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Black wings
Intersperse
 Red
 Pink
 Gold
 Chatter
 Flutter
 Peck

Gather
 Scatter
Flurry to arrange
 Colored hoods bob
 Purple
 Green
 Blue
 Orange

 Ready
 Realign
 Music begin
 Energy
 Vigor

Process
 Before their young
 Fresh new students

 Faculty in
 Academic
 Regalia

Contributors

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Celebration and Reflection

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The Scholarship of Teaching and Learning (SOTL) movement in the United States and internationally is now sufficiently mature to justify a bit of celebration and reflection. The Carnegie Academy for the Scholarship of Teaching and Learning (CASTL) in the US has completed its first seven years. CASTL has provided key books, a [Gallery of SOTL projects](#), the [KEEP Toolkit](#) for reflective documentation and refinement of teaching and learning, and an evolving program for fostering leadership by individual campuses (currently the CASTL Leadership Program). Some individual campus programs in the US were also started by 1998 (including the Hesburgh Award winning program at my own [institution](#)). These campus programs provide local venues for involving faculty in this important project. National venues are provided by the annual Colloquia cosponsored by CASTL and by an increasing number of sessions at disciplinary meetings. Parallel developments have been occurring in other countries, perhaps most prominently in the UK, Canada and Australia.

International venues are provided by new or transformed journals such as [MountainRise](#) and by the new [International Society for the Scholarship of Teaching and Learning \(ISSOTL\)](#) which has just completed its second, oversubscribed (650 participants), annual meeting in Vancouver, British Columbia. Planning is underway for meetings in 2006 and 2007 in Washington, D.C., and Sydney, respectively. ISSOTL provides scholars the opportunity to give internationally peer-reviewed presentations (thus fostering higher standards and raising the prestige of SOTL for promotion and tenure), to explore developments across continents, and to develop networks and intensive conversations both nationally and internationally. More fundamentally, it consolidates the momentum of this emergent field in a way that makes it independent of the vagaries of support at particular institutions and from individual funding sources. At the risk of pride going before a fall—this feels like remarkable progress in a relatively short period. I think that this progress is largely the result of the alignment of five coupled levels of interest and importance.

1. Interest in Effective Teaching

Most obviously, on the level of the individual faculty member, SOTL fosters systematic, comparative examination of the extent to which the pedagogical practices we use effectively foster the kinds of learning and the competencies we most desire. Many faculty have found such questions at least intermittently interesting, but only a few have previously pursued them vigorously. SOTL programs on individual campuses provide intellectual and other resources for doing this more effectively and provide venues for making such thinking public. ISSOTL and [MountainRise](#) and similar journals provide sources of external validation that may be especially important when a campus program is underdeveloped.

Two key consequences follow from faculty beginning to apply research thinking to improving teaching and learning. Although faculty rarely have asked about current best practices or prior pedagogical research when they thought about teaching and curriculum development, they automatically begin to ask such questions when they think

about doing the scholarship of teaching—it is just part of doing research. Secondly, as some faculty learn how to efficiently ask such questions, they become a resource for their colleagues—and begin to ask different questions of them. This fosters a culture of research-based teaching that extends well beyond the faculty who are actually doing SOTL.

2. Support from Faculty Developers

A major force in the rapid development of SOTL has been the extensive support offered for it by the faculty development units at many institutions. About one third of the presentations at the first ISSOTL conference were tied to faculty development. Faculty interest in improving teaching has typically been short-term, often focused on particular problems or on the initiation of a new course. SOTL, in contrast, generates sustained engagement in individual projects and attendance at colloquia. Some campuses cite SOTL as their most effective faculty development initiative. And faculty development itself has become more transparently a vehicle for directing faculty to specific resources.

3. Expanding Definitions of Scholarship

There has been a sustained attention to expanding the definition of scholarship, a shift catalyzed by Boyer's 1990 *Scholarship Reconsidered*. This has made it easier to argue that SOTL should be considered as research for purposes of promotion and tenure. At the same time it has in some institutions generated considerable controversy as to what should count as SOTL—over its definition. Indeed, I initially participated in such discussions in ways that I would now regard as counterproductive. I now see that it is essential to distinguish between defining SOTL and deciding how to count individual SOTL productions for promotion and tenure and other rewards on a particular campus. SOTL itself is a spectrum that begins with any reflective analysis of one's teaching, often now augmented by tools such as classroom assessments, course portfolios or the KEEP Toolkit. From this base, SOTL extends through a wide array of increasingly sophisticated kinds of research.

Once the analysis of any SOTL study is made public either in a presentation or by publication, it can be considered as potentially counting for promotion and tenure. Two comparative points are then crucial. For normal disciplinary scholarship, whether and how much a particular form counts for promotion and tenure varies radically across institutions. In biology, some institutions that require "research" accept as sufficient the presentation in a departmental seminar of a review of new developments from the literature. Others accept as sufficient all publications in any scientific journal, including for example the proceedings of various state academies of science. Still others only really count publications in high-impact journals and require appropriate documentation for each journal.

Standards for SOTL obviously will need to vary across institutions in ways that parallel the variations in standards used by those institutions for disciplinary research. But there is an important second complication. Quite important SOTL can result from a wide variety of techniques—ones that span, for example, the entire range from purely qualitative to complex, pre-specified multivariate quantitative analyses. Again, existing disciplinary practices provide instructive parallels. Outside advice becomes crucial whenever disciplinary research uses techniques that are unfamiliar to most members of the department or ranges into questions on which the department lacks sufficient expertise to render sound judgment. Similarly, outside advice will be especially important

when the techniques used in a SOTL project or the questions it addresses lie beyond sound departmental judgment.

4. Shifting Contexts for Higher Education

Several developments are challenging or changing higher education in quite important ways. Three US examples will suffice. Alternative delivery systems such as the University of Phoenix are explicitly challenging the tradition of requiring a Ph.D. for instructors of introductory level material, especially in high enrollment areas such as writing and basic math. Across academia as a whole, much recent faculty hiring has been into non-tenure track positions. And there is an increasingly rapid expansion of on-line, pod-cast and distance education. Each of these developments raises the question of what, if any, are the advantages of having tenure track faculty teach particular classes.

At least in the US, one common response during the hiring process has been to increase the emphasis on teaching experience and, more recently, on knowledge of SOTL. At Indiana University we have found that students who have had courses in pedagogy and who have collaborated in SOTL projects typically are invited to do more faculty job interviews than those who have concentrated solely on disciplinary research. This has driven interest in SOTL among graduate students and faculty. Some 20 of our departments now offer SOTL based graduate pedagogy courses for their own Ph.D. students.

5. Accelerating Real World Problems

For a variety of reasons, it is becoming much clearer that major real world problems are collectively worse than most faculty have previously realized. These include global climatic change, social inequity, national and international disease situations and geopolitical problems.

Public discourse in a nation's capital on these issues can be seen as a collective final exam for the institutions of higher education in that country. Most of the major players in the national government, at least in the US, have an undergraduate degree and many have a graduate or professional degree. But policies and public discourse rarely seem to adequately grasp the complexities and tradeoffs. Perhaps I am being too optimistic in suggesting that more than a few faculty see SOTL as a way of focusing higher education on finding more effective ways to foster fundamental outcomes like critical thinking, engagement with the real world and sophisticated ethical judgment. I, for one, certainly hope that the effects of SOTL will extend this far.

Group Cohesion in Team-Based Learning

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Abstract

This study examined group cohesion within permanent student teams. A modified Group Environment Questionnaire was used to determine the locus of group cohesion. It was administered after the first four weeks of the semester and during the last day of classes. Average scores did not change significantly over time, nor were they different between classes or the sexes. An exploratory factor analysis revealed two clear factors on the post test: a task and a social items factor. Students appeared mostly attracted to their group because of the tasks and not so much the social aspects. Results are discussed in the context of situated learning theory.

Group Cohesion in Team-Based Learning

The volume of research conducted on cooperative learning has helped us learn far more about the efficacy of cooperative learning than about almost any other teaching strategy (Johnson, Johnson, & Smith, 1991). Cooperative learning implemented correctly has many benefits for the students and the teachers. Relationships within a class become more positive, absenteeism decreases and students' commitment to learning increases; feelings of personal responsibility to complete the assigned work grow, and the willingness to take on difficult tasks rises. Motivation, and persistence in working on tasks, satisfaction and morale, willingness to endure pain and frustration to succeed, willingness to listen to and be influenced by peers, commitment to peers' success and growth, and productivity and achievement can also be expected to increase (Johnson et al., 1991).

A unique cooperative learning strategy was developed by Michaelsen and colleagues (Michaelsen & Black, 1999; Michaelsen, Bauman Knight, & Fink, 2004). They named their strategy Team-based Learning (TBL) and developed it based on their observations that when group work was applied poorly, outcome-oriented, motivated students often performed most of the work for the group, resulting in inequity of workload; student complaints about group members and group activities, a lack of development of healthy group dynamics, little appreciation of diversity, and complaints about the in-effectiveness of group assignments for student learning. Ultimately, they argued, these problems resulted in poor team performance and low levels of learning (Michaelsen, Bauman Knight, & Fink, 2004).

Michaelsen and Black (1999) contend that small teams and the rotation of members among teams, as recommended in most cooperative learning texts, leads to less effective team work when compared to situations in which teams remain intact for the entire semester. He also argued against groups of three or four members and suggested

that teams should consist of about six members. A group of six members is small enough to function efficiently and large enough to contain sufficient human resources to deal with challenging assignments. Johnson and Johnson (2004) refer to these permanent teams as base cooperative groups.

Michaelsen and Black (1999) argued that groups should stay intact for an entire semester based on findings concerning group development (Tuckman, 1965; Tuckman & Jensen, 1977). Tuckman claimed that high-performing groups develop along a predictable sequence of five stages: a "Forming" stage, a "Storming" stage, a "Norming" stage, a "Performing" stage, and an "Adjourning" stage. The Team-based Learning teaching strategy was designed to help groups progress through these stages and become high-performing teams. It should be pointed out that groups often are not able to progress to the performance stage in one semester. Some may remain in, for example, the storming stage for the entire duration of a project or a semester. Likewise, groups that reached the performing stage for one project may revert to the storming stage on another. Group development is dynamic and the developmental stage reached depends on numerous factors. As a teacher one should not assume that progression through the stages during a semester occurs in a smooth linear fashion, and at times intervention may be needed.

