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Creating a Positive Atmosphere in Online Courses: Student Ratings of Affective Variables in Teacher Education Courses

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Editor's Note: Affective elements are part of humanizing and relationship development within an online environment. It may be more important for students in the social sciences than in science and engineering, but this has been little explored. Here is a good place to start.

Creating a positive atmosphere in online courses: student ratings of affective variables in teacher education courses

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Abstract

Instructors in higher education have to work to create a positive atmosphere. Yet, the behaviors instructors must exhibit to create such an atmosphere are different for online courses than face-to-face (F2F) courses. The current study surveyed graduate and undergraduate students in a teacher education program to identify which affective variables identified in academic literature for creating a positive online atmosphere are most and least important. The results of this study suggest undergraduate and graduate students rank logistical behaviors (e.g., clearly described directions and expectations, constructive feedback) as most important and emotional-relational behaviors (e.g., interpersonal relationships, humor related to content) as least important. The implications of this study advocate for online courses for adult learners that are clear in expectations and provide assignments that require both practical and higher order thinking. This study provides specific guidance for instructors about which behaviors have the most capital when teaching online courses in a way that creates a positive atmosphere.

Keywords: online courses, online teaching, course atmosphere, affective factors, emotional-rational behaviors, student satisfaction, student input, instructor capital, adult learner, teacher education

Introduction

In face-to-face (F2F) courses, instructors create an atmosphere using nonverbal as well as verbal communication techniques that are present outside academic, cognitive experiences (i.e., discussions, practice exercises, assessments, etc.). For example, when students experience F2F courses the instructors' facial expressions, gestures, posture, tone, clothing, and emotional state before or during the class can positively or negatively influence the students' impression of the instructor and overall course (Sidelinger, 2010; Myers, Goodboy, & Members of COMM, 2014; Witt, Schrod, & Turman, 2010; Witt, Wheelless, & Allen, 2004). The instructor can also provide verbal communication unrelated to the cognitive experiences such as a humorous exchange after class, a shared conversation with another professor who unexpectedly enters the room before class begins (Booth-Butterfield & Wanzer, 2010), and an informal conversation with students about weekend activities (Myers, Goodboy, Members of COMM 600, 2014). All of these affective factors create a positive or negative atmosphere in F2F courses, which influence levels of engagement and motivation (Sidelinger, 2010; Myers, Goodboy, & Members of COMM, 2014; Witt, Schrod, & Turman, 2010; Witt, Wheelless, & Allen, 2004).

In fully online courses, in-person affective factors that contribute to course atmosphere are absent. Graham (2006) explained, "Many learners want the convenience offered by a distributed [online] environment yet do not want to sacrifice the social interactions and human touch they are used to in a face-to-face classroom" (p. 9). Thus, instructors must work to intentionally create a positive atmosphere in online courses in order to encourage high levels of engagement and motivation in students, which are evidence of a positive atmosphere (Zhu, 2012). Nonetheless, instructors are left to hypothesize which variables in the online platform can compensate for the

lack of F2F interaction and positively influence the student experience. When instructors are left to randomly determine these variables, they may spend valuable time and resources implementing practices that have no positive influence on the students' experience. Are there certain critical behaviors that students identify as contributing to more or less to a positive online environment? In the age of technology efficiency, it is equally important to be efficient with human resources and design a course that maximizes technology and instructor capital. Therefore, the purpose of this study is to investigate which affective factors are most important and least important to create a positive atmosphere in a fully online course.

Literature review

Affective factors can be defined as “behavior having to do with emotional or feeling responses to an object of experience and all the complex perceptions, attitudes, characteristics, and behaviors associated with seeking, accepting, and incorporating or avoiding and rejecting the object” (Wight 1972, p. 2). Emotions shape the learner's perceptions of particular aspects of a situation and focus on cognitive processes (LeDoux, 1996).

