Thematic Analysis of the "Games" Students Play in Asynchronous Learning Environments

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ABSTRACT

The dynamics of the student-student relationship within the asynchronous online classroom, as evidenced by conversations in an online discussion board, is a balancing act potentially more complex than those occurring in real-time. In order for learning to truly be considered effective, a collaborative, safe environment needs to exist among students within the online conversation [1]. In the present study, student conversations and postings were examined by two raters using qualitative analysis. Thematic coding and member checking was conducted. Several prevalent themes emerged around the metaphor of 'playing a game.' Students established rules, they followed suit of the lead of player, formed team alliances, and established who was 'in' and who was 'out' of the game. Based on these results, strategies have been identified to demonstrate techniques on how instructors can create a more effective learning environment for students, and what strategies can be used to examine and advance conversations, regardless of discipline. These techniques focus on creating awareness among students of potential issues in asynchronous student to student interactions, how to examine and engage in a diversity of student perspectives, and ways to facilitate intellectual growth and advancement in the asynchronous online classroom.

KEYWORDS

Online learning, qualitative methods, Human Services courses

I. INTRODUCTION

Smaller, faster forms of technology are improving lives in various ways, providing more access to higher education for many. The number of students taking at least one course online has increased to over 6 million students [2]. This represents one-third of all college students [2]. Given the growing audience to online instruction in higher education, the importance of online instruction and facilitating student-student interaction has been described as "the most important strategy that online teachers need to employ" [3]. However, current conceptions of online course instruction are mixed. Some believe online instruction should employ equivalent pedagogies to those found in traditional environments [4, 5], while others feel that a different set of skills are required of the online instructor [6, 7].

The dynamics of the student-student relationship within the asynchronous online classroom, as evidenced by conversations in an online discussion board, is a balancing act, particularly in the presence of disrupting or challenging students. The online asynchronous course environment has both unique

benefits and challenges [8]. Gallagher uses the analogy of game play to explain the benefits and challenges of participation in the online discussion board [9]. A benefit of the game play analogy is that it applies the interactional nature of a board or card game to the online conversation. For each game play made, or discussion thread posted, a student has the ability to 'make a move' by responding to another player or not. The challenge lies in the interpretation of the rules of the game; specifically, are there assumptions in game play within the online discussion board? What happens when one student makes a play that others do or do not like? The application and conceptualization of game play has not been explored within a human services course and thus, this analogy is the lens through which this study is situated.

With a diversity of students and the faceless-nature of the online environment, conflicts of ideas, beliefs, and experiences may arise, which can divert the focus of a class discussion and negatively influence the learning environment [10, 11, 12]. The social, cognitive, and affective presence of each student has the potential to impact course discussion [10]. The largest challenge to the online learning environment is the somewhat "removed" presence of the instructor within the course [5, 10, 11]. In a face-to-face course, the modality of real-time instruction and facilitation implies that the instructor has a physical presence within the classroom; this is particularly beneficial when instructors need to address power imbalances between students or disruptive behaviors. More importantly, in traditional environments students also form real-time relationships with instructors. Online, the course "happens" with or without the instructor's presence, as do conversations amongst students in discussion boards [10, 12].

Much has been written on conflict management in the face-to-face classroom [13, 14]. However, research shows that teaching and classroom management skills may not always transfer to the online environment [15]. A particular challenge is the inability of the asynchronous instructor to provide emotional and physical immediacy [14] as a way to prevent and respond to conflict. Thus, the dynamics of the student-student relationship within the asynchronous online classroom, as evidenced by discussion board conversations, are more multifaceted than those occurring in real-time [1, 5, 12].

Controversial topics, such as those discussed in human services courses, are inevitable grounds for student dialogue and discussion in the classroom, whether the learning environment is online or face-to-face. Instructors should anticipate differences and plan to use divergent voices in a productive manner to enhance the student experience. Problems may arise within the online discussion board and present themselves differently than those in face-to-face environments.

In order for learning to truly be considered effective, a collaborative, safe environment needs to exist among students engaged in the online conversation [1]. Collaboration can be reflective of an effective learning environment; one that allows a practical application of course content in order to discuss, analyze, and challenge knowledge [16]. Similarly, a safe and trusting online learning environment involves a sense of ownership and control over one's learning [17], which includes the dynamics of the relationships and interactions between and amongst students, as well as with the instructor.