A group of individuals needs to go through the stages of group development before the true benefits of cooperative learning and teamwork can be realized. Therefore students should remain in permanent teams throughout an entire semester and receive difficult group assignments that become common experiences and conquered challenges binding them together. The benefits of such an arrangement are clear. The students get to know each other much better and trust, communication, leadership, accountability, and responsibility, develop. They start to appreciate the benefit of diversity within the team and take on roles that match their individual strengths and benefit the team's performance. Finally, many students feel more comfortable being part of their own familiar small group compared to a large class full of strangers, and thus engage more intensely in the learning experiences. Further details about how the TBL strategy is designed to bring about these changes in students can be found in Michaelsen et al. (2004).

A theoretical explanation of the positive changes in students due to Team-Based Learning can be found in Lave's (1988) situated learning theory. Lave considered social interaction to be a critical component of situated learning because learners become part of a community which embodies certain desired beliefs and behaviors that are to be acquired. In related work, the concept of communities of practice was popularized by Lave and Wenger (1991) who argued that humans constantly engage in the pursuit of many endeavors and often engage in these pursuits together, interacting socially and with the world around them, modifying their relations and understandings with each other and with the world, learning in the process.

Situated learning theory implies that group cohesion should strengthen as a collection of individuals' works together in the pursuit of common goals, interact socially, develop relations and understanding, and learn together in the process. While the cooperative learning literature indicates that there are many benefits to using cooperative learning strategies (e.g. Johnson et al., 1991), the development of relations within a group, and the reasons for wanting to belong to an academically focused group in a specific class have not been examined in detail. Team-based learning with its prescription of

permanent teams provides a strategy that affords the study of the development of team cohesion and communities of practice. In order for a community of practice to develop, attraction to the group is a necessary prerequisite. The desire of individuals to belong to a group has been termed group cohesion.

Group cohesion is considered a social-psychological factor that is defined as “a dynamic process which is reflected in the tendency for a group to stick together and remain united in the pursuit of its goals and objectives” (Carron, 1982). The opposite of group cohesion, social loafing, is characteristic of individuals in poorly applied cooperative learning situations. Social loafing was defined by Latane, Williams, and Harkins (1979) as a psychological process of motivational loss in individuals participating in team work and reduced individual effort and persistence for teamwork. In a condition of social loafing, individuals working together on a task tend to exert less effort than when performing the same task alone. The issues of group cohesion and social loafing have been examined extensively in sport teams and research indicated that higher team cohesion was associated with greater success in sport performance (Carron & Ball, 1977; Bird, 1977; Landers & Crum, 1971). The negative effects of social loafing have been found when participants performed physical (Ingham et al., 1974; Huddleston, Doody, & Ruder, 1985) and cognitive tasks (Harkins & Jackson, 1985), it is pervasive in males and females of all ages (Harkins, Latane, & Williams, 1980) and impedes success.

Davids and Nutter (1988) found that players from successful volleyball teams cohered around task factors more than players from less successful teams. According to Bandura (1986), teachers have the potential power to influence team cohesion. Teachers may set up efficient learning environments and maximize mastery experiences to enhance collective efficacy and team cohesion. Also, coaches and teachers may influence collective efficacy through verbal persuasion and the modeling of efficacious behavior. Therefore, greater team cohesion can be achieved through working on tasks focused on a common goal rather than through activities focused on creating social bonds without the use of specific goal-directed efforts. Team-based learning asks of students to work in teams on demanding academic challenges in line with Bandura’s claims, laying the foundation for effective development of group cohesion and a community of practice.

Carron, Widmeyer, and Brawley (1985) constructed the Group Environment Questionnaire (GEQ) to examine group cohesion issues in sport teams. Subsequent studies have validated and further refined this instrument (Brawley, Carron, & Widmeyer, 1987; Carron, Brawley, & Widmeyer, 1998; Carron, Brawley, & Widmeyer, 2002; Carron, Bray, & Eys, 2002; Carron, Colman, Wheeler, & Stevens, 2002) and the instrument has been used successfully in college settings (Carron & Brawley, 2000). Validity of the instruments was reported by Schutz, Eom, Smoll, and Smith (1994).

The GEQ was deemed adaptable to examine the attractiveness of belonging to an academic base cooperative group during an entire semester of team-based learning. The essence of the items on the GEQ was not altered, but the wording was changed to better meet the academic classroom context. The modified GEQ was applied twice during the spring and fall semesters to a sophomore level motor learning and control class of freshmen and sophomore students over the span of five consecutive semesters from Spring 2003 through Spring of 2005. The Group-Interaction-Social, Individual-Attraction-to-Group-Social, Group-Interaction-Task, and Individual-Attraction-To-Task subscales were retained as theoretical constructs.

The purpose of this study was to examine the source of individual attraction of learning and working in permanent base cooperative groups for an entire semester. The following research questions were addressed. First, was the attraction of belonging to a group related to completing class-related tasks and assignments or to the social bonds and friendships that developed during the semester? Second, was group cohesion stable or did it change as students worked together over the course of a semester? Based on the review of the literature, we hypothesized that the source of group cohesion within academic teams would be mostly based on tasks rather than social interaction, and that the level of attraction might increase over a semester.

Methods

We administered the modified GEQ to five sections of a sophomore level motor learning and control course from Spring 2003 semester through Spring 2005. The courses ranged in enrollment from 57 (Spring 2004) to 66 students (Fall 2004; N=265; females = 108; males = 157) ranging in age from 16 to 49 years. For analysis purposes we grouped age in 5 year cohorts ranging from 20 and younger (n=61), 21-25 (n=145); 26-30 (n=33); 31-35 (n=9), 36 years and older (n=17).

Students were asked to complete the modified GEQ in class four weeks after the start of each semester so that they started to know their group members a little and had completed several group tasks as well as received introductions to group dynamics before completing the survey. The second administration occurred during the last day of class at the end of each semester.

The modified GEQ consisted of 18 items similar to those on the original GEQ (Carron, Widmeyer, & Brawley, 1985) and were organized in the same categories. Carron et al. labeled one of these categories as Individual Attraction to Group – Task (ATG-T), characterized by items such as “I’m not happy with the amount of play time I get” and “I do not like the style of play on this team.” A second category was labeled Individual Attraction to Group – Social (ATG-S) characterized by items such as “Some of my best friends are on this team” and “I do not enjoy being part of the social activities of this team.” A third category was Group Interaction – Task (GI-T) with items such as “We all take responsibility for any loss or poor performance by our team.” The last category was labeled Group Interaction – Social (GI-S) and characterized by items such as “Our team members rarely party together.”

Results

A multivariate analysis of variance of the Class (5) x Sex (2) x Age Group (5) x Test Time (2) x Category (4) with repeated measures on the last two factors was used to analyze the data. We used the Hotelling’s Trace as our multivariate statistic. The five-way and four-way interactions were not significant. The Sex x Age Group x Test Time interaction with repeated measures on the last factor was statistically significant, Hotelling’s $F(4,222) = 3.55$, $p = 0.008$, as was the two-way interaction of Class x Category, Hotelling’s $F(12, 656) = 2.91$, $p < 0.001$, and the Category main effect, Hotelling’s $F(3, 220) = 254.73$, $p < 0.001$. The follow-up analysis of the Class x Category interaction indicated that the interaction was due to the differences between Categories within each class, but not to the differences between classes within each Category. The Sex x Age Group x Test Time interaction was mainly due to non-significant changes in the average scores of the participants in the two oldest male age groups from the pre to the post test. These changes did not exist in the female

participants. The most meaningful finding is the category main effect due to students giving the highest scores to the Group-Interaction-Task, and Individual-Attraction-To-Group-Task subscale items which indicates that group cohesion is largely due to working on tasks together. Average scores were lower on the Individual-Attraction-to-Group-Social, and lowest on the Group-Interaction-Social items (See Table 1). *Table 1 Means and Standard Deviations for the Modified Group Environment Questionnaire Categories*

	Mean	Std. Deviation
ATG-T	6.8427	1.12673
ATG-S	6.3356	1.43098
GI-T	8.1640	1.31386
GI-S	4.1221	1.18914

Note: The rating scale for each GEQ item ranged from 1 to 10, with 10 indicating “strongly agree” and 1 indicating “strongly disagree”.

Based on findings by Sullivan (2004) who failed to find identifiable factors for the GEQ items in the co-competitive sport of track and field, we performed an exploratory factor analysis of all the data. Based on the eigenvalues and the scree plots, only two meaningful factors appeared for the pretest and the posttest rather than the four reported by Carron et al. (1985). While the loadings were slightly different for the pre and post test data, the majority of items related to the task-oriented constructs (ATG-T and GI-T) loaded on Factor 1, and items related to the social-oriented constructs (ATG-S and GI-S) loaded on Factor 2. This separation was particularly clear for the post-test data. Consequently, Factor 1 could be labeled the “Task” factor, while Factor 2 could be named the “Social” factor. Three GEQ items did not load on the two factors. While the average scores did not indicate a significant change in group cohesion over the semester, the factor analysis results suggested differently.

Based on Tabachnik and Fidell (2001), the correlations between the pairs of factor component scores for the pre and the post tests were computed to establish whether these factors were dissimilar between the pre and the post test. This analysis showed a significant correlation only between the pre and post test data for the Task factor, $r = 0.674$. The correlation between the pre and post test data for the Social factor was not statistically significant. This result suggests that the loadings on the Social factor were different for the pre and post test, indicating that changes did occur.

During the individual final exam at the conclusion of each semester, students rated each team member’s team work behavior on a 100 point scale. They were not allowed to rate themselves. Excellent team work behavior was defined as a student being self-motivated and a hard worker who took initiative; made sacrifices to ensure the success of the team; was concerned about the success and learning of the other team members; and clearly exceeded normal performance expectations. In such a case, students were asked to give more than 100 points, but no more than 150 to any such team member. If they gave a member 150 points, they were to lower the score for other team members to arrive at an overall team average of exactly 100 points. An analysis of the team work behavior data frequencies showed that 57.1% of the teamwork scores were above the 100 point average (See Figure 1) suggesting that the majority of students were perceived as better than average team members.

