceeded its intent. The original intent was to provide students with a collegial platform for helping each other with difficulties arising from an assignment. However, students interacted in a complex fashion rather than just completing an activity. It was this observation that led to this study to understand how graduate students might develop as scholars in an online environment.

Method

The online format is an increasingly popular method to deliver postsecondary education. Studies of online education are increasing in popularity as well (Haigh, 2007). This study investigated the emergence of scholarship by graduate students through asynchronous discussions in an online environment. In order to address this issue more fully, a case study approach was undertaken. It examined the phenomenon as a bounded system (Merriam, 2002). Bounded refers to a single entity or unit by which a phenomenon is limited. In this instance it is an online graduate course, and more specifically, students' use of a Muddiest Point discussion in that course. The course and participants

were selected for two reasons. First, the Muddiest Point activity appeared to produce learning beyond its original intent. Second, graduate students are expected to exhibit scholarship characteristics and these appeared to be emerging. To address ethical concerns with the inquiry and participants, the study was approved through the university's Institutional Review Board.

Data Collection

Data collection involved examining the case from multiple perspectives. First, the course was offered in a ten week format. The Muddiest Point discussions required participation by students during five consecutive weeks of a ten week course. Even though each week offered a new written assignment, the standards of the Muddiest Point interaction remained the same. Second, the course was taught an additional four more times from its initial offering by four separate faculty members, of which the researcher was one. The courses were not offered at the same time but staggered over a six month period. Faculty members did not discuss with each other their experiences. Third, the students took the course as a requirement. There were a total of 39 graduate students in the four courses: 12, 11, 8, and 8 respectively. Fourth, the actual discussions were highlighted, copied, and pasted into a Word document. This process preserved the flow of the discussion as well as the content, date, time, and number of each participant's posts. This resulted in 392 pages of transcripts. Each course contributed a relatively equal number of pages of asynchronous interaction. Table 1 provides an overview of the contributions.

Coding. Each course was assigned an alpha value, and within each course every participant was given a numeric value. By assigning alpha-numeric designations demographic biases were mitigated. Student contributions were color coded according to common ideas they conveyed. These were then assigned a descriptive category in keeping with the types of information expressed. The data were coded and the coding protected confidentiality as well as mitigated bias from the possibility of name recognition of discussants and influence on analyses. Coding was then validated by an independent, qualitative scholar, who was not associated with the study.

Data Analysis

Analyzing qualitative data based on a theoretical framework can be accomplished using a strategy known as *pattern-matching* (Yin, 2009). In pattern-matching patterns observed in the data are compared with patterns indicated by theory. To arrive at identifiable patterns, the data were analyzed according to

Table 1
Contributions from Each Course

Faculty Member	Number of Students in the course	Number of Asynchronous Assignment Discussions	Number Transcript Pages in Word
One	12	5	101
Two	11	5	107
Three	8	5	83
Four	8	5	101
Totals	39	20	392

categorical aggregation (Stake, 1995). Further, categorical aggregation establishes patterns for interpretation by looking for themes among categories. Boyer (1990) laid the theoretical groundwork for categories of scholarship as scholars are to step back from their work and look for connections, build bridges between theory and practice, and communicate their individual knowledge. This perspective was reiterated more recently: Walker, Golde, Jones, Bueschel, and Hutchings (2008) wrote about scholarship as an intellectual community in that it sends "powerful messages about purpose, commitment, and roles, [while] creating (or not) the conditions in which intellectual risk taking, creativity, and entrepreneurship are possible" (p. 10-11).

Results

Overall, the intent of the research was to discover how scholarship might develop in graduate online courses. Three major themes indicative of scholarly activity were found as a result of categorical aggregation analysis. Table 2 represents the categories assigned to scholarship.

Scholarship can be viewed as the integrity of creative work demonstrated by one's thinking, communication,

Table 2
Scholarship Themes

Scholarship	Characteristics
Recognize task difficulty	• Task difficulty • Accept task • Defer task
Pose difficult questions	• Difficult questions
Apply concepts to other fields	• Apply concepts • Personalize information • Offer advice/insight

and learning abilities (Boyer, 1990). However, online discussion may "lead to disengaged learners who fail to acknowledge new ideas, skills and knowledge" (Gulati, 2008, p. 186-187) as students are just playing the academic game because they are required to participate (Oliver & Shaw, 2003). However, the results suggest one particular type of discussion format, Muddiest Point, can promote scholarship development among online graduate students.