In addition, “effective teaching requires instructors to meet both their rhetorical goals and their relational goals” (Myers, Goodboy, & Members of COMM, 2014, p.15). Thus, if educators are concerned about learning in the online environment, they need to be concerned about a person's experience in the learning situation and design educational experiences that are both meaningful and positive to the student. Although, not all learning experiences will be interpreted positively for every student regardless of the instructor's efforts to create a positive atmosphere, and positive emotions are not always necessary for success with different types of thinking tasks (Picard, R. W., Papert, S., Bender, W., Blumberg, B., et al. 2004).

Furthermore, in the context of Emotional Response Theory perspective, “relationships among instructor communication and student behavior are mediated by the emotional responses of students to instructor messages” (Horan, Martin, & Weber, 2012). Specifically, if a student experiences positive interactions with the instructor, the student is “likely to feel...motivated, attend class, and study [resulting]... in increased cognitive and affective learning” (Horan, Martin, & Weber, 2012). Even mildly positive affective factors can improve thinking (e.g., memory retrieval, creativity/flexibility in problem solving) (Isen, 2000) and are “significantly related [to] learning outcomes” (Bryant, S., Kahle, J.B., & Schafer, B.A. 2005; Eom, Wen, & Ahill 2006).

Affective factors in online courses are largely communicated through texts (e.g., announcements, feedback, email conversations, discussion boards, etc.) students read or interpret within a learning management system. Research indicates methods of communication through text in the online environment contributing to a positive atmosphere include clearly described directions and requirements (ASHE 2014; Jaasma & Koper 1999), individualized, detailed, and constructive feedback (e.g., includes correcting wrong assumptions), instructor-held high expectations, higher order cognitive activities (ASHE, 2014), humor related to instructional content (Wanzer, Frymier, & Irwin 2010), instructor credibility (Teven & Hanson 2004), instructor's presence in the course (Arbaugh & Hwang 2006), opportunities to ask more questions to the instructor, interpersonal relationship with the instructor, caring and encouraging communication from the instructor, and consistent and timely feedback in emails and assessments (Vonderwell, 2002). All of these actions are affective factors contributing to the online learners' emotional response toward a course. While these affective factors are suggested in academic literature, they are not described as most or least important to creating a positive online atmosphere; therefore, it is at the discretion of the instructor to choose factors to interact with students. However, an instructor's preference may not match the students' needs and desires. In the end, an instructor may choose

affective factors but they are unknowingly unimportant to creating a positive online course atmosphere.

Recognizing that the underlying theory of student success is closely tied to positive interactions between instructor and student, it behooves educators to investigate the student satisfaction of the most important affective components of online courses. Two research questions addressed in this study include:

1. Which affective factors are most important to the creation of a positive atmosphere in an online course?
2. Which affective factors contribute most to the creation of a negative atmosphere in an online course?

Methodology

Participants in this study were students in a College of Education online course at a Mid-western urban institution. A total of 186 undergraduate and graduate teacher candidates enrolled in teacher education courses required for all education majors were surveyed using Survey Monkey during the spring of 2016. Students were asked to rank order 11 actions instructors take to contribute to a positive online course atmosphere. Items were ranked based on how each item was important to the student with 11 being the *most important* and 1 being the *least important*. These 11 actions were compiled from the literature indicating each as an affective factor influencing online course atmosphere (Arbaugh & Hwang, 2006; ASHE, 2014; Jaasma & Koper, 1999; Teven & Hanson, 2004; Vonderwell, 2002; Wanzer, Frymier, & Irwin, 2010). Following the rank order task, students were asked, in an open-ended format, to identify up to five instructor behaviors that contribute most to a negative online course atmosphere. Providing both a quantitative and qualitative response allows for the use of multiple sources to compare data collected to increase internal validity (Merriam & Tisdell, 2016, p.245).