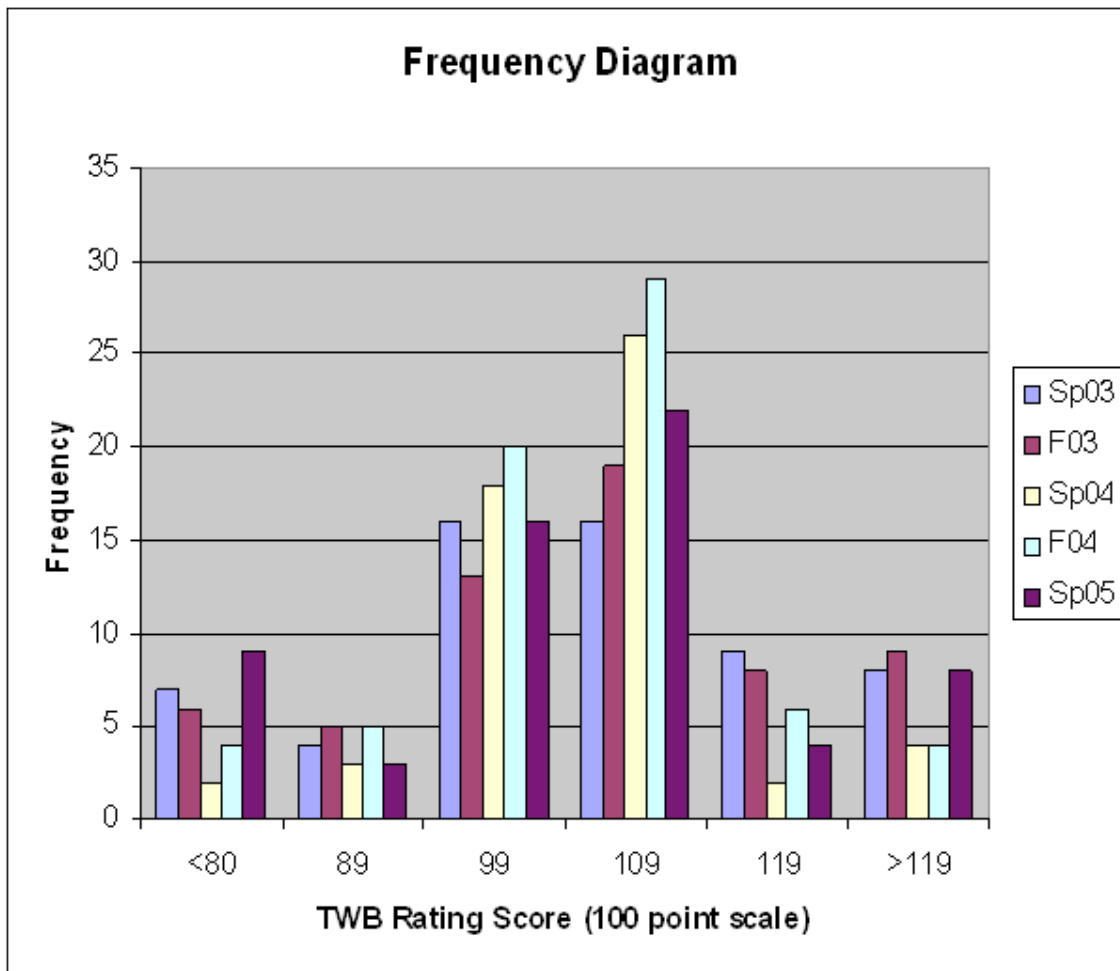


Figure 1. *Frequency Distribution of Team Work Behavior Scores. The Average Score was 100 and 57.1% of the Scores fell above the Average.*

Focus Group Comments. Students were asked about their experiences related to Team-Based Learning in focus group sessions by an independent facilitator during the last week of classes (Meeuwse & King, 2004). The following statements are examples of comments made by students during these focus group meetings. This sample of statements is related to group cohesion and indicative of the students' focus on task related aspects of team work.

- As a group we view different angles and approaches to the questions
- Other people's ideas helped one to understand the material individually
- Eight minds are more effective than one
- The sharing of ideas and the discussions lead to better understanding
- It taught us how to cooperate with the team
- It took seven different people's ideas and had to compromise to form a united decision
- The entire process enabled anyone who took advantage of the situation to further their knowledge on the subject, learn from their peers, and find out whether or not they fully understood the material
- Explain information to each other

- Help get teammates prepared
- Didn't want to let teammates down
- Collective knowledge is greater than individual
- Teammates helped my grades
- Accountability towards my teammates

Discussion

The first research question asked whether the attraction of belonging to a group was related to four different constructs focused on individual attraction to the group based on task orientation, individual attraction to the group based on social interactions, group interaction focused on task completion, or group interaction for social purposes. The mean scores, the factor analysis of the students' responses, and the student comments clearly indicate that the locus of group cohesion in Team-Based Learning is largely based on the benefits of working together to complete assigned tasks and much less on the social bonds that develop. Additionally, the data loaded on only two factors, a Task and a Social factor, suggesting that the distinction between individual attraction to a group and group interaction was not present in these data. The development of a specific tool to further examine group cohesion in academic settings in greater depth seems to be warranted as the two factors seem to be too coarse a representation of why individuals are attracted to an academic group.

The second research question asked whether the locus of group cohesion was stable or changed as students worked together over the course of a semester. Even though the mean scores indicated that there was not much of a change from the beginning to the end of the semester, the change in the loadings on the two factors, and the lack of correlation between the pre and post test pairs of factor component scores for the Social factor suggest that change did occur. While these data do not indicate causality, they do indicate that further study is warranted particularly concerning the development of social aspects of group cohesion in this academic team context.

While competition was not explicitly encouraged, Team-Based Learning required student teams to work on the same assignment, make specific choices based on what they learned, and displayed their choices simultaneously to the entire class. In the subsequent class discussions they received immediate feedback from their peers and the instructor about the reasons behind their choices. This strategy ensures that all students study the same information and justify their choices in a class-wide discussion using relevant background information and logical reasoning. These requirements change learning styles (Meeuwsen, King, & Pederson, 2005), and motivate teams to work hard because their understanding of the material is on public display and they need to be able to defend their solutions when questioned by others.

While these data do not directly confirm situated learning theory (Lave, 1988), social interaction within a team is a critical component of Team-Based Learning. The fact that factor loadings changed in strength and clarity from the pre to the post test resulting in strong task and social factors, supports the notion that a change in the locus of group cohesion did occur over the semester. The data suggest that this change may have been due to greater importance of social factors at the end of the semester. Moreover, observations of student behavior within their teams suggested that stronger social bonds did indeed develop among team members as the semester progressed. The data collected using the modified GEQ was not able to illuminate these group development changes.

The student comments reflect that they appreciated the benefits of working with others on tasks to achieve common goals. In combination with the results of the data analyses, it could be argued that the teams did develop as communities of learners. Groups came to embody certain desired beliefs and behaviors that strengthened over the semester by engaging in common pursuits, interacting frequently with a purpose, modifying their relations with each other, creating common understandings and work habits, and learning together in the process (Lave & Wenger; 1991). More research is needed to confirm this assertion.

In conclusion, using the modified GEQ to determine the locus of group cohesion in academic base cooperative groups was partly successful. The data obtained indicated that students were more attracted to group membership because of the benefits they received when working collectively on class assignments than the social interactions within the group. The data also indicates that future research needs to examine in greater detail how the social interactions change over a semester and their impact on student performance.

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The Effects of Teaching Future Teachers How to Teach Ethics

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Abstract

Seventy-one American college seniors enrolled in a teacher preparation program were studied to determine the effects of teaching future teachers how to teach ethics to their future students. Three instruments were developed to determine the impact of teaching method upon student knowledge/sense of ethics, student interest/motivation/sense of value in learning to teach, and student ratings of professor/course effectiveness. Two groups were studied: one taught without use of a convergence tool and one taught with such a tool. Students learning by use of a convergence tool had a statistically significantly higher score on all three instruments.

Introduction

"Character consists of more than just a person's moral values and judgments. It also includes outward manifestation of a person's identity and those attributes that affect whether one acts on or disregards the moral judgments one makes...." (King & Kitchener, 1994, p. 212) The goals of American higher education are often stated in terms of the development of students' character as well as their intellect (King & Kitchener, 1994). In fact, Dewey (1897) argued that the development of character is the ultimate aim of all schooling. Bok in 1988 stated that "...helping students understand how to lead ethical, reflective, fulfilling lives" (p. 50) is not only a goal but also an obligation of higher education -- and especially those preparing future teachers (considering the impact those graduates can have on their future students).

"Moral education of teachers is necessary for halting the weakening of the present generation's moral fiber" (Campbell, 1997, p. 1). There are increasing concerns about the perceived decline in moral and ethical values in American contemporary life and this concern is promoting renewed interest in moral education (Beck, 1990; Jarrett, 1991; Kelsey, 1993; Wynne & Ryan, 1993). Those being prepared to be teachers should be taught how to teach children to examine their own ethics and how to be ethical (Reiman & Johnson, 2004; Campbell, 2001; Strike, 1996).

Ethics deals with values, with good and bad, for what we do and don't do is always a possible subject of ethical evaluation (Singer 1993). "Ethics is a statement making a claim about how the world is and how the world should be." (Rutland Center, lecture, August 17, 2003) Ethical standards are: overriding, public, practicable, deal with serious matters, are not changed by the action of authoritative bodies, are impartial, and are associated with feelings of approval or disapproval that are expressed through a specialized vocabulary (e.g., duty or right) (Hart, 2000). As society in the US has less and less time for child rearing, more and more teachers are taking over the role that used to be done by community, church, and family; namely, teaching ethics (Green, lecture on the foundations of education at Clemson University, February 21, 2001).

This article is about how college seniors enrolled in a secondary social studies education program were taught how to teach ethics and the impact that the lessons had upon student perceptions. In a control-experimental study, there were statistically significant impacts by the ethic lessons upon the college seniors' sense of knowing ethics; upon student perception of professor effectiveness; and upon interest in learning education -- and these impacts are reported in the Results section of this article. While done in social studies education, the information in this article should be helpful to those who teach in other disciplines (because the teaching of ethics is not exclusive to social studies) and, indeed, should be helpful to the reader who just wants to explore his/her own sense of ethics.