This research investigated the emergence of scholarship by graduate students through asynchronous discussion in an online environment. Three major themes were identified as indicative of scholarly behavior: (1) recognize task difficulty, (2) pose difficult questions, and (3) apply information to other fields.

Recognizing Task Difficulty

Recognizing task difficulty is only one aspect of scholarship. As there is an expectation for faculty to exhibit scholarship (e.g., Major & Palmer, 2006; Nicholls, 2004), so there should be the same expectation of students seeking advanced education in graduate school. However, graduate students may struggle with expressing scholarship from the content of which they are learning. As part of the process, they must interact, even wrestle, with the material. How they grapple with it can be an indicator of emerging scholarship though. Comments were made by most students to reflect this sentiment:

- "This is a difficult assignment."
- "I do not have any questions as yet but this is a very challenging assignment and I am sure there will be some."
- "I have no doubt I will be back soon with requests for assistance!"

Students recognized their lack of expertise in the area, openly admitted it, and sought further understanding: "I must say that this is one of the more challenging assignments I have done in the entire time I have been in school." While the task is difficult, one

particular response characterized, in part, the intent of the discussion: "I think that's because they designed it that way to make us interact, which I think is pretty cool." This was reiterated: "Like you, I followed the prof's instructions and went to the text first. I discovered that it took quite a bit of reading, re-reading, and taking notes to try to get a handle on the chapter regarding systems and the implications for administrators."

Students appeared to be exploring additional sources to shed light on the task. By articulating uncertainty, students were able to evaluate what they knew and did not know in order to reframe the material better, thus meeting assignment objectives. The literature deals with how students meet assignment requirements according to directions (e.g., Cox & Cox 2008; Lebaron & Miller, 2005; Palmer, Holt, & Bray, 2008), but it does not express students' willingness to seek additional material. This finding is particularly salient. If students are expected to demonstrate scholarship, they should seek information beyond those sources required for assignments. For instance, the following excerpts are a few examples:

- "I am going to use the library research tool and look at some of the other state universities in [the State]."
- "I would also like to research other states to see if they have similar issues and what they have done to reach their goals and better their governance."
- "I think you are correct about the need to research to provide additional information. I am not considering that though until I really understand what we already have. Once I really get organized with the concepts we have I will then know what additional information to go after."
- "Even though this [additional comparison] was not part of the assignment it helped me 'give a face' to the type of [faculty] senate the institution was likely to employ if they chose that route. Perhaps this will also help someone else too."
- "Even when I complete the program, I will still refer back to my research for additional insights."

Additional resources ranged from looking at Internet sites to other texts and journal articles.

Even though students recognized task difficulty, it cannot be assumed scholarship will emerge. There tended to be two types of contributions for recognizing task difficulty. These posts are critical since the perceptions students have about their study also affect their learning (Asmar, 2002).

Accept Task

Task acceptance refers to the assignment as a learning process. There were those students who recognized the difficulty, accepted it, and worked through concerns as a class:

- "Did anyone feel that the example of [the] college is a very unusual case? I have only gotten so far in my reading but I thought this was probably rare. Those of you who work at universities is this the case where you work?"
- "I also reviewed the article several times and highlighted the points I felt were important to the assignment."

They also recognized the value of the process:

- "I think everyone struggles a bit, but if you didn't, how would you learn? It's the fact that you haven't given up and keep plugging away that makes what you do learn and understand so great! We're all here for each other, so if you are ever frustrated just ask for help!"
- "This project is not only challenging but one of the most interesting that I have been involved in at this education level. I feel the results from our group participation will be very rewarding."

This comment reflected what Fink (2003) considered "doing experience" (p. 105), which refers to designing activities for students to learn what is intended.