Table 1
Demographics for entire sample

Variable		f	% of Total Sample
Age Range	18-22	10	17%
	23-28	17	29%
	29-34	12	20%
	35-40	7	12%
	41 and older	13	22%
Degree Status	Graduate 3+ years	12	20%
	Graduate 1 st -2 nd year	26	44%
	Undergraduate 3+ years	19	32%
	Undergraduate 1 st -2 nd year	2	4%
Licensure Area	Early Childhood	19	32%
	Special Education	24	41%
	AYA	3	5%
	Reading Endorsement	5	8%
	Secondary	1	2%
	Middle Childhood	6	10%
	No License	1	2%

All respondents ($n=59$) completed the open-ended questions. A visual inspection of the demographics indicates that the sample successfully completing the rank ordering task ($n=36$) and respondents completing the open-ended questions ($n=59$) is similar in age range, degree status, and licensure area suggesting that the 23 students not completing the rank order were equally spread across demographic data.

Demographics of the 59 respondents indicate an age range 18 to above 41 years with the 23-28 years representing the most frequent age range ($n=17$). First and second year graduate students were the most represented degree status ($n=26$) with the first and second year undergraduate students the least represented ($n=2$). Respondents identified with a range of licensure areas with special education ($n=24$) and early childhood ($n=19$) the most frequent. A total of 59 students completed the survey (see Table 1); however, incomplete rank ordering data was received from 23 respondents who partially ranked the 11 items and are not included in the rank order summary leaving 36 respondents ranking all 11 items (see Table 2).

Table 2.
Demographics for individuals ranking all eleven items

Variable Items	Range	f	% of Total Sample
Age Range	18-22	5	14%
	23-28	10	28%
	29-34	8	22%
	35-40	5	14%
	41 and older	8	22%
Degree Status	Graduate 3+ years	6	16%
	Graduate 1 st -2 nd year	19	53%
	Undergraduate 3+ years	10	28%
	Undergraduate 1 st -2 nd year	1	3%
	Licensure Area		
	Early Childhood	11	31%
	Special Education	13	36%
	AYA	3	8%
	Reading Endorsement	4	11%
	Secondary	1	3%
	Middle Childhood	3	8%
	No License	1	3%

Note: N= 36. A total of 59 students completed the survey; however, incomplete rank ordering data was received from 26 respondents who partially ranked the 11 items and not included in this summary.

Table 3
Online Instructor behaviors and positive course atmosphere

Online behavior descriptor	M	Median	Mode	SD
Clearly described direction and requirements	8.61 ¹	10	11	3.32
Individualized, detailed, & constructive feedback	7.63 ²	8.5	10	2.57
Instructor held high-expectations	5.33 ⁷	5	5	2.69
Higher order cognitive activities	4.58 ⁹	4	2	3.05
Humor related to instructional content	3.97 ¹¹	3	1	3.47
Instructor knows the content	7.33 ³	8	8	2.72
Instructor updates home page, involved in discussions, provides announcements	5.86 ⁵	6.5	7	2.40
Opportunity to ask more questions to the instructor	5.22 ⁸	4.5	3	2.79
Interpersonal relationship with the instructor	4.52 ¹⁰	4	2	2.67
Encouraging and caring communication from the instructor	5.61 ⁶	6	3	2.71
Consistent and timely feedback in emails and assessments	7.30 ⁴	8	9	2.83

Note: $N=36$. A total of 59 students completed the survey; however, incomplete data was received from 23 respondents who partially ranked the 11 items and not included in this summary. Online behavior descriptors appear in order presented on the Survey Monkey. Means are ranked in order of highest to lowest rating.