Despite the importance of teaching ethics in higher education, there is very little investigation on how ethics gets taught or what effect ethics courses actually have on students' knowledge, interest, and sense of value in learning the subject. So, in addition to teaching how to teach ethics to future teachers, the goal was also to improve the college seniors' sense of knowing ethics. American educators are concerned that the students are coming into their classes with unacceptable ethical standards (Martel, 2003). Seventy-one college seniors enrolled in a teacher preparation program were taught how to teach ethics to their future students. The experimental group was taught using a tool developed by the Rutland Center for Ethics at Clemson University that taught those learning ethics to strive for a convergence (i.e., agreement) of three ethical philosophies (Kantian, Utilitarian, and Virtue Ethics) and the control group had the same lesson but without use of this tool.

The results of this study might shed some light on a useful tool with which to teach ethics and thereby give information to others who are contemplating how to teach their own students about ethics.

Rationale

In the Platonic view, knowledge is both having the right answer and being able to explain why it is the right answer (Wueste & Jones, 2003). When you have an ethical discussion, the topic becomes one of opinion and belief. The college students in this research felt that it was important for them to be able to justify those opinions/beliefs and also learn how to teach their future students to do the same.

Dialogue is useful for the students exploring their own sense of ethics (Nucci, 2001; Wueste, 2003). Dan Wueste of the Rutland Center for Ethics in 2002 cautioned that it was best to avoid absolutism and relativism. Those two beliefs cut off discussion and discussion is important to exploring ethics. The college seniors were not taught that absolutism or relativism were "wrong." Indeed, many parents raise their children with one or the other of those two beliefs. Wueste (2002) defined absolutism as the belief that there is only one code of morality and relativism as the belief that, if an ethics is right for one group or person, it is correctly moral. When absolutism or relativism was encountered during the lessons for both Group A and Group B, students were asked if anyone knew of another idea in order to encourage dialogue. The class then discussed the correctness of that idea in the light of the previous absolutism or relativism statement. If an answer was given that might not be considered moral, students were asked if anyone had another opinion. This approach seemed to open the dialogue and some students did change their opinions to acknowledge that there might other ways of looking at reality.

Review of the Literature

Teacher preparation and development have become increasingly important in American school reform (Reiman & Peace, 2002). Originally, children were influenced by three parts of American society; namely, the community, the family, and the church (Bob Green, lecture on educational foundations, Clemson University February 21, 2001). In more recent times, the community is a huge city in which children are not the main concern; the family is either single or both parents are working and the children are raised in daycare centers; and not that many citizens either go or are influenced by their church. So, schools seem to be taking over child rearing. Part of child rearing should

include ethics. Teachers need to be taught how to do this.

Reflective Judgment To act ethically requires reflective judgment. Reflective thinking and moral judgment represent different but related domains (King & Kitchener, 1994). Both reflective thinking and some aspects of character development are frequently identified as desired outcomes of education. Reflective thinking appears to be a necessary...precursor of moral judgment (King & Kitchener, 1994). There are structural

<u>Stage</u>	<u>Concepts of Knowledge</u>	<u>Concepts of Morality</u>
1	Single concrete category for knowing	Single concrete category for good/bad
2	<i>2 concrete categories for knowledge</i>	<i>2 concrete categories for morality</i>
3	Several concrete categories for knowledge	Several concrete categories for morality
4	Knowledge is understood as a single abstraction	Morality is understood as a single abstraction
5	2 or more abstract concepts knowledge can be related	2 or more abstract concepts of morality can be related
6	Abstract concepts of knowledge can be related	Abstract concepts of morality can be related
7	<i>Abstract concepts of knowledge are understood as a system</i>	<i>Abstract concepts of morality are understood as a system</i>

similarities between reflective and moral judgments:

In a study on reflective judgment, Kitchener, Lynch, Fischer and Wood (1994) state that there are seven stages to determining ethical decisions and not even all adults reach the top stage. Since most college students are at stage four with a few at stage five, it was felt that the topic had to be explained at their level -- thus, the Rutland Center for Ethics convergence idea was used. In addition, the high school students that these future teachers would be teaching are at stage two with a few at stage three (King & Kitchener, 1994).

Stage	Cognitive Characteristic
7	Knowledge develops probabilistically through a process of inquiry that is generalizable across domains: At least 24-years-old with some post-graduate work
6	Knowledge is uncertain but constructed by comparing and coordinating evidence and opinion on different sides of an issue: College graduates
5	Knowledge is uncertain and must be understood within a context; thus, it can be justified by arguments within those contexts: Some college students
4	Concept that knowledge is unknown in several specific cases leads to abstract generalization that knowledge is uncertain: College students and some high school upper classmen
3	Knowledge is uncertain in some areas and certain in others: High school students and some middle school students
2	Two categories for knowing: right answers are contrasted with wrong answers: Middle school and some elementary students
1	Knowing is limited to single, concrete instances: Most elementary students

Ethical development (e.g., knowledge) is not the same as cognitive development (e.g., reflective thinking). Again, most college seniors are at stage 4 with a few at stage 5. Their future high school students are at stage 2 with a few at stage 3 (King & Kitchener, 1994). So the strategy was to teach college seniors (that were going to become teachers) about ethics and, in addition, to teach them how to teach ethics to their future students, who would be at a lower stage of intellectual development.

Teaching Ethics Having a high quality of teacher preparation is the lynchpin of teacher education reform (Darling-Hammond, 1996). Future teachers need to have a better understanding of how decisions are made in moral situations (Nagel, 1979). This understanding can be best taught by expanding the students' moral imagination, in which they can explore all possibilities before making a judgment (Kekes, 1993).

Moral sensitivity is crucial for making moral decisions (Bebeau, 1994; Rest, 1994). Moral sensitivity is the ability that teaches how our moral decisions affect others (Myry & Helkama, 2002). Once moral sensitivity is developed, it is possible to make the most ethically correct judgments in ethical situations since judgment involves perception, knowledge and action (Pardales, 2002). Moral sensitivity is directly related to moral motivation and the building of moral character (Rest, Narvaez, Bebeau, & Thomas, 1999).

Procedure

Both groups A and B were briefed on the definition of ethics and the state of American education today concerning ethics in the classroom. Each group was given the three instruments (see appendix) as a pretest and as a posttest. In the convenience sampling, four classes were randomly selected to participate in either the control group (A) or the

experimental (B). Group B was taught the convergence tool and used it with both the teaching scenarios and the real-life case studies. Group A was taught just using the three teaching scenarios and the real-life case studies.

Only three theories of ethics were considered. For example, Nel Nodding's work on Care Theory was not used. We also did not use John Rawl's Theory of Justice or Carol Gilligan's feminist-inspired Ethics of Care upon which Nodding's work is based. We investigated these theories and agreed with Dan Wueste of the Rutland Center for Ethics that they were too complex for high school students and one of the goals was to teach future teachers how to teach ethics to their future high school students.

The Tool Students were instructed on three ethical theories. Students were then given three imaginary scenarios by which they were taught how to get a three-way convergence of all three ethical theories. By convergence, it is meant that all three ethical theories would agree that the most ethical decision had been made. Afterwards, students were given some real-life scenarios and asked to further apply their convergence knowledge of all three ethical theories.

UTILITARIAN = The good of the many outweighs the good of a few. The aim is to achieve the greatest benefit possible at the lowest cost. Right actions are actions that create the greatest good for the greatest number.

KANTIAN = You are to treat humanity, wherever you find it (in others or yourself) with respect. Human beings deserve this; they have a right to respectful treatment. Another way of expressing the criterion of right action here is to say that the policy of a right action is universalizable (the policy could be a universal rule of action). So, a mark of wrong action is that its policy cannot be universalized. This is the golden rule idea. Kant's approach is a non-consequentialist approach. Accordingly, those who embrace it reject the idea that the end justifies the means. Kant, however, acknowledged 3 types of action: good, bad and neutral. A neutral action (like dropping a pencil) is neither good nor bad. Kant, therefore, stated that goals and means need to be either good or neutral.

VIRTUE THEORY = The Platonic approach, like the Aristotelian approach, does not aim at identifying duties (both the utilitarian and the Kantian approaches have this aim). Both Plato and Aristotle advocate what has come to be called an ethics of aspiration. The goal with this approach is to be an excellent human being, that is, a person who has developed habits of action that lead to right action (in a word, good character). Acting rightly comes naturally to a person with good character in much the same way that outstanding performance comes naturally for a virtuoso musician or athlete. Here, one's role demands as a parent supercede one's job role demands.

The Teaching Scenarios It is important for the students to know that, if one can get all three ethical theories agreeing the most ethical decision was made, the chances of the students making the most ethical decision were very good. Three, imaginary scenarios were used to teach how to get a convergence of Utilitarian, Kantian, and Virtue theories. While a convergence of all three would almost guarantee your decision was ethical, a convergence of any two would probably give some assurance of making the right decision (Dan Wueste, lecture at Rutland Center for Ethics, August 13, 2004).

The Emergency Room *

You are a doctor in a hospital's emergency room. Six accident victims are brought in. All six are "at death's door," but one is much worse off than the other five. You can save that person, if you devote all of your energy, resources, and attention to him. Alternatively, you can save the other five, if you are willing to focus your energy, attention, and resources on them.

What should be done?

Why would that be the right thing to do? What would justify doing it?

*This is a slightly revised version of a case from Gilbert Harman's *The Nature of Morality* (New York: Oxford University Press, 1977).

The Man in Room 306 *

You have five patients who are dying; each needs an organ transplant. You can save all five, if you take a single healthy patient and harvest his organs for transplantation. The person you need is in room 306. He is in the hospital for a physical—for insurance purposes. You know from the results of the tests that have been run that he is perfectly healthy. You also know that his organs could be transplanted successfully in the needy patients. If you do nothing, he will survive without incident, but the other patients will surely die. They can be saved only if the organs of the man in room 306 are harvested and transplanted.

What should be done?

Why?

*This is a slightly revised version of a case from Gilbert Harman's *The Nature of Morality* (New York: Oxford University Press, 1977).

A Day at the Beach *

You are a lifeguard at a public beach. Looking to your right you see two people floundering about and in obvious need of assistance. However, as you climb down from your lifeguard tower, you notice that your 16-year-old daughter, who was swimming off to your left, is also in danger of drowning. No one else is in a position to help.

What would you do?

What should you do?