Defer Task

A second type of response showed students deferring the difficult information for issues more comfortable to them. Du, Havard, and Li (2005) suggested new and complex assignments require students to rely on the familiar. Accordingly, students must systematize current knowledge with new information for learning. A critical component to this is that "[w]ithout reasoning, the learning cannot be deep" (Du et al., p. 209).

However, some students clearly recognized the difficulty, but their interaction tended not to extend beyond that. These types of posts began similarly as *task acceptance*, "Can anyone give me some specific examples of this to make it more clear in my mind?" However, as the discussion progressed, the shift became evident: "Still, I found the reading a bit confusing, just like my life. All I really like to do now is teach. Anything that gets in my way is junk – Ha, Ha." Task deference was further exemplified as a springboard into personal expressions:

This year my husband and I have decided that I will stay home and recover from [an] accident and work on this degree. [Some] Schools such as [State]U and U[of State] are so overpopulated that unless you play football or another sport, there are very few spaces for incoming freshmen and the athletic department gets first pick.

Thus, it is difficult for students to adapt learning to new situations when they defer the material to what is most familiar to them (Du et al., 2005) instead of developing strategies to bring information into cohesive patterns (Greene, 1995). Deference also seemed to be a matter of correspondence instead of discussion. Bender (2003) related that if students work too independently, interaction can reflect one-on-one correspondence instead of dynamic learning, for example, "Is this a first grandchild? I spend every bit of time I can manag[ing] my 5 grandchildren. It is a wonderful experience. Mine range in age from four to nine months – two four-year-olds, two 2-year-olds and one nine months." Other deference comments emerged: boring reading, job responsibilities, political viewpoints, and complaints about the difficulty of a particular software program. If students default to the familiar, it is incumbent upon the faculty member to guide the discussion toward assignment goals.

Boyer's (1990) theoretical framework of the ability to think is found in recognizing task difficulty. For Boyer (1990), scholarship included being involved in activities that continually challenge their minds, skills, and abilities. When students recognize and accept difficult tasks, they are taking first steps toward scholarship. Recognition should be directed toward formulating new knowledge structures. This incorporates course material into existing knowledge versus relying on familiar information to defer difficult concepts for convenient ones. A second major theme dealt with posing difficult questions about the subject matter.

Posing Difficult Questions

An interesting feature of the discussion surfaced during the analysis, which was categorized as posing difficult questions. Posing difficult questions refers to students' ability to ask complex questions with precision and accuracy by using the material they learned. This feature does not appear in the literature, although Ellis, Goodyear, Prosser, and O'Hara (2006) come close when they reported that discussions are a way of challenging ideas and beliefs. For example:

One of the colleges where I work was probably once a [specific type of] institution. As the college grew, it has evolved into a [another type of]

institution more closely resembling a corporation. Student satisfaction is at an all time low. Some of the students who have been here beyond the traditional four years report that they miss the individual attention that continues to get harder to find as the school gets larger and hires more people who do not know what it was once like here. My question is as follows: Do you think bureaucracy is an inevitable consequence of institutional growth?

The example demonstrates that the student not only understood the information with accuracy and precision, but he or she is able to transform it to address other problems or scenarios, which is indicative of advanced learning (Gallagher & Aschner, 1963). Online discussion formats can be created to where students engage in creative work. Boyer (1990) wrote scholarship "integrity [can be] measured by the ability to think, communicate, and learn" (p. 15):

This is a very interesting thread. As an administrator, there are some fundamental questions that must be asked of almost any situation. First, is the institution public or private? This is crucial since governance issues apply differently, particularly as it relates to the US Constitution. . . . Second, does the action (decision) follow policy? The courts are not really prescriptive in nature. . . . Third, do policies and procedures conform to local, state, and federal laws? This one is obvious. Administrators should not make policies that violate law. . . . Finally, are decisions based on one's personal views (which are not wise) or are they based on policies and procedures? It is not unusual for people to make decisions based on their own moral values or to get caught up in an emotional issue. . . . Note: there is a difference between bad management and breaking the law.