The online learning community may develop quickly and can be highly cohesive [18]. As such, group dynamics can affect the quality of student-student interactions and conversations [5, 19]. For example, if one student is trying to dominate, bully, or interfere with the conversations of others, his/her actions could potentially halt the entire conversation [12, 19, 20]. Additionally, some students may not recognize the need for personal boundaries and over-share personal information [19]. While this may not seem extreme, this behavior has the potential to stop online conversations, as other students may not feel comfortable responding. Finally, when students' posts lack substance or when they do not post at all, students cannot effectively learn from discussing course content [5, 12, 20].

For instructors who teach in the human services area, many of our courses consider the nature of diversity. These conversations are made more complex by a consideration of how race, class, gender, sexual orientation, ableism, and ageism impact human service delivery and the populations we serve. Students often bring their own set of presumptions, biases, assumptions about self and other, assumptions about knowledge and truth, values/ethics, and entitlement to these courses and are encouraged to reflect

on how these factors influence their own professional practice. Conflict in the classroom can be seen as a desired process that can help students develop critical thinking skills and advance their ability to handle conflict in the real world [21]. However, in our experiences as online instructors, assumptions, poorly developed assertions, and sweeping generalizations either made to the entire class or between one or two students have the potential to "stop the discussion" or make other students feel less comfortable within the course. Best practices related to instructor presence in asynchronous discussion boards have been extensively addressed elsewhere [22, 23]. However, we believe that the instructor's presence and student-instructor interaction is not enough to maintain dialogue in an online learning environment; attention must also be given to the interactions between students. There is a need to examine the quality of interactions on the discussion board between students in a human services course. The research questions to be examined are (1) *what are the types of student-to-student interactions seen on the online discussion boards in a human services course?* (2) *do student-student conflicts, or negative interactions arise and what do they look like in the online discussion boards in a human services course? And* (3) *does the game playing analogy represent the types of student-to-student interactions seen in the online discussion boards?*

II. METHOD

A basic qualitative inquiry was used to explore the types of student interactions, conflict, and suspected game play among students in the asynchronous online human services course. The goal of our inquiry was to use research methods to explore the types of interactions in the discussion boards of an asynchronous online course through the theoretical lens of game play. Qualitative inquiry allowed us to classify the types of interactions, uncover themes, and develop a meaningful description of student-student interactions so as to identify ways to improve the depth of dialogue in the asynchronous online environment. It also provided a vehicle to explore whether Gallagher's game play analogy [9] existed within the online discussion board interactions, and a means to explore the play by play nature between students. Although our initial interest in this topic arose from interactions seen in our online courses, we purposefully collaborated as a research team in all stages of this inquiry so that we could more effectively bracket our own (or individual) biases.

We attempted to determine what types of interactions are present in online courses, to describe a portrait of student-student interactions, and to categorize interactions using an emergent design.

A non-probability sampling technique was used to gather data from three sections of an undergraduate course on disabilities taught by the same instructor at a public college in a state university system. The content, discussion board platform, and assignments were identical across all sections of the course. The same online discussion board conversation from the first module of the course in all three sections served as our data source. Students were asked to provide an initial posting to the discussion board in response to the following question:

> *What have you read, seen, or experienced regarding the broad and complex topic of disability? Can you think of some diverse persons that you have encountered in the workplace, in educational programs, or in the community? A person with a disability (or multiple disabilities) also has other diverse characteristics that are important to consider. Please join in the first discussion, Understanding Disabilities, to begin our conversations about disabilities.*

Both the syllabus and the discussion board identified the purpose of the discussion board dialogue to "provide [students] with an opportunity to reflect on the reading materials and activities of the module with your classmates." Each discussion board response was to be a minimum of 125 words and required citing references in support of arguments.