* This is from case studies provided by the Rutland Center for Ethics (2004) at Clemson University

Teaching by Three Scenarios

We looked at the above case studies in groups. After each group presented a majority (and, in some cases, a minority) report, we held a discussion. Our ground rules were that we were working not only with opinions but also beliefs, which are deeper. So, all involved agreed in advance to respect each other's statements -- even if they could not agree with such statements. The students discussed and debated how they would use the three theories to demonstrate that their group made the most ethical decision possible for each scenario. Most were able to do this. Only if the students could not get a convergence of all three ethical theories, did we teach that the convergence for all three case studies would be as follows:

For the emergency room, Utilitarian ethics would teach save the greatest number. Kantian ethics would argue that there are 3 types of actions (moral, immoral, and neutral). You need to save the five but you did not kill the one - in cases like this, waiting to work on the one until after you save the five is neutral action. Virtue ethics would argue that one aspires to do the greatest good for the greatest number and saving the one would condemn the others to death (one does not aspire to commit manslaughter).

For the man in room 306, Utilitarian ethics would argue that the long-term result of that action would be for all people seeking insurance not to undergo hospital physicals plus many people would not go to the hospital for other help; so, our medical system, insurance system, and people in general would suffer (you have not done the greatest good, you have done long term harm). The Kantian would argue that one cannot take from another person unless that person consents of his or her own free will - we must respect all people's free will. Virtue ethics tells us not to aspire to steal from people and kill them (I do not aspire to be a murderer).

For the day at the beach, Utilitarian ethics would argue that if all parents did not carry out their primary duty of protecting their children, society in general would suffer (so, save your child and throw out lifesavers to the two adults). Kantian ethics would argue that your responsibility as a parent is higher than your responsibility for your occupation - so, since lifeguards should never work alone, get the others to save the two adults. Virtue ethics requires you to be a good parent before you be a good lifeguard.

The convergence for all three case studies would be as follows: For the emergency room, Utilitarian ethics would teach save the greatest number. Kantian ethics would argue that there are 3 types of actions (moral, immoral, and neutral). You need to save the five but you did not kill the one - in cases like this, waiting to work on the one until after you save the five is neutral action. Virtue ethics would argue that one aspires to do the greatest good for the greatest number and saving the one would condemn the others to death (one does not aspire to commit manslaughter).

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The Real-Life Scenarios The next part of instruction involved real-life ethical case studies. Working in pairs, each pair was given a different case study. They were to explain their case study to the class and tell what the most ethical decision to make would be based on attempting a convergence of the three philosophies stated earlier in this article. Again, after each group's presentation, the class discussed if a three-way agreement was reached with all three ethical philosophies. Here, the discussions allowed for agreement as well as disagreement with all positions being heard respectfully. All paired groups were able to get a three-way convergence.

1. Lobbying for "Liberation"

Three years ago, King Industries was named by the Department of Defense as the prime contractor for a new generation of battle tank. Though military production amounts to only a small part of King's business, the contract is enormous in dollar terms and potentially very lucrative. But things have not been going so well otherwise for King. Intense competition in its consumer products division and a national recession, which has reduced the demand for consumer durables, has resulted in huge losses for the company, which has depended on this division for 80% of its revenue in the past decades. Analysts say that the company is in danger of bankruptcy, and if such a bankruptcy occurs, tens of thousands of jobs in factories throughout the United States may be lost.

Ned Ordway is a longtime lobbyist for King Industries, and has spent years gathering support among legislators for legislation favorable to King, encouraging them to resist legislation and other policy decisions which would be unfavorable to King. Recently, there has been much political unrest in the country of Chad, partly due to the efforts of groups opposed to the current regime, and there is some discussion of U.S. military intervention in the country. However, support for this has been weak because opposition groups are seen by many analysts as no better

than the current regime, and because the current situation does not pose a clear threat to the interests of the United States, though there is some concern that the political turmoil could spread to neighboring states. Legislation has been proposed that would give \$53 million to opposition groups, which will likely lead to military intervention on the part of the United States if the groups are effective at using the money to destabilize the government. Both military intervention in Chad and military aid to a new government in Chad will increase demand for J-1 tanks and will likely hasten the timeline by which the old tanks will be replaced. This would restore the financial health of King Industries as well as provide a future government friendly to the United States with the best in tank technology.

Ned is lobbying for the legislation and coordinating attacks against groups that oppose the legislation and military intervention; however, he has some concerns about whether or not this is lobbying-as-usual, or something very different. You are a trusted friend of Ned and he asks your advice. What do you say?

Convergence: A Utilitarian would say that the greatest good would be for Ned not to lobby as the good of the people (not engaging in a war because people are killed) outweigh the good of his business and the warhawks in politics. A Kantian would argue that you are not treating others with respect if the profit motive is more important to you than human life. Virtue Ethics would say that to aspire to be a good human being, one needs to put the good of others (no war) over the good of one's job.

2. That 'Ole Time' Religion

The text of the First Amendment to the U.S. Constitution is as follows: Congress shall make no law respecting an establishment of religion, or prohibiting the free exercise thereof; or abridging the freedom of speech, or of the press; or the right of the people peaceably to assemble, and to petition the Government for a redress of grievances. NOTE: The questions below deal only with the part of the amendment that is about religion.

Suppose you were one of the Founding Fathers. Would you have voted for the adoption of this amendment? Why (or why not)? Does this amendment allow people to have no religion at all? Is that a good idea? Why (or why not)?

Convergence: If you were a Utilitarian, you would vote for the First Amendment because it offers the greatest good to the most people of all religions in the country. If you were Kantian, you would vote for it because you should respect other peoples' faiths. Virtue Ethics would require those aspiring to be good Americans in the new democracy to extend freedom to all peoples, regardless of faith.

3. Ethics and the Patriot Act

The Patriot Act increases the government surveillance power in several

areas, including: Records searches. It expands the government's ability to look at records on an individual's activity being held by a third party. (e.g., doctors, libraries, bookstores, universities, and Internet service providers). Secret searches. It expands the government's ability to search private property without notice to the owner. For example, the government can enter a house, apartment or office with a search warrant when the occupants are away, search through their property, take photographs, and in some cases even seize property - and not tell them until later. Intelligence searches. Under the Patriot Act, the FBI can secretly conduct a physical search or wiretap on American citizens to obtain evidence of crime without proving probable cause, as required by the Fourth Amendment. Previous exceptions to the fourth amendment had only allowed searches if the primary purpose was to gather foreign intelligence, but the Patriot Act changes the law to allow searches when "a significant purpose" is intelligence.

Isn't national security our primary concern these days? Don't we all have a patriotic duty to promote homeland security? Where, if anywhere, should and how we draw the line?

Convergence: A Utilitarian would argue against the Patriot Act because it could lead to the loss of freedom for too many Americans and endangers the Constitution. A Kantian would argue that one has to respect the rights of all citizens or risk losing yours. Virtue Ethics states that, if one aspires to be a good contributor to American democracy, one would not endanger that democracy.

4. Right to die

"Skin cancer had riddled the tortured body of Matthew Donnelly. A physicist, he had done research for the past thirty years on the use of X-rays. He had lost part of his jaw, his upper lip, his nose, and his left hand. Growths had been removed from his right arm and two fingers from his right hand. He was left blind, slowly deteriorating, and in agony of body and soul. The pain was constant; at its worst, he could be seen lying in bed with teeth clenched and beads of perspiration standing out on his forehead. Nothing could be done except continued surgery and analgesia. The physicians estimated that he had about a year to live."

Matthew Donnelly begged his brother to shoot him. He did. Was what Mr. Donnelly's brother did a criminal offense? Is euthanasia wrong - why or why not?

Convergence: A Utilitarian would argue that despite the patient's condition, the cost is too high (taking a human life) to justify shooting him. Utilitarians would also argue that a person in a lot of pain, might not be in full mental capability of asking for death and, if one did this to all patients asking for death, America could become a nation in favor of euthanasia, which allows for too many costly mistakes. A Kantian would state that one can not take a human life except in self-defense. Virtue Ethics states that, if one wishes to fulfill to the highest one's role as a brother, one does not take another brother's life.

Instruments

Professor/Course Effectiveness

Would this unit on how to teach ethics have an effect on students' perception of course/professor effectiveness? This was measured. The instrument assessing professor/course effectiveness was originally developed by Jack Fraenkel and presented at the national convention of the American Educational Research Association (Fraenkel, 1992). He used it without establishing reliability and validity, but he gave permission for such a study (Fraenkel, phone call to Susan Pass, November 28, 2000). So, in 1993, 180 students took part in a four-week study to establish reliability and validity of this instrument. A factor analysis was done on the results.

Two factors were identified with the teacher effectiveness instrument. Factor 1 dealt with student perception of their teacher's excellence. Factor 2 dealt with students' perception of the excellence of the course as created by the teacher. This instrument is reliable with a Cronbach's alpha of .86 for the overall instrument (.97 for Factor 1 and .56 for Factor 2). Validity was established using the Delphi technique with eight teachers and three professors of social studies education. After a series of exchanges over two months, all eleven reported that the instrument was valid in reporting what it was designed to do; namely, student perception of teacher and course effectiveness.

Student Interest/Motivation/Sense of Value in Learning the Subject (Teaching)

Would use of this unit on how to teach ethics increase students' motivation to learn how to teach? This was measured. An instrument was developed to measure student interest/motivation/sense of value in learning the subject from Fraenkel's instrument. By changing the format of Fraenkel's instrument to reflect interest and motivation, an instrument was developed that could be used to assess progress in motivating the students to learn the lesson.

The instrument was assessed on usefulness and reliability and its items appeared to have strong communalities and acceptable reliability (the standardized item alpha was .5749). However, the data analysis also seemed to indicate some mutuality of factors. While the inter-item reliability ranged from strong to weak, all the components were stable over time. From the data, it was deduced that there were components at work, which clumped the data, and further analysis was done.

Three factors arose from the data analysis; namely, student interest, motivation, and sense of value in learning the subject. Communalities for all items were good and a scree plot showed an acceptable "U" curve. The alpha values on all 3 factors were good. Factor One (interest) had an alpha of .6179; Factor Two (how students valued the good that they would receive from learning the subject) was .6857; and Factor Three (student efficacy or motivation derived from lessons) was a .6023. However, an interesting fact was that item C was included in two factors (two and three). It is believed that this was because students perceived learning the subject was good for them, if they could participate more in class lessons. Validity was established through a Delphi technique done with four college professors and eight teachers in 1994.