The process of scholarship gets students to ask what the key ideas are in the material, what their importance is, and the effect it has (Levine, 2007). Further evidence of this type of scholarship was related:

Does anyone else find that [the college] functions almost like a social club, more so than an institution concerned with making sure that their students are well educated (no research and no attention paid to advancements made in the field of education)?
     Also, what are your takes on their practice of excluding those who think or act even slightly outside of their "norm?" A part of me feels that it is almost discriminatory. However, another part of me feels like those individuals who decide to

attend [the college] or become part of the faculty know exactly what they are getting into and if they do not plan on conforming, they should just go elsewhere.

The ability to pose difficult questions reflected the process of scholarship. One might understand it according to Kanuka, Rourke, and Laflamme's (2007) four stages of cognitive presence, where (a) there is evidence of directed and purposeful thinking, (b) students refine or redefine an issue, (c) they organize ideas and contingent facts, and (d) ideas and hypotheses are tested with peers. The stages describe how students act upon their ideas: "Hope you don't mind if I cite you in my paper. I've learned to learn from great minds like yours." Those aspects represent some of the hallmarks of scholarship as "it involves systematic inquiry and results in publicly observable community property that is open to critique and available for others to use and develop" (Colbeck & Michael, 2006, p. 7-8). On a humorous note, one student recognized the value of this process: "Ha! I've been quoted! Does that make me a scholar now?" The process is a matter of good practice according to Chickering and Ehrmann (2005), that sharing ideas and interacting with others increases thinking and deep learning, as one student indicated: "I'm impressed with your interesting discussion and the integration of examples in your postings. What impact do you think coupling has on the issues you've been discussing?" This study suggests sharing ideas is a process of an emergent scholar as well.

Another aspect of Boyer's (1990) theoretical framework is for scholars to demonstrate the ability to learn. The findings indicated graduate students show signs of learning as scholarship during online discussions as they pose difficult questions. Boyer (1990) wrote that "the probing mind . . . is an incalculably vital asset to the academy" (p. 18). These are not questions for simple understanding or clarification, but to advance complex concepts. Students already understand the material, and with posing difficult questions they exhibit learning through Kanuka et al.'s (2007) four stages of cognitive presence. There is a third theme that emerged from the inquiry.

Applying Concepts to Other Fields

The Muddiest Point discussion required students to clarify issues related to an assignment. It was discovered that students applied information beyond the requirements of the assignment to make connections to other fields. In one sense, this is what Boyer (1990) referred to as the scholarship of integration: "By integration, we mean making connections across disciplines, placing specialties in larger context,

illuminating data in a revealing way, often educating nonspecialists, too" (p. 18). Even though the interactions are from a higher education organization and governance course, one student remarked, "This reminds me of personality models that I studied in one of my undergrad psychology courses; not one person has all of the characteristics associated with a model and may have characteristics from another model as well." As Boyer (1990) conveyed, specialties are placed in a larger context. Another student explained in detail the course information related to the Washington State Higher Education Board. One student even associated a bureaucratic model of higher education governance with the corporate world:

> I worked for [a large corporation] for 15 years. They have a place for everything and everyone in his [sic] place. They are the number one bureaucratic system that I have ever endured. I am grateful for the good income I received while [I] worked there, but I became a liability when I wanted to become educated.

These contributions are particularly important given the nature of the subject matter. Higher education governance is a course in the field of higher education studies, which has no undergraduate program. Therefore, graduate students enter the field from other disciplines and academic areas. The material, for all practical purposes, is new to them. For students to apply concepts to other contexts suggests they have a grasp of the current subject matter, as well as others. According to Cohen (2001) scholarship is demonstrated by the organization and integration of knowledge into civic, research, general, and domain based activities. Examples of this type of knowledge were spread throughout the discussions:

> In my last class, foundations, I read an article that defended bureaucratic higher ed organizations and for-profits. In this article (I couldn't locate it off-hand) the author explained the structure of this type of institution and the benefits it gives a new population in the community.

> I am reminded of my grandmother's late night filibuster sessions that took place in the last weeks of this last legislative session and with that in mind I would not want to be a part of a collegial system if decisions were being debated over and over and over again.

> At my school the faculty and department chairs recently lost the ability to advise the students. They were unhappy about this change and we find that in this type of system the faculty may not be

consulted when decisions are made regarding their job descriptions.