Results

As noted in Table 3, rank ordering of the 11 online instructor behaviors indicates that higher rated items are related to instructor *logistics*, including clearly describing directions and requirements ($\bar{x} = 8.61$); providing constructive feedback ($\bar{x} = 7.63$); timely feedback ($\bar{x} = 7.30$); and provides web updates and announcements ($\bar{x} = 5.86$). Conversely, the two lowest ranked items are associated with *emotional-rational behaviors* including the importance of an interpersonal relationship with the instructor ($\bar{x} = 4.52$) and use of humor related to content ($\bar{x} = 3.97$). However, the *emotional-rational* behavior, encouraging and caring communication, is a mid-ranked item ($\bar{x} = 5.61$). One *academic/cognitive behavior*, instructor knows the content ($\bar{x} = 7.33$) is ranked as the third highest behavior that responders indicate contributes to a positive online course atmosphere. A number of remaining rankings related to *academic/cognitive behaviors* including instructor held high-expectations ($\bar{x} = 5.33$), opportunity to ask more questions to the instructor ($\bar{x} = 5.22$), and higher order cognitive activities ($\bar{x} = 4.58$) are also mid-ranked items.

An analysis of qualitative responses to the open-ended question asking respondents to identify behaviors that contribute to a negative online course atmosphere revealed six themes. Table 4 provides an overview of the themes which are listed in order of frequency based on the open-ended survey responses (i.e., lacks organization ($n=34$), feedback concerns ($n=42$), problematic assignments ($n=20$), availability ($n=12$), overall disposition ($n=9$), and grading procedures ($n=7$). In a similar fashion, the themes that emerged in the open-ended responses that represented the important affective factors, which used negative language, were the same as ranking task, which used positive language. For instance, respondents ranked *clearly described directions/requirements* as the most important instructor behavior for a positive atmosphere then self-identified in an open-ended response that *lacks organization* is associated with a negative atmosphere. This agreement between rank ordering and open-ended questions is also noted in the

high rating of feedback contributing to a positive atmosphere and feedback concerns (e.g., no feedback, negative feedback, late responses) associated with a negative course atmosphere. In a like manner, items associated with *emotional-rational* behaviors were not viewed as particularly important to providing a positive atmosphere in the rank order task while few respondents self-reported that overall negative dispositions contributed to a negative atmosphere.

Table 4.
Instructor behaviors contributing to negative course atmosphere and associated examples

Instructor Action Theme	Respondent Examples
Lacks organization	Unclear directions and assignments
	Difficulty finding items within the course
	Unclear expectations
	Poor or unclear course schedule
	Confusing online structure
Feedback concerns	No or minimal feedback on assignments
	Negative feedback
	Feedback not constructive
	Indirect feedback with no details
	Late responses (grading, email, feedback)
Problematic assignments	Assignments do not represent the real-world or are meaningful
	Unrealistic due dates
	Same activities each week
	Page restrictions
Availability	No or minimal communication
	Not able to get in touch
Overall disposition	Inflexible
	Instructor is not encouraging
	Assumes students are lazy/disinterested
	Not understanding of learning management system issues
Grading procedures	Grading according instructor's beliefs
	Unfair grading
	Rigid grading/petty point deductions
	Unclear rubrics
	No rubrics for assignments

Note: N= 59.

Discussion

At the onset of this study the purpose was to identify affective behaviors that influence a positive online environment particularly since affective behaviors are not easily conveyed in an online setting compared to a F2F course. Additionally, since current research suggests affective behaviors play a role in student satisfaction and success, it was the intent of the researchers to secure student ratings of critical instructor behaviors to avoid instructors "guessing" which affective behaviors are viewed as having the most capital to secure positive student feedback.

Nonetheless, findings of this current study suggest students in online courses have a strong desire to complete the course and “check it off the list” (i.e., low rank for relationship with the instructor, high rank for desire for clear leadership and timeliness). Although this outcome does not support the literature on the importance of affective behaviors, it does support the characteristics of the adult learner as noted by Knowles (1984) a leader in adult learning theory who purports that the adult learner is self-directed, has a readiness to learn, and needs relevancy in their course work (Knowles, Holton, & Swanson, 2015).