Student Achievement or Student Self-Rating Scale on Ethical Knowledge/Sense of Ethics

Would students' sense of their own ethics and their knowledge of ethics increase because of being taught this unit on how to teach ethics? An instrument to measure student achievement was developed by again adapting Dr. Fraenkel's 1992 instrument. There were two factors revealed by a factor analysis search. Factor One (knowledge of ethics) had an alpha of .815. Factor Two (sense of value of ethics) had an alpha of .579. Communalities for all 9 items were acceptable and the instrument had a scree plot that resembled a "U". The Cronbach's alpha for all 9 items was .8565, which is highly reliable. For validity, I did a Delphi technique with two professors of education and four members of the Rutland Center for Ethics Education. After four months and some adjustments on the test items, results indicated that the instrument was effective in measuring what it was supposed to measure; namely, student knowledge of ethics. A factor analysis was done to determine reliability. The instrument (with a standardized item Cronbach's alpha of .8583) was determined to be a reliable instrument to measure student achievement on learning how to teach ethics.

Results

Although both groups increased in their sense of ethics, the ratings on a paired t-test were statistically significantly higher for the experimental group B, which was taught by using the convergence tool.

Group	N	Means		SD	
		Pretest	Posttest	Pretest	Posttest
A	43	3.5311	3.8872	.58695	.68765
B	28	3.6634	3.8661	.50518	.59091

t=4.549, df = 70, N=71, Correlation = .460, Sig. (2-tailed)= .000

Student ratings of professor effectiveness were also statistically significantly higher on a paired t-test for experimental group B:

Group	N	Means		SD	
		Pretest	Posttest	Pretest	Posttest
A	43	3.9222	3.9349	.72013	.69171
B	28	3.8857	3.9750	.77111	.76624

t=1.391, df= 70, N=71, Correlation = .559, Sig. (2-tailed) = .000

Finally, the students' sense of value in learning how to teach was statistically significantly higher on a paired t-test for experimental group B:

Group	N	Means		SD	
		Pretest	Posttest	Pretest	Posttest
A	43	3.8709	4.2751	.92136	.42940
B	28	4.0179	4.1179	.73789	.54232

t= 2.693, df = 70, N=71, Correlation = .308, Sig. (2-tailed)= .009

Conclusions

While both groups increased their sense of ethics; their perceptions of professor effectiveness and their interest/sense of value in learning how to teach, the data suggests that the use of the convergence tool should be used because (with all three

instruments) the group that used the tool had a statistically higher increase in their sense of ethics, their interest in learning how to teach, and their perception of professor effectiveness.

The weakness of this study is that it was done with just a small, selected sample with college seniors enrolled in social studies education. Replication of this study should be made in another discipline, with a larger sample, and a different Reflective Judgment stage. Another weakness was that only three theories of ethics were used. However, given the stage of Reflective Judgment that the students were at, it was believed that introducing other ethical theories would be too complicated.

The strength of this study is that it applied a means to discover how to obtain the most ethical decision and the instruments developed were both reliable and valid for further research.

Plato wrote in his *Apology* that the unexamined life is not worth living. There is a need for future teachers to be taught how to teach ethics to their future students (Campbell, 1997 & 2001). I believe that use of this tool is universal to all cultures and societies. Ancient Greek metaphysics teaches that there are universal ethical standards that are in all cultures, societies, religious, countries and ethnic groups. For example, all of the world's major religions have The Golden Rule. Attempting a three-way agreement of Utilitarianism, Kantian, and Virtue Ethics is, therefore, not specific to American culture and, from the data reported, seems to be effective in teaching ethics, increasing interest, and increasing perception of teacher effectiveness.

In their final comments, students in both groups (A and B) said that teacher education programs should be concerned with preparing future teachers to be proficient in moral education. Professors might want to concentrate on bringing the teaching of ethics "alive" (Campbell, 1997, p. 259).

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Critical Reading Outcomes and Literary Study in a Problem-Based Learning (PBL) Literature Course

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Abstract

What happens when students move through apprenticeship to mastery as literary readers? How can we observe that growth? This research project describes the degree and kind of critical literary reading responses demonstrated by students in a problem-based learning (PBL) introductory literature course. By using a rubric we designed (A Map of Literary Reading Responses), we learned that students demonstrated that they were reading critically in several desirable reading behavior domains. Some evidence suggests that more mature students (i.e. upperclassmen) may have been more successful as critical readers, but this descriptive study illustrates that first-year students and students with no previous literature course experiences also succeeded in demonstrating desirable critical reading behaviors. This study suggests that the PBL approach has a place in literary study and sketches out some further avenues for research into critical reading response.

Critical Reading: A Descriptive Study

English professors have long acted upon the belief that there are significant differences between inexperienced and experienced literary readers. The heart of these discussions is that inexperienced readers are passive consumers of the texts they read while critical readers play an active role in constructing meanings of those texts (see Blau, 2003). When Dorothy Sarbin notes that "Learning in college is a kind of apprenticeship, in which the student learns by doing, often by imitating those who are already proficient" (2003, 1), she describes the landscape of most introductory literature courses, courses in which relatively passive, inexperienced consumers of texts develop into more active, critical, and experienced readers of texts. But what happens when students move through apprenticeship to mastery as literary readers? How can we observe that growth? We decided to design a research project that would make that process visible, and as we did so, those questions eventually focused on the critical reading engendered in a very specific kind of literature course, one based on a problem-based learning (PBL) pedagogy.

What Blau and Sarbin are discussing is not so much the reading process itself as the *outcome* of that process, the observable responses of readers through their work in a literature class, whether through their contributions to class discussions or their written commentary in journals, essays, or examinations. The distinction between the process of reading and the outcomes of reading is central to our project. We made the decision that rather than investigate how students comprehend literature, we would focus on how they demonstrate what they have comprehended. Over four decades ago, James R. Squire made the same distinction when he argued that teachers needed to develop techniques for assessing the quality of students' responses to literature apart from measuring literal comprehension. "By analyzing individual oral and written comments regarding literary selections, the teacher may obtain some rough indication of the nature of such reactions," he concluded (1964, 56). Researchers have been examining the reading responses of student readers ever since Squire's report was issued (see Kintgen, 1983; Rogers, 1991; Peskin, 1998, among others).

Literary study offers a disciplinary framework for literature instruction, a point Lucy Cromwell makes when she urges that literary instruction should provide students with "tools" to read analytically with the objective of cultivating a "literature mind-set" (80). That "mind-set," as she defines it, requires students to move beyond literal decoding of a story's plot to a consideration of the writer's choices. "Looking at the world from a background in literature study is an inductive way of responding" (80) that requires students to pay close attention to detail and to acquire the habit of providing evidence to substantiate their inferences. "As instructors," she concludes, "we systematize the reader's role by evaluating the validity of students' responses" (79). While Cromwell's evaluation is most likely assigning grades and providing formative response to student work, we can extrapolate from her argument that one way to assess the degree of "literature mind-set" in a class would be to evaluate the students' responses. This study thus set out to complete that evaluation in hopes of providing a rich description of the forms of critical reading outcomes the students have manifested.

Our intent in studying these critical reading outcomes is thus a descriptive one, as presented by Pat Hutchings of the Carnegie Foundation for the Advancement of Teaching. Hutchings has proposed a taxonomy of questions that researchers in the scholarship of teaching and learning might pose:

- What works? This is a measurement or argumentation question, the intent of which is to make a case for the effectiveness of a particular pedagogical approach
- What's possible? This is a question that focuses on design, examining the consequences of making changes in pedagogy
- What is? This is a descriptive or analytical question intended to learn what is actually occurring in a given learning situation. Hutchings elaborates by explaining that "Here the effort is aimed not so much at proving (or disproving) the effectiveness of a particular approach or intervention but at describing what it looks like, what its constituent features might be" (3).

We thus designed a study that would allow us to answer the question, "How can the critical reading responses of students in a literature course be made visible and assessed?" situating our work in the forty-year tradition of reading studies dating back to James R. Squire. What follows next is a description of the course we studied and the design of the study that we developed.

A Literary Problem?

Professor Bart D. Ehrman, Chair, Department of Religious Studies, University of North Carolina, was so upset that he recently published *Truth and Fiction in The DaVinci Code: A Historian Reveals What We Really Know about Jesus, Mary Magdalene and Constantine* (2004). *The DaVinci Code* by Dan Brown is a best-selling novel, a thriller about Leonardo DaVinci and Jesus Christ. But Ehrman is not the only reader who is upset about the book: Christian groups have denounced it; the country of Lebanon has banned it. The issue at stake is the novel's historical accuracy.

In a recent interview, Professor Ehrman was asked, "Why do the inaccuracies in *The DaVinci Code* matter? It's a novel, after all." He responded, "The first page of the book has a fact sheet on which Dan Brown says that everything is factual except the fictional characters. He makes an explicit statement in which he says all descriptions of artwork, architecture, documents and secret rituals are accurate. The point is that he claims to be building on a factual basis, and people get misled" ("The Dan Brown Code", 2004, 2).

This news article caught the lead author's (Sommers) attention (This research project was developed under the auspices of the Carnegie Foundation for the Advancement of Teaching during the lead author's year as a Carnegie Academy for the Scholarship of Teaching and Learning scholar. The research team was formed as part of that project.) because he had taught a course on historical fiction in the Spring 2004 that addressed the very issue on Ehrman's mind: how are readers supposed to read historical fiction? The course focused on an academic version of that question: "How do students *learn* to read historical fiction in a literature course?" Let us briefly trace the development of that latter question and why this particular course became the one we used in our research study.

After more than twenty years of teaching literature courses at an open-enrollment, two-year regional campus of Miami University, the lead author's teaching philosophy had come to emphasize the development of learning processes more than the acquisition of information in those courses. In other words, the goal of literary study is to promote critical thinking through critical reading to a student population which consists predominantly of inexperienced literary readers, rather than to impart information about literary history or critical approaches to reading. Of course, while a literature class that emphasizes close reading, class discussion, and frequent writing probably assists students in becoming active critical readers, problem-based learning (PBL) offered a teaching approach that emphasized the need for students to read more critically. Chet Meyers argues that "Teaching a framework for analysis will be in vain unless students have the motivation to engage in critical thinking. To develop this motivation, students must actively struggle with real problems and issues—and see their instructors doing the same" (1986, 8). When a central problem is posed in a literature course, the reading takes place within a carefully designed context: solving the problem posed by the course. PBL establishes *apurpose* for the critical reading and thinking in a literature course.