One student even described in depth his or her son playing an online video game. The thought while reading this part of the response was: What does this have to do with anything in the course? The student then inquired of classmates: "Do you all think my son will make a good negotiator for the political faculty senate?" From this question, the connection was made, and as Boyer (1990) related, scholarship should integrate information in revealing ways while often dealing with non-specialists.

As students integrate knowledge, they also personalize the information. Chickering and Ehrmann (2005) stated that learning includes the ability to write reflectively, relate information to past experiences, and apply concepts to everyday life.

Personalize Information

Lebaron and Miller (2005) conveyed that online courses are remiss with developing active learning or camaraderie among peers. It is important, they state, to create an environment where students are stakeholders in a community. It was discovered in this study that students made personal connections. This appears to have been accomplished through the Muddiest Point discussion:

> I think I have enough background about the University to be able to relate to what was written in [the text]. My son attended this school because he got the most money there and it has a very good academic reputation. He was not happy! He felt that the rules were stupid and he did not like the close faculty student relationship. He stayed there because of money but would have like to transfer to a public university. This type of university does have many advantages but if a person is looking for a place to live a lifestyle not in agreement with the statement of belief then it would better for all involved to go elsewhere.

The type of scholarly expression demonstrated by students indicated they related interdependence, one of shared purpose. They become part of a larger society where they find value or meaning (Correia & Davis, 2008):

> After I read your post I compared some of the issues the faculty at my job deal with and I see why you are leaning towards [a type of governance structure]. They too have meetings and have to report to administrators and they have to report to higher administrators and so on and so forth. The

same process also occurs when its time for our accreditation.

As Lebaron and Miller (2005) indicated, students must become stakeholders in the learning process. They reflected about how information impacted them. Several examples exemplified this:

- "As I started to read about the political system-I have decided that I do not want to work at an institution like RSU. I am sticking with my original thoughts."
- "As a student at a school with 20,000 students I felt that my presence was irrelevant. I was lost in such a huge organization. I like to feel my influence on campus." In addition:
- "I remembered when I taught ninth grade and the students all came to me with their problems, I was a little surprised until my co-workers told me that I did something they had to think about – I cared. I hope I can continue to be that kind of teacher and later that kind of [college] professor."

It is advocated here that in order for students to emerge as scholars, they become stakeholders as they personalize information. This in turn gives them a framework to apply the information to other fields. One student captured this sentiment about another student: "Thanks for explaining and allowing us to look into your life by using it as an example because of your explanations." With a firm grasp of understanding they, also, can offer sound advice/insight to peers.

Offer Sound Advice/Insight to Peers

Scholarship is a platform where faculty, students, and the community reflect on their contributions and share knowledge (Colbeck & Michael, 2006). This is revealed as a dynamic interplay among the themes that emerged. For example, as students recognized the difficulty of the task, they often remarked the reality of the subject matter was not as clearly defined as the models in course texts suggested:

> Due to the complex nature of governance administrators formulate models to predict how an internal revision of policies and procedures will either increase or decrease the institution's functionality. Both [authors] agree that there is no ideal model. Nevertheless, the major problem that arises is determining what model(s) work best.

Another student commented:

> [S]ometimes we cannot fight two battles at the same time. One will get burned. In these cases unfortunately the students are the ones that suffer and yes we need help because our main purpose in our jobs is the students.

The value of advice and insights can be readily seen. For example, "I want all of you to know how useful these discussions are to me." And, "Thanks, you contribute a lot to the discussion board and you are there helping me along right from the start!" When students relate to each other, their understanding and learning deepens (Palloff & Pratt, 2007).

Results also exhibited advice/insights pertaining to process. Although there are many comments posted like the previous one, sound advice or insights was not limited to that type of result, as a product. "I read one post where they said to take it step by step. I want to try to go back and find out who it was because that is good advice." And:

> The easiest way around to get around losing everything you wrote it to type it up in Word first. Then you can just copy and paste it. Then if you do lose it you have it saved. Another interesting point is the fact that Word is much better at grammar and spell check then our system. That is how I got around it. Don't worry, you will get it mastered soon enough.