A rubric for discussion board participation was provided to all students at the beginning of the course; it detailed the expectations for initial postings (i.e., timeliness of the posting, reflecting on course content if possible and answering the question provided) and the need to respond to the posts of at least two peers. Students were encouraged to check the discussion board at least twice a week for new postings by

classmates. Both the initial and reply postings were required to be completed by the end of a three week module. In addition to the formal explanation of discussion board expectations listed in the course syllabus, the online instructor also posted an announcement at the start of the module reminding students in each section to "be engaged with the course study; participate in course discussions and dialogues; be open to seeing disability in a new light through the exploration of course materials; and interact during student-student dialogue and student-instructor interaction." Inclusion of the instructor's goals and expectations for asynchronous discussions is consistent with recommendations by Dennen [24] that students should be told explicitly of the need to interact with other students.

All three sections of the course had been completed prior to the start of this study. To gather the existing data, the researchers emailed a description of the study to all students who participated in the course. Each student was given the option of not having their postings included. All students were informed that no names would be attached to their postings. Students were asked to reply to the instructor's email with their willingness to participate; each was asked to check off in a box marked participation as either "yes" or "no" if they would like to participate. No students declined to have their postings included, which provided for a total sample of 32 students. There were 11 students in section one, 10 students in section two, and 11 students in section three. As a reminder, the same instructor taught all three sections; the course content and announcement described above were identical in all three sections The instructor-presence was held constant across the three sections given that the instructor, syllabi, and announcements were identical. The instructor's presence was not included in the qualitative analysis process, although it was determined by researchers that the instructor took on a supportive, conversational, and consistent tone across the three sections.

Data for this inquiry included 108 postings (32 initial postings from each of the 32 students and a total of 76 replies to peers). All posting data were aggregated into one Word document to ensure there was no identifying information. This 46 page single-spaced document served as the data source for qualitative analysis. The data file was distributed to all three researchers for a three-stage content analysis of student-student interactions using inductive analysis techniques: that is, thematic analysis, constant comparison, and member checking.

As Merriam has reported, documents created for purposes other than the research objective are nonreactive, and "a product of the context in which they were produced and therefore grounded in the real world" [25]. Consequently, there is a keen awareness among qualitative researchers of the value of online interactions as a rich source of qualitative data. Our decision to confidentially and ethically collect de-identified discussion data allowed us to capture real world experiences of student-student interactions that occurred during the asynchronous online course. The nonreactive nature of the collection of these existing interactions allowed for stability of the data so that the presence of the researcher did not alter the experience or event, which subsequently increased the trustworthiness of the data.

The exploratory nature of this study and the type of data collected allowed us to frame our analysis around theoretical issues related to student-student interactions and 'game play.' Thus, qualitative thematic content analysis was the best choice for analyzing student-student interactions, as well as to assess the appropriateness of game play as an analogy. Through the triangulation of data analysis techniques, we sought to increase the credibility of our findings to create an enhanced understanding of the interactions amongst students.

The first stage of our content analysis of the qualitative data document from the first discussion board from three sections of a human services course involved classifying a large amount of data into broad categories and themes. Using a post as a unit of analysis has been found to be reliable and valid for analysis purposes [26]. Each researcher individually searched for words, phrases, situations, and whenever possible, the written expression of feelings to thematicize a shared meaning [27] of student-student interactions. Following a preliminary review of emerging categories, we collectively revised our coding scheme and interpretation to better describe themes that appeared in the data. We sought to obtain subjective agreement of inductive coding categories in a manner that increased the dependability of findings.

Next, two researchers used the themes and categories to constantly compare relevant situations and nuances [28]. The researcher who was also the course instructor was excluded from this portion of the qualitative analysis so as to bracket assumptions or prior experiences had as the instructor. Constant comparison techniques allowed us to discover rich, thick descriptions and examples of commonalities found in student-student interactions. Since this portion of the analysis continued to involve the inductive formation of concepts derived directly from the aggregate document, we were careful not to force categorical definitions a priori so that unique themes based on the data could be developed.

Finally, several students from the course volunteered for member checking of the identified themes. Five students provided feedback and helped revising and/or solidify themes identified during the initial qualitative analysis.

III. RESULTS

Students' initial postings to the discussion board were examined first. The initial posting set the stage and provided a context for the remaining discussion board dialogue. Three themes emerged from these posts:

1. Students discussed their own personal experience with a disability.
2. Students discussed a family member or friend's experience with a disability.
3. Students did not have a personal or family/friend experience to share, but were interested in the topic due to a book, movie, or other media source.