An additional conclusion from this study suggests adult learners at the university level want assignments that are pragmatic and translate to the real world (i.e., low rank for higher order cognitive tasks, high rank for unmet expectations on assignments). This means students do not like “busy work” or fulfilling course requirements that do not translate to the occupation for which they are training. The focus of adult learners is such that each task completed, each minute devoted, and each financial investment matters; thus, they expect course requirements to be purposeful toward their intended vocation upon program completion or graduation.

Implications

There are three main implications from this study for online instructors to implement within their course load. First, instructors need to ensure that assignments are both practical (i.e., pragmatic and translate easily to the classroom) and involve higher order thinking (i.e., Bloom’s Taxonomy levels of synthesis and evaluation). While higher order thinking was ranked low by adult learners in this study, online instructors cannot assume this is not an important skill for P-12 educators. It may be safe to assume that higher order tasks were ranked low because the adult learner perceives such tasks as time consuming and thus interferes with their desire for efficiency when completing course work. However, both the practical and higher order constructs of assignments can be achieved when assignment are directly related to coursework. For example, a teacher-candidate in a Literacy Assessment course might be required to assess a P-12 learner identified as at-risk and teach a lesson the same learner, which would be a practical assignment. This same teacher-candidate could be required to evaluate his lesson by reflecting on not only the pedagogy and data collected but his personal interactions with the P-12 learner. In this reflection, the teacher-candidate could be required to connect and affirm his observations to any research, theory, or an expert’s work. The assignment is, therefore, both practical and requires higher order cognitive tasks.

The second implication is online instructors should read what they post or present in expectations, rubrics and directions from a student’s perspective and anticipate what may be unclear or vague. This implication may seem elementary, yet it is of critical importance in the online environment in order to eliminate misinterpretations. Due to the lack of visual affective factors in an online course, instructors need to anticipate ways in which directions and descriptions (i.e., specific wording) could be misinterpreted. For example, instructors should avoid too many pronouns, provide examples and non-examples, avoid colloquialisms and metaphors, and repeatedly post due dates and where to submit assignments.

The final implication involves the need for research in this topic of study. Due to the sample size which reflects the many students out of 200 who did not complete the survey in its entirety, it would benefit the body of research to look at the strength of relationships among variables that affect online course atmosphere as well as the relationships among those that are ranked strongly (or weakly) with teacher-candidate demographics.

Conclusion

This study was conducted with students enrolled as teacher education candidates in a College of Education particularly because both authors are faculty in teacher preparation programs and seek to contribute to the literature related to online courses in teacher education. Students identified that a highly organized and responsive instructor were variables they regarded as contributing to a positive online environment. This is an unexpected result given the current literature on the importance of an instructor's affective behavior and student satisfaction. However, this finding does support research related to the adult learner who is looking for learning experiences that are directive and meet their needs.

To further understand the online adult learner, future research is needed to investigate to what extent online students in different areas of study (e.g., business, nursing, engineering, history, etc.) evaluate the meaningfulness of an instructor's affective behaviors. Academic areas often attract individuals with different personalities (Wille, Beyers, DeFruyt, 2012). Would this variable influence the affective factors they view as important contributors to a positive online environment? As online courses continually evolve and simulate the F2F classroom experience using multi-media and technology tools (Ganesh, Paswan, & Sun, 2015), such as synchronous discussions and live video feeds between instructors and a class of students, would the affective variables identified in this study as most (or least) important change in rating? Finally, online courses appeal particularly to graduate students (Grinder, 2014) who are older and who are more likely to manage course work alongside other life circumstances (e.g., marriage, full-time jobs, children) compared to typical undergraduate students. Are there affective variables associated with specific age ranges of students when creating a positive online course atmosphere?

While the academic literature has described affective variables that create a positive online course atmosphere, no previous studies have ranked them from most important to least important. The results of this study suggest a rank order for behaviors instructors can exhibit that promote student motivation and engagement reflective of a positive online course atmosphere. Instructors of online courses now have specific guidance about which behaviors have the most capital and influence when teaching online courses.

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