In graduate work where it is intellectually challenging and can be socially isolating (Brandes, 2006), there must be means and measures when students are able not only to grasp the subject matter, but show authentic signs of scholarship by interacting in an intellectual community (Boyer, 1990). For example:

> My thinking is that the first part of the paper will force me to really understand the concepts involved with governance. The second part will have me take those concepts and decide how governance will take place to reach my academic goals in spite of all the problems and contradictions.

Applying information to different contexts pertains to the third aspect of the theoretical model (Boyer, 1990)—ability to communicate. For Boyer (1990), scholars possess the ability to apply one's results to help others. By communicating one's findings, scholars give meaning to isolated facts, put things in perspective, and demonstrate how issues apply in other disciplines (Boyer, 1990). Though the results from this study are not of the magnitude of Boyer's (1990) scale, they do indicate the connectedness of scholarly activity. Discussions to where peers help each other with a difficult assignment may also help them emerge as scholars as they apply the information to other contexts. In addition, they recognize task difficulty and pose difficult questions. Table 3 summarizes these characteristics.

Discussion

Brandes (2006) related that graduate programs offer little opportunity or incentive for student interaction with their peers outside of their discipline. Online programs may further limit graduate students' contact with peers, faculty, and others outside the discipline. In turn, one could surmise this is all the more reason to develop online courses with provisions to help graduate students develop their scholarship abilities. Whereas scholarship tends to be a priority of the professoriate, it, nonetheless, is expected that graduate students demonstrate the ability to produce scholarly work, whether they are headed for the professoriate or a profession.

For scholarship to be expressed, it is incumbent among students to peer monitor their actions (Vonderwell, Liang, & Alderman, 2007) and faculty to reiterate the purpose of assignments. Thus, consistent with the research of Vonderwell et al. (2007) it is imperative for faculty to adhere to structure in order to impact student responses according to course expectations and engage them in dialogue versus just posting questions for them to answer, as students tend only to answer questions. It became evident that a Muddiest Point type of approach to discussion gave students greater freedom of expression and creativity, which tends to be consistent with scholarship (Boyer, 1990; Walker et al., 2008).

In reality, what expectations does the academy place on graduate students to reflect scholarship? Scholarship is a priority of the professoriate not student development. It reflects public expression on issues of community engagement as it integrates teaching, research, and service as faculty functions (e.g., Hutchings & Shulman, 1999; Yapa, 2006). Yet, Geiger (2007) observed graduate work is often closely linked to research, but graduate-service institutions assume a greater role of relating specialized knowledge often for providing professional advancement and occupational mobility.

Although discussions in online courses aid with critical and higher order thinking, they also can be used to help develop scholarly skills. When appropriately implemented, the Muddiest Point discussion can elicit scholarly patterns by students in three areas: (a) recognizing the difficulty of a task; (b) posing difficult questions; and (c) applying information to other fields.

Table 3
Categories of Emerging Scholarship Through Online Discussion

Category	Description	Characteristics	Representative Quotation
Recognize task difficulty	Students recognize the difficulty of the task and it requires input from others for them to grasp the material more fully.	Task difficulty	I have no doubt I will be back soon with requests for assistance!
		Accept task	I think everyone struggles a bit, but if you didn't, how would you learn?
		Defer task	This year my husband and I have decided that I will stay home….
Pose difficult questions	Students' demonstrate the ability to ask difficult questions of peers by using the material they learned with precision and accuracy		Another thing that struck me about this article is that the leadership is based on legitimate power. This begs the question, who decides the legitimacy? Does the leader adopt different forms of power to compensate? Or are some departments poorly run because they do not accept the legitimate power?
Apply to other disciplines	Students apply information beyond the requirements of the assignment to make connections to other academic disciplines.	Apply concepts	What is helping me to understand the idea of an open system actually comes from the field of psychology.
		Personalize information	I think I have enough background about the University to be able to relate to what was written in [the text].
		Offer advice/insight	This is what I have gathered so far.

And yet, the research may have raised more questions than it answered.