These three themes were highly consistent with the instructors' prompt for the first post:

> *What have you read, seen, or experienced regarding the broad and complex topic of disability? Can you think of some diverse persons that you have encountered in the workplace, in educational programs, or in the community? A person with a disability (or multiple disabilities) also has other diverse characteristics that are important to consider. Please join in the first discussion, Understanding Disabilities, to begin our conversations about disabilities.*

From analysis of initial postings, we determined that the game play analogy was an appropriate theory to categorize students' online interactions. Students were akin to players in a card or board game. The initial posts established the skill level, expertise, and cohesiveness of what we refer to as ***'players' in a game of asynchronous learning***. By answering the initial prompt, each player established prior skill level through the content of his or her post; those with a personal experience may have been perceived by others as having a higher skill level than those without one. In responding to each other's postings, players self-selected a team alliance based on whose posting he or she replied to, and at that point in the reply cards could be shared to show similarities. While this analogy may seem overly simplistic, the back and forth nature of the interactions seen clearly mimics that seen in a game and not necessarily a natural conversation. The use of a game metaphor to understand asynchronous conversations between students was subsequently applied to the analysis. It should be noted that students were not be categorized as being "good" or "bad" players of a game, as this would mean judging one response against another. Given the personal and complex nature of the prompt, it did not seem appropriate to judge the quality of the theme discussed within a posting. Therefore, our analysis focuses on the positive and negative interactions seen within the discussion board, while holding constant the variable of instructor-presence.

A. Playing the rules of the game: Disability Poker

Analysis of posts revealed a pattern in each course cohort in which the rules of the game were established along with an understanding of individual players. Each cohort appeared to establish its own set of game play rules within the discussion board, which is consistent with the literature on the quick and strong establishment of online learning communities [3]. Students validated the posts of others by identifying strengths and offering textual support. Once rules were established, students were then able to share similar and differing opinions.

Each class established their expertise in response to the discussion board question. Our analysis revealed the presence of student competition in a game of "one-upmanship." For example, students displayed their proverbial cards by promoting themselves as the disability expert. Subsequent replies followed a pattern

in which others attempted to trump the card previously played. One such thread began with the mentioning of a living with a mild disability. The first person to reply stated she had a more severe version of the same disability. The next person to reply in the thread discussed the difficulties living with a parent with a disability. Finally, a student posted details about caring for her twin children with severe disabilities. This player drew the 'best hand' and was applauded by the group for her dedication to her children. Thus, in the game of disability poker, this student had the best hand in the first round of the game.

1. Moves students make in the game of asynchronous learning

Student-student interactions were categorized into two broad categories: (1) being *in* agreement with the game being played, and (2) being *out* of the game through disagreement. Examples of student comments for each broad category are presented in Table 1.

Table 1: Sample student posts categorized as agreement or disagreement

In: Agreement	Out: Disagreement
"I can relate."	"Kindly don't feel that way."
"I agree with your statement. "	"I would have to admit that my understanding has always been limited."
"Completely agree with you 100%"	""I'm not sure I agree with you…"
"I couldn't agree with you more. "	"Please don't take offense to what I am posting but…
"I can completely empathize with your thoughts. "	"It kind of disturbed me a little when you wrote…"

Within the category of agreement, students who followed the rules of engagement in student-student interaction agreed with others and began their replies politely and harmoniously. Supportive interactions between students were similar and validating. When a student engaged another in the conversation, they did so as a result of agreement with the initial posting and as a way to express support for other students' views. Everyone appeared to be cautiously playing well together. As seen in Table 1, agreement may have resulted from shared personal beliefs or experiences.

The qualitative analysis revealed clear patterns of 'game play' by students engaged in online discussions. This led us to further the metaphorical conceptualization of the moves students play in the asynchronous course discussion boards. For example, students who made the first move in the initial post by providing a personal or family/friend experience served as the lead-off player in the game by having others interact and respond to them in agreement, as noted in Table 1. This pattern was consistent across all sections of the course.

Similarly, student posts and responses appeared to form a team allegiance of agreement. Repetitive replies with enthusiasm (i.e., exclamation points and hyperbole in the writing) from small groups of students to commend and 'high five' other players was a dominant theme in the threaded conversations (e.g., "Great post!" "Thanks for sharing!" "You are for sure doing it right!"). This agreement with others did not advance the conversation, but was reminiscent of 'playing nice' in accordance with rules of a game.

B. Being out of the game

Not all students played well with each other. In particular, students who did not follow the unspoken rules of the game were not viewed as part of the team in the asynchronous learning environment. Thus, a

multi-layered category of disagreement and being 'out' of the game emerged. Most often, students who played the game differently by challenging dialogue or offering differences in opinion were met with disagreement by the other students (or players) in the course. Confrontation on the discussion board could be metaphorically described as an effort to force the other to fold his or her cards.

For example, one notable reply by a student challenged another student's word choice and attempted to correct the individual:

> *"It kind of disturbed me a little when you refer to people without a disability as 'normal.' I may be just playing the politically correct card too much, but I am very sensitive to discrimination of all people and would hate for you to think of anything even yourself as abnormal."*

It is interesting to note the student who posted the strongly worded reply made use of the word "card" in his reference to "playing the politically correct card." The student who made the initial post responded with an explanation of his use of the term. He also wrote, *"If I use the term again please don't take offense, in the future I will try to use another term."* Despite these efforts to engage in a critical dialogue, this student had no further interaction with other students in the module. Future posts from this player were weak, brief, and directed inquiry to the instructor. Thus, it appeared the student may have been silenced—essentially **folding his hand** and disengaging from the collaborative learning environment with other students as other students no longer replied to his posts.

Disagreement among student-student conversations was framed as being with or without engagement by others. When a student's post and experiences did not mirror and agree with others in the course, or if a student challenged a perspective of others on the discussion boards (one of the goals associated with critical thinking), the post was most often ignored or could be viewed as being banned from the game. One student wrote a divergent post about disability which stated, *"The really weird thing I've noticed is that elderly folks believe themselves "entitled" just because they're elderly… not, perhaps, because they're actually disabled, and it's like you have to defend yourself!"* This post was subsequently omitted from the group discussion even though the content of the post was appropriate to the topic being discussed.

The lack of engagement around students who expressed differing views was noticeable in our analysis—these posts were most frequently met with silence from other students. It appeared other students who converged in their agreement on the discussion board had already formed a cohesive team allegiance. Thus, the person who made a deviating comment was dropped from the group's conversation, essentially **forcing the player out** or banning them from the rest of the game since most were not willing to engage with them.

Those students who responded to the discussion board questions without providing personal experiences (either because they had none, or perhaps were uncomfortable in doing so), were ignored by other students. For example, one student provided a scholarly, lengthy, objective response to the discussion board prompt. No one responded to the post. Were these players too good for the team? In our view, this student may have demonstrated advanced academic skill that did not align with the abilities of other players in the course. The lack of alignment of intellectual and experiential capability appeared to create some distance in the student-student interaction.

The group validated one another's experiences of working or living with persons who are disabled. Yet when a student acknowledged limited knowledge of disabilities in his or her post, offering a rich opportunity for collaborative engagement and learning, the group did not reply. It was as if the student became an **inexperienced player** who could not play the group's game. For example, one student wrote:

> *"As I personally don't know much about disabilities, I have come across many disabled people in my life. I have very limited knowledge about disabilities and am looking forward to learning as much as I can from this course in order to apply it to my everyday life."*

No students engaged with this student's post. When students posted a comment that did not align with the group, the post was ignored and isolated while the larger group continued their conversation; students carried on without acknowledging differences in opinion despite efforts by the instructor to re-direct

students to the post. This was a missed opportunity for students to teach others how to play the game and to engage in critical dialogue.

IV. SUMMARY/CONCLUSIONS

The findings revealed by this qualitative exploration are particularly relevant; patterns of game play were found amongst students in all three sections of the course. Game rules were facilitated through shared beliefs and the experiences of students allowed 'in' as members of a team game. Disagreement was represented with or without engagement, which resulted in patterns of players being pushed 'out' of the game. Overall, the findings were akin to a game of asynchronous learning between students, with some students emerging as the leaders of the discussion boards, and others silenced or ignored.

A. Keeping Your Health in the Game: Staying Focused on the Content

These encounters highlight conflicts among and between students. When students pay more attention to each other than to the actual discussion prompt, there is a loss of content focus, and the discussion runs the risk of distracting students from the larger academic goals of the course. If the discussion becomes too focused on the experiences of one or two students, or if one student appears to 'win' every round (e.g., by having the best hand in disability poker or by challenging another student in such a way that the student does not continue to interact), the board is narrowly focused and does not invite a diversity of perspectives. It also runs the risk of becoming too confessional in nature, and can circumvent the academic nature of the topics. Focused attention should be placed on the discussion boards, as they are the primary mode of group communication in the online environment.

Although the instructor is known to be responsible for helping ensure fair play and establish expectations for student participation, we believe student interaction is a crucial element of online discussion boards. It has been said the online environment is "a potent environment for promoting interaction between peers" [29]. However, implicit in this statement is the assumption that peer interaction is a positive experience which promotes collaboration, community, and collegiality among students. Our analysis revealed students do not always play fair, nor do they necessarily play well with others in an asynchronous discussion. To achieve these goals, instructors may need to focus more attention on strategies than those which have been previously described in literature regarding asynchronous game play and student collaboration. This study further identifies the need for instructors to explicitly facilitate a constructive, interactive, shared process among students within the online discourse.

A need may arise for instructors to draw students away from personal connections to a more academic conversation, especially in human services courses. Providing a discussion prompt that allows for a combination of both personal and academic reflection—for example, drawing in the application of course content to personal experience—may allow for this advancement. The goal here is to allow all players to participate in the game, while also acknowledging there are certain rules to be followed. Instructors can ask students to use course content to frame not only initial discussion posts, but also responses to peers. While this practice may make the discussion at times feel more stilted, it will also help drive conversation back to the expertise of course materials, dissuading students from taking on the role of the expert or 'best' player in a game.

B. The Instructor's Playbook

The importance of the instructor's presence in asking for the elaboration of responses and eliciting explanations in the online discussion board is key to effective online learning [30]. Based on the type of discussion board prompt utilized, instructors can anticipate that discussions may take on a conversational, personal tone unless they actively work against this tendency. One way to do so is by establishing instructor presence very early on in discussions. Instructors may want to start with a **strengths based approach** by commending each student to create a positive, supportive culture where all students are free to express views, including those that are different from others. This process is akin to encouraging all players to participate in a game, while introducing clear rules of game play. Instructors can mention what

was learned from each student's post, and support comments based on course readings or supplemental material. Additionally, instructors should ask for feedback to their own posts. Being actively engaged in discussion boards will allow students to know there is a reciprocal relationship in the online course room.

We believe being an instructor to a human services course calls for the employment of empathic teaching skills. One can assume the content and topics covered in these courses (e.g. disability, discrimination, and family relations) may be influenced by students' personal experiences. These can be challenging discussions; students may be uncertain how to play their cards appropriately. Instructors should **probe to elicit ongoing dialogue** among students rather than make assumptions about the meaning behind student posts. Personal connections may exist even for students who have not disclosed said connections to other students in the course. Instructors should remember to mindfully draw out all student contributions using course content as a basis for advancing the conversation. One goal would be for instructors to allow students to engage in dialogue amongst themselves, presenting each other "with alternative ways of interpreting their experiences" [31].

The use of **Socratic questioning** is one popular method to explore students' perspectives in a non-judgmental, academic forum. In this method, the instructor does not direct knowledge or make assumptions about a student's point of view, but asks open-ended questions to promote further explanation on the topic of discussion—e.g., "You seem very passionate about this topic. Why is that?"; "Tell us more about your thoughts on this topic." In this way, the instructor is able to uncover the skills of each player and offer an opportunity for each student to contribute to the discussion, or play the game.

The instructor may want to **prompt for the contextual meaning** of a post in a way that will allow for the student to feel accepted and safe to express his or her views. The request for clarification of a post should be done in a way that is a supportive challenge rather than threatening or demeaning. The instructor is not calling out a student's weak hand or embarrassing a less experienced player, but must create a learning environment that promotes sharing of views and beliefs. For example, the instructor may want to comment positively on the post and then ask the student to elaborate further—e.g., "Your comment is intriguing. Can you tell us more about how you came to this belief?" A move by the instructor that advances the student-student conversation forward in a meaningful is a necessary pedagogical skill.

The use of **consistent formative feedback** is another way to curtail the development of negative gaming patterns by students in asynchronous course rooms. Assessing both initial and follow-up posts for critical engagement of course material is essential to ensuring stronger and more consistent participation. Formative feedback is intended to modify a learner's behaviors through probing questions, hints, redirection, and requests for clarification [32].

The use of a **rubric for discussion boards** is a key tool in the instructor's playbook and establishes clear rules of the game. Rubrics provide necessary expectations for students and offer directions for how posts and replies are to be structured. The use of rubrics to evaluate student responses not only reduces student anxiety regarding expectations, but also reduces the student reliance on personal experience to answer questions. Student perceptions of the online discussion board might be that they are more like a casual chat than an academic conversation [33]. For example, our analysis shows that posts containing source material were less emotional and allowed others to respond to the course content rather than the personal views of the student. However, posts with too much source material that did not infuse the student's perspective were ignored. Providing a concrete assessment tool reminds students they are engaged in academic discourse.

C. Helping Students Play Fair

Conflict in asynchronous learning environment presents opportunities for instructors to engage students in critical thinking and to promote a greater level of understanding of differences. Managing conflict on the discussion board is a required role of the instructor in order for fair game to be played in asynchronous learning. Hawkes and Dennis note that instructors should anticipate active involvement because it is often difficult to help students actively and academically engage discussion board topics [34]. Research on student perspectives of student-faculty conflict has found that the least desirable response from the

instructor is to do nothing or deny that a problem exists [5]. These same beliefs can be applied to student-student interactions.

Instructors need to recognize and address concerns as they arise in the asynchronous course to advance and model an academic conversation. The instructor who is **actively engaged in monitoring, evaluating, and providing feedback regarding student-student discussions** can gather valuable insights into the diverse needs of students in each section of a course. The use of active listening skills is not limited to the face-to-face classroom. Instructors must pay attention to players who are ignored or pushed 'out' of the conversation by other students, and perhaps stronger players. Instructors may need to reframe a discussion board question, ask for clarification, or ask the student if his or her thoughts were accurately understood. When appropriate, posting formative feedback as a general class announcement may communicate and reinforce expectations of student-student interactions. Instructors can use technology tools such as private chat areas and course email to pull a player aside (or out of the game). This allows the instructor an opportunity to verify accuracy of statements, draw out of students more complex reasoning, and investigate whether students adequately expressed themselves in the conversation and are comfortable in the asynchronous 'game.'

Being prepared and able to identify misconceptions, differences, or tensions between students in asynchronous conversations requires instructors to have questions ready to guide students on how to articulate and clarify these conflicts [30]. Question prompts might include: "What is the evidence for your thoughts?"; "Can you explain why you took that approach?"; etc. Each of these instructor 'plays' offer the opportunity to promote critical dialogue and advance the group as a whole.

When responding to student conflict in asynchronous learning environments, we encourage instructors to **focus on the content** of the argument as it relates to the course rather than the student. Students get off track and distracted when they see the cards of other players or compare their hand rather than focusing on learning related to course content. For example, there was evidence in our analysis of rich personal experiences and 'one-upmanship' of experiences with disability. However, these posts did not provide evidence of understanding of course readings or content. Personal stories are valuable ways to contextualize student learning [35], but these examples need to be framed within an academic analysis as a way to promote learning for all students—not just those who have the best hand. Additionally, students need to learn to see beyond their own experiences. The instructor can be actively involved in facilitating students to play well with others who are different than them as a way to advance understanding of course content.

Nonetheless, the instructor is the **content expert** on course topics and will be more likely to notice gaps or visualize how problems and topics can be approached more holistically beyond students' individual views [36]. Thus, the instructor must facilitate not only rules of the game in asynchronous learning, but also expand opportunities for inclusive game play in the course room. Instructors may want to purposefully solicit the viewpoint of students who have been challenged, and find ways to support those players who express differences in opinion.

D. Support Differences Between Players

Many human services courses consider the nature of diversity. Therefore, one purpose of the instructor's role is to help students learn alternatives to their own perspective by placing value on differences in beliefs and experiences in relation to course content. We must expand the concept of diversity to include the diverse nature of learning in order to realize how student differences in culture, academic skills, social background, and personal experiences influence student-student interactions in asynchronous learning. The very nature of differences can positively contribute to the intellectual and personal growth of students [37]. Being in an academic environment committed to diversity may contribute to students' development [38]. Instructors should support differences between students as a way to promote learning.

The online instructor must know how to create safe and effective online teaching and learning experiences for a diverse range of students. In every course, some online students will be experienced, confident players, whereas others will be timid and at risk of folding their hand (either in the course

conversation or the course itself). Kearney and Plax reported that students who feel alienated or different from the class more likely to exhibit aggressive or provocative behavior in face-to-face environments [14]. Online instructors need to be aware that these same dynamics may emerge in the online classroom, and actively intervene to prevent isolation or discrimination of one student by another.

When differences or conflicts arise in game play among students, the instructor may highlight the value of discourse tension by posting a validating comment such as, "It's great to see such a diversity of views on this topic." The use of the devil's advocate position and role reversal activities for student-student replies could be encouraged. Students with differences of opinions can be asked to engage in a reciprocal reflection of the strengths of a conflicting student's post rather than responding to differences with silence. This may promote positive dialogue among students to help maintain a safe, diverse learning environment that is visible to others in the course.

Instructors can and should make use of comparative information to highlight agreement between students as well as identifying areas of disagreement. The instructor can ask questions to clarify disagreement and to elicit a more in-depth discussion of the topic. The goal here is to ensure not only that all players are permitted to play, but to publicly demonstrate that the instructor can and will facilitate a fair game for all students.

V. LIMITATIONS

Several limitations were present within the study. The first was that only three sections of a course were analyzed. While this provided a multitude of data, only 108 posts and replies were analyzed. We recognize the discussion board prompt could be considered leading in how it was worded; this was a constraint associated with our use of archival data. However, the data provide a foundation from which to explore other human services courses. The sample also represented one of convenience as only one course from one college was chosen. However, the college selected has a large selection of online courses and a diverse student body. The course selected was an undergraduate human services course with only one online instructor. While this may seem limiting, it provided the opportunity to explore themes without the intervening variable of course content or variations in instructor presence, as the instructor was consistent in her discussion board involvement across all three sections.

VI. LOOKING AHEAD TO THE FUTURE

Disagreement, conflict, and different levels of experience regarding a controversial topic can be anticipated universally in human services coursework. Students should be encouraged to post and respond with respect. However, the goal of course discussions should not be to simply 'play nice' and avoid conflict, but rather to see and use ideas of disagreement as a springboard for learning. In human services courses, online discussion boards can be promoted as communities of practice, where disagreement models academic content. Instructors should respond to student posts with course goals and learning objectives in mind, and drive comments back to these outcomes. Instructors will not only model an academic conversation, but will also be providing a basis for measurable outcomes and fair play.

Our study is limited to three online, asynchronous sections of one course. Given the importance of the discussion board to online courses, future research on student-student interaction is warranted. Some questions to consider: How does the length of a discussion module or topic affect student interactions? If shelf life of the topics appears to be ending, how can instructors redirect or deepen analysis to avoid the unproductive conflicts described in this study? Can instructors phrase questions to ensure discussions do not encourage the personalization described in this study, or do students default to these patterns regardless? Finally, does the level of the course (introductory or advanced; undergraduate or graduate) influence the discourse of the game? Even when the level of the game changes, do gaming patterns among players (students) remain?

Discussion board conversations are the primary mode through which students in online, asynchronous courses engage each other, the course readings, major theoretical concepts, and the instructor. It is the

virtual classroom, and as such it demands careful and close analysis. This study hopes to shed light on what we term dialogic "games" in this virtual classroom. Similar to face-to-face counterparts, the virtual classroom holds promise for critical thinking, and deep engagement of material. Discussions are also at risk of remaining on the surface, however, with students playing games that encourage alliances, deference to positioned "experts," and silencing of students who do not neatly fit into a particular category of engagement. These patterns inform missed opportunities for real learning, diversity of perspective, critical thinking, and richly drawn peer-to-peer discussion. We believe it is incumbent on course designers and on instructors to minimize opportunity for these gaming patterns to develop by using consistent, content driven criteria to encourage critical reflection.

VII. REFERENCES

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