PBL is "focused, experiential learning organized around the investigation, explanation, and resolution of meaningful problems. In PBL, students work in small collaborative groups and learn what they need to know in order to solve a problem" (Hmelo-Silver, 2004, 236) although it has not been employed extensively in literary study (Bill Hutchings and Karen O'Rourke have been experimenting with the use of PBL in

literature courses, arguing that students should be required to engage in the actual basic activities of the discipline of literary study, emphasizing the “active, creative engagement of the reader to meet the creative power of the literature,” 2002, 75). In the fall 2002 the lead author developed and taught his first PBL-grounded literature course in an effort to stimulate his students to become active, critical readers. The course seemed both exciting and successful (See Sommers, 2002). However, that opinion was rooted only in anecdotal experiences. There really was no way to demonstrate what the students had learned – no small problem. But we subscribe to the redefinition of “problem” offered by Randy Bass. In his influential article, Bass argues that viewing a “problem” in teaching as an opportunity for research rather than as a failure to be overcome can transform a shortcoming into an ongoing intellectual activity. Bass notes that “As with scholarship or research, you cannot investigate everything at once. Indeed it may be that you can’t investigate more than one question at a time. What matters most is for teachers to investigate the problems that matter most to them” (1999, 8). The problem that mattered was that we had no way to talk about the learning which had taken place in that exhilarating literature course. Salvatori and Donahue have commented about research in the field of English: “We have argued that a scholarship of teaching suggest more than conversations about the classroom and descriptions of instructional methods. Rather, it is the result of critical analysis, theorized reflection, and thoughtful enactment” (2002, 71). The desire to help students through their apprenticeship as literary readers led to the PBL approach. But the question of what happened to students as they experienced that apprenticeship was no more readily apparent in the new PBL course than it had been in earlier literature courses. Our need to learn more about what had transpired in the PBL literature course led to this study, designed to *analyze* and *reflect on*, using Salvatori and Donahue’s words, the learning outcomes, in the form of critical reading responses, of students in a second PBL literature course.

Background of the PBL Course

English 124 is entitled “Introduction to Fiction.” The course description explains that the course will focus on the elements of the fiction writer’s craft: plot, setting, point of view, etc. The course was designed as an introduction to *historical fiction* with the central problem posed for the students being the following question, the very same one that motivated Professor Ehrman to respond to *The DaVinci Code*:

When reading a book set in the past, how are readers supposed to know what to trust or believe, especially when on some occasions they encounter actual persons, places, events from history and on other occasions are reading about cultures with which they are unfamiliar?

The problem presented by the course required students to explore possible answers to this very real, but abstract and messy question. PBL groups were required to select the novels to be read in the course and make a presentation on the selected novel, illustrating the reading strategies the group had been developing. In order to select an appropriate novel, the groups had to research literary criticism of the novels available (I provided a list of a dozen recent historical novels) and often delved into interviews with the authors as well as investigations of the historical events depicted. Later in the course, the groups had to develop a second presentation that illustrated their strategies for reading historical fiction, this time focused on one of two novels I had already selected because of the unique issues each one raised. Once again, the groups had to devise a plan for investigating the critical response to their chosen books as well as other ancillary materials that provided a context against which to read the novel. Finally,

each individual student was asked to select a novel from those left on the short list I had provided, a novel about which they would write a take-home final exam in which the students would have the opportunity to apply what they had learned about critical reading to a text that presented the same reading problem with which they had been grappling for the entire term. (See Appendix B for course materials and a description of some of the PBL activities.)

The syllabus for English 124 reminded students of the university's liberal education objectives for general education courses. Those objectives include

- Critical thinking
- Understanding contexts
- Engaging with other learners
- Reflecting/acting

This research project focuses on the middle two of those objectives. The course syllabus explained their relevance to English 124 as follows:

Understanding contexts complements critical thinking in that the ability to inquire freely requires our breaking through the boundaries of our personal understanding of the world, our personal contexts. All of the fiction we will read was written by writers who lived in the context of a particular time and place and whose way of thinking about and writing about the world was influenced by that context. Reading historical fiction demands that we enter another time and place – the past. If we are going to produce intelligent interpretations of our reading, we will have to be aware of the contexts in which they were created. But we too live in a particular time and place and our ways of thinking have also been influenced by our own contexts, so we will have to take into account who we are and where we come from as we read and interpret.

Reading may seem to be a solitary act, but that's not entirely true. Of course, every reader encounters at least one other person during the act of reading – the author. When we read in a college course, we also encounter other students and a teacher; we are part of a reading community. And that is an enriching experience because each of us will learn regularly that other viewpoints and contexts exist when we listen to and talk with other members of our community. The class will emphasize not only individual reading activities but also meaningful small group interactions; among our activities, the class will be deciding upon the reading list for the course, for example. *Engaging with other learners* will be an integral part of English 124.

The syllabus also described more specific objectives focused on the specific PBL course:

- I want you to interrogate literary texts by asking questions about the choices the writer has made – choices about what to include, what to omit, what to emphasize, what to de-emphasize, how these choices impact readers – and why the writer might have made these choices, and I want you to be able to evaluate the effectiveness of those choices.
- I want you to become more adept at raising good questions about the “trustworthiness” or accuracy of the history you are reading; I want you to be able to examine how the degree of “truth” you find in the text affects you and to be able to ask questions and speculate about how the writer has constructed that truth with certain effects in mind.

As we pointed out at the outset of this essay, many literature courses involve students in critical reading, class discussion, and group work. This course, however, used a PBL framework as the foundation for those activities, not a typical strategy in literary study. All of the PBL activities were designed to prepare individual students to demonstrate their critical reading response skills on the final exam. The two instances described sketch a portrait of how the course used PBL to move students toward the final requirement of completing a take-home examination in which they were asked to demonstrate the reading strategies they had developed as solutions to the reading problems created by historical fiction.

A Map of Literary Reading Responses

In order to measure the students' learning outcomes in the course, it was necessary to examine the degree to which their critical reading responses demonstrated achievement of the stated objectives described in the syllabus. With the consultation of a number of colleagues, we developed a taxonomy of critical reading responses, a rubric entitled A Map of Literary Reading Responses (see Appendix A).

Thomas Foster, in his popular text *How to Read Literature Like a Professor*, offers a preface in which he justifies his book by describing the difference between literary or critical reading – what we teach at the university – and what he terms “lay” reading: “When lay readers encounter a fictive text, they focus, as they should, on the story and the characters: who are these people, what are they doing and what wonderful or terrible things are happening to them? Such readers respond first of all, and sometimes only, to their reading on an emotional level; the work affects them, producing joy or revulsion, laughter or tears, anxiety or elation. In other words, they are emotionally and instinctively involved in the work. This is the response level that virtually every writer who has ever set pen to paper... has hoped for... When an English professor reads, on the other hand, he will accept the affective response level of the story...but a lot of his attention will be engaged by other elements of the novel. Where did that effect come from? Whom does this character resemble? Where have I see this situation before? Didn't Dante (or Chaucer, or Merle Haggard) say that?” (2003, xv). Foster's take on the task of critical reading, notwithstanding its breezy informality, articulates perhaps the main objective of reading literature in a college-level course: becoming a critical reader (Remember that Professor Ehrman's objections to *The DaVinci Code* are grounded in the assumption that readers need to assess critically the historical accuracy of a fictional text. The professor rejects the interviewer's suggestion that “It's a novel, after all” because luxuriating in the exhilaration of the plot and characters of the thriller isn't the way he plans to read the novel.)

The Map of Literary Reading Responses reflects the distinctions that Foster makes. The Map's three circles – initial responses to a text, intratextual responses to a text, and extratextual responses to a text – trace an incremental building of responses. They do not represent a hierarchy so much as they show how readers build on their initial responses, the ones Foster attributes to lay readers, and construct more sophisticated and critical forms of response. The Map presents this relationship among the three kinds of response by embedding them within one another as concentric circles.

The middle circle on the Map captures reading responses that focus intently on the words on the page as the readers try to construct meaning. These behaviors show a

reader who is engaged in close reading, who is making active meaning of the text being read, and who is at times evaluating the craft of and the choices made by the author. These responses show evidence of critical reading of the sort most of the literature professors we consulted hope to promote in their courses. This form of response builds upon the initial responses and lays a foundation for another kind of response that reaches outside the boundaries of the text itself.

The largest circle on the Map describes readers' attempt to interact with other readers and texts as they approach the reading act. These behaviors show a reader who, as part of an active reading process, has gone outside the text being read to learn more about that text. This active reader engages with the interpretations of other readers, the observations of the author, the history of the text's composition, and/or the context of the historical setting of the text, and reevaluates the text in light of these additional materials. (Thus, relying upon Sparknotes or Cliff Notes to *supplant* the reading of the text, for example, would not qualify because such use is not a "critical" response.) These responses show evidence of critical reading of the sort most of the literature professors we consulted hope to promote in their courses. This form of response builds upon and works along with an intratextual response to the novel.

In her own literature courses, researcher Deborah A. Sarbin explains, she concentrates on students' "over-reading," which she defines as "moments when students offer an interpretation that interjects some material not in the text, for example, or that stretches logical credibility." Sarbin is right that over-reading should be applauded. She concludes, "For students, I argue, over-reading is not simply mistaken reading, but rather an overreaching, a moment of trying too hard to be 'scholars of literature' rather than readers" (2003, 1). Sarbin's goal is to help the students expand their repertoire of reading response behaviors into the middle and largest circles on the Map. While the English teachers whose commentary helped flesh out the Map of Literary Reading Responses were not in universal agreement about how to express these different responses, they were consistent in agreeing that the middle and largest circle of response behaviors represent *preferred* responses, as implied by Sarbin's comments. They might not rank each form of Intratextual or Extratextual Response as equally important, but they would prefer to see their students engaged in more of these responses rather than responding solely with Initial Responses to a Text. This research study hoped to measure the degree to which students in the course engaged in those preferred reading responses.

Domains of Response and Course Objectives

The purpose of this research study was to describe learning outcomes, and that necessarily meant the focus would be on the behaviors in the middle and largest circles on the Map. However, only six of those ten domains were likely outcomes in the course, given the stated course objectives. The six domains studied were as follows:

1. Constructing the text (developing interpretations beyond the literal meaning of the text's actions; reading between the lines)
2. Citing text (offering evidence to support interpretations/emotional responses)
3. Recognizing textual moves (observing/assessing authorial choices/strategies in terms of the elements of fiction, e.g. plot, style, theme, etc.)
4. Developing interpretive authority/exercising agency (expressing confidence in the value of personal interpretations through argument making; testing their own responses against the text)

5. Exploring contexts (speculating about the cultural/biographical/historical backgrounds that influenced the text and/or its interpretation)
6. Making intertextual connections (placing the text within the context of other readings and other texts)

These response behaviors, it is arguable, are gestures toward meeting the objectives of the university's general education critical thinking expectations. The first two chosen domains – constructing the text and citing the text – seem implied in all of the course objectives as they constitute the very basic behavior of interpreting a text through close reading and offering evidence of that close reading. Critic Stanley Fish is talking about interpreting through close reading when he argues that poems—and by extension all literature – are “constructed artifacts, the products and not the producers of interpretation” (1980, 273). Fish's observation presents the major dispute in literary theory over the past three decades: where does meaning inhere – in the text itself or in the response of the reader? However, his comment also voices a major given in literary studies: the text is a constructed artifact, and whether theory holds that readers construct the meaning or attempt to extract it from the text, in both cases readers are engaged in interpretation. For a definition of *interpretation*, we can turn to Robert Scholes, who says that readers “move to interpretation” when they consider the significance of what they have already noticed and begin to seek its meaning (1998, 117). Scholes aptly uses the verb *moves* to describe the readers' efforts to engage in what we have termed “intratextual responses.” This movement is the students' efforts to leave behind the inexperience that has made them, as Umberto Eco would say, “naive readers,” readers who expect unambiguous meanings to arise from texts (1979, 7-23). Readers leave that naiveté behind as they learn the roles they must play in constructing meaning from a text.

The syllabus also explained that students were expected to “interrogate literary texts by asking questions about the choices the writer has made,” an objective represented by the domain of “recognizing textual moves.” Scholes makes a case for the importance of this kind of response when he defines “good reading” as “reading every text sympathetically, trying to get inside it, to understand the intentionality behind its composition” (1998, 118). Scholes argues that critical reading is reading that *notices* and perhaps even *evaluates* what actually appears in the text. Even if literary critics may disagree about authorial intention (and they definitely do!), they can agree that critical readers still encounter the evidence of authorial choices in the very words and sentences on the page and can appraise the impact of those choices.

The syllabus also expressed an objective that the students would “become more adept at raising good questions about the ‘trustworthiness of the history’ they were reading, an objective reflected by the domain of “developing interpretive authority” or argument making. “Those who hail the indeterminacy of all ‘texts’ are ...quite right,” says Wayne C. Booth, “up to a point: readers must always in a sense decide whether to accept a given responsibility” (1990, 354). Making decisions about their own responsibilities as readers is reflected in the course objective about evaluating historical trustworthiness; we tried to capture that assuming of responsibility in the notion of argument-making as evidence of a developing authority.

The syllabus also informed students that the course would help them in “understanding contexts” and in “engaging with other learners.” Behavior domains such as “exploring

contexts” and “making intertextual connections” emphasize these same attributes of critical reading. The importance of exploring contexts as a literary response can be illustrated with an example offered by Annette Kolodny. She offers an argument that women writers may have been underappreciated in the past because male readers weren’t familiar enough with the worlds of these writers to read them appropriately. “The reader coming upon such fiction with knowledge of neither its informing literary traditions nor its real-world contexts will find himself hard pressed, though he may recognize the words on the page, to competently decipher its intended meanings” (1980, 305-6). This inability to “decipher” meanings suggests that a convincing argument can be made for examining the context of a literary work. Whether the context consists of biographical background, cultural studies, historical exegesis, etc. depends on the literary critic, but context matters to literature teachers. As for the importance of intertextuality, Theresa Rogers’ argument is that the “richest” readings of a text will include references to a number of other texts. She explains, “For instance, a reader who focuses solely on the story structure will likely produce a more limited interpretation than a reader who simultaneously focuses on a character’s reaction, comparisons to characters in another text, and his or her own personal responses (or texts)” (1991, 393). And while the reasons for making links to other texts and the kinds of texts chosen will differ from teacher to teacher depending on the theoretical construct the teacher chooses, literature teachers are, of course, always interested in readings that are not “more limited.”

The point of this overview has been to establish the appropriateness of the reading behavior domains we chose to include in the study. They are connected to the stated objectives of the course in the syllabus, and they corroborate the values of many literature teachers, even though those teachers embrace a variety of critical approaches to reading literature. The Map of Literary Reading Responses represents both the desired outcomes of the specific course being studied and the more general preferred outcomes that literature teachers across a variety of courses would welcome if demonstrated by their students.

Methodology

Our research project focused its analysis on the final examination in the course. This assignment gave the students a week to write a 5 - 7 page essay at home. The exam counted for 25% of the course grade, providing students with ample incentive to produce their best work, given that the outcome could raise or lower their final grade by almost two letter grades. The task on the final differed from a more traditional exam about a teacher-selected book. The examination question asked students to answer the course question, the problem they had been exploring all semester long (“When reading a book set in the past, how are readers supposed to know what to trust or believe, especially when on some occasions they encounter actual persons, places, events from history and on other occasions are reading about cultures with which they are unfamiliar?”) as they would apply it to the historical novel each of them had selected to read as an independent reading assignment outside of class. The independently-read novel was a requirement of the PBL approach, and students were encouraged to select a novel that they felt would assist them in grappling with the course’s central problem. Thus, not only did students have incentive to do their best on the exam, but they also had personal responsibility for choosing the subject matter of the exam. It seems reasonable to expect that this increased investment in designing the exam would serve as a further incentive to deliver an excellent performance. In other words, we had strong reasons to anticipate that the students would try their very best to succeed on the final exam.

In order to analyze the students' performance in their final examination essays across the six chosen domains, we used a coding system that would identify the degree of accomplishment achieved by the students. We employed a four-point scale as follows:

Level 0 = No instance of the behavior

Level 1 = An instance of the behavior but in a superficial or undeveloped manner

Level 2 = An instance of the behavior that formed the basis for developing a substantial argument or interpretation of the student's novel, with *substantial* meaning *sustained for a full-length paragraph or more or referred to more than once as a touchstone for the developing argument*

Level 3 = More than one instance of level 2 behavior

Each examination essay was read and coded by two members of the research team. We read and coded an exam individually and then met to compare notes. Where we were not already in agreement, we discussed and negotiated until we came to an agreement.

Using this system, we were able to generate seven scores for each student: 0 - 3 in each of the six domains and an aggregate score that reflected overall performance in a range from 0 - 18. We then aggregated the students in a number of ways: by gender, by the degree of focus in the examination on the course problem, by number of previous literature courses taken, and by academic year at the university (The study focused on ten students in a class of 19. These ten were willing to sign informed consent for their materials to be analyzed. In terms of course performance, it is fair to say that these ten students in the aggregate were more successful students than those who did not grant permission, based on average final course grade and average final exam grade).

Data and Analysis

Our results will allow us to claim that certain reading response behaviors were manifested by the students in the course, a course that emphasized a PBL approach. In other words, we can describe what is happening in the course in terms of critical reading behavior. Had those behaviors been noticeably absent, such results might suggest that PBL as an approach to literature is a pedagogy of limited utility. However, the results are promising in that they establish that an encouraging level of critical reading response did occur.

We worked with ten student examinations, each generating a score for six behavior domains. Analysis of the six domains shows that critical reading response behaviors occurred to varying extents, as one would expect (see Table 1).

Levels	3	2	1	0
Constructing Text	3	4	0	3
Citing Text	3	2	4	1
Textual Moves	9	0	1	0
Agency	6	1	3	0
Contexts	4	2	3	1
Intertextual	2	1	3	4

Table 1. All Exam Performance in Response Behavior Domains (N = 10)

We interpret results at levels 2 and 3 to be indications of significant critical reading behavior and results at levels 0 and 1 to be indications of no significant critical reading behavior. A brief discussion of each follows:

- Constructing the text (developing interpretations beyond the literal meaning of the text's actions; "reading between the lines"): A majority of the students (7) demonstrated this behavior, as one would hope in a literature course. Given the examination question, it was possible to make a convincing argument without resorting entirely to a close reading of the text, but the exams nevertheless show a substantial amount of interpretive reading of the students' selected novels.
- Citing text (offering evidence to support interpretation/emotional responses): The results indicated that almost all of the students cited their novel's text in their exams; however, the level of development of this skill was evenly balanced between those who did so substantially or those who did not demonstrate the behavior or only did so superficially. This is a disappointing result.
- Recognizing textual moves (observing/assessing authorial choices/strategies in terms of the elements of fiction, e.g. plot, style, theme, etc.): Fully 90% of the exams received ratings at the highest level in this category, an understandable result given the course description which emphasized this reading behavior. Nonetheless, this result is encouraging because of the students' level of achievement; while they may have engaged in this form of reading response because it seemed to be required, they did so with skill.
- Developing interpretive authority/exercising agency (expressing confidence in the value of personal interpretations through argument making; testing their own responses against the text): The exam asked students to provide an answer to the course question, the focus of the PBL learning. In doing so, we interpreted argument-making about the genre of historical fiction as an example of this reading response behavior. In other words, when a student offered an interpretation of the novel, she evidenced "Constructing the text," as described above. When the student offered a generalization about reading historical fiction based on the reading of the chosen novel, she evidenced this reading response behavior. We found that 60% of the exams succeeded at the highest level in this type of response. This behavior most closely relates to the PBL work performed in leading class discussion and presenting to the class. Given the demands of the exam, it is not surprising to find all the exams show evidence of this behavior, but the level of accomplishment is heartening.

- Exploring contexts (speculating about the cultural/biographical/historical backgrounds that influence the text and/or its interpretation): This is one of the two behaviors from the Extratextual Critical Response to a Text level of the rubric. It is a behavior that was emphasized throughout the semester in the course because of the nature of the problem students were asked to tackle, a problem that was conducive to the use of extratextual materials. The exams showed a majority of the students working at a substantial level in this domain (N = 6); the single largest group of scores was at Level 3 (N = 4). In our personal experience, students in introductory level literature courses do not customarily consult extratextual materials, so this was a gratifying result.
- Making intertextual connections (placing the text within the context of other reading and other texts): These results were surprising and disappointing. All of the course texts were historical novels, and the students themselves had responsibility for picking many of them. We had expected the exams to make extensive cross