Conclusions and Recommendations

The findings from this research are encouraging for several reasons. First, they suggest discussion may be the most important aspect of online education. It appears to be the central place where scholarship can be interactive as students consider goals, reflect literature, apply methods, add knowledge to the field, provide results, and critically reflect upon achievements, all in a safe community environment (Glassick et al., 1997). Second, with suitable motivation graduate students explore a subject matter in depth and with purpose. They see the material as something more than a grade. Third, it indicates that online education may be in transition with the rise and acceptance of online education as a viable means for graduate work. Students may be more comfortable with their interaction and expect more from it. Thus, the level of discussion may need to reflect a greater variety of outcomes, including scholarship development.

These issues also raise questions. The results signify that students recognized some tasks are difficult. Nevertheless, for the most part they embraced challenges as something to enrich their experience, as well as provide possible contributions to the academy. Yet, students were not making contributions to the academy. They were asked only to meet assignment requirements. In doing so, they showed signs of scholarship. If scholarship is not an explicit or even an implicit goal of a course, then at minimum, it is recommended that online discussions should be designed with sufficient difficulty and freedom for graduate students to rely on their experience and penchant for problem solving (Knowles, 1980). They should be given an opportunity for professional expression. With regard to scholarship, what are the expectations for online graduate students? If they are headed to the professoriate, the expectations ought to reflect the scholarship of the discipline. Asynchronous

discussion formats can promote this attitude toward learning. If students are headed to the professions, how much does the expression of scholarship matter? Given the recognition of task difficulty, future research might examine the question with regard to scholarship: How does this experience promote scholarship in order to benefit the academy?

More questions from this research arise as students posed difficult questions. This could be dismissed as a unique characteristic of this research. Except, discussion is not a unique characteristic of online learning. It is a staple. It is a collaborative tool by which students learn to work together on complex issues (Havard et al., 2005). When students are able to grasp difficult material, they raise issues not only congruent with the topic, but also demonstrate deep learning. Ultimately, asynchronous discussions are about learning not critical or higher order thinking. So, how important is the ability to pose difficult questions in light of learning objectives for an assignment? This may be a matter left to specific assignment design within specific academic disciplines. Yet, in light of the findings, it could be an indicator of scholarship within specific disciplines. It is recommended when asynchronous discussions are designed, requirements about how students express information are considered. Possibly, a fundamental question could be asked: If students participate in Muddiest Point or similar discussions on a regular basis, over time how will they develop skills readily discernable as scholarly? Whatever the approach, students should not be assessed beyond the limits of the learning objectives. Future research could look at learning outcomes for asynchronous discussions. Are they narrow and restrictive or do they allow students to express not only uncertainty of understanding, but when grasping material, show insights through asking questions, demonstrating discrete knowledge of the field (Glassick et al., 1997)?

Finally, the findings showed students were able to make connections about a specific subject matter to other fields. Since this inquiry revolved around higher education studies, which is a field only in graduate work, a natural default may be for students to relate concepts to their previous undergraduate major. But, what if a student's graduate studies are in the same discipline as his or her undergraduate study? Is it enough to relate graduate information narrowly or should students show how other fields or broader contexts are affected? Should graduate students be able to explain where fundamental principles of their discipline can benefit other areas of knowledge as Boyer (1990) suggested? One recommendation is to encourage students to demonstrate how claims they make about their subject matter may impact a larger context parallel to or outside their field. Future studies,

then, may look at how students in specific disciplines relate to various other academic fields and professions, as well as impact a larger context.

Conclusion

Asynchronous discussions are an integral part of online education. For the most part they have been relegated to the development of critical and higher order thinking among students. Although important, thinking skills should not be the outcome of discussion but a means to achieve learning. This study looked at achieving other results by examining the process of how graduate students reflect scholarship in online courses. It was found that graduate students will rely on their experience, expertise, and each other to express scholarly behaviors. Three major themes emerged to describe scholarship behavior: (a) recognize task difficulty; (b) pose difficult questions; and (c) apply information to other fields. Overall, when given the occasion, graduate students in this study welcomed the opportunity to express a full range of knowledge and competencies. As such, they were not only learning the material, but showing signs of scholarship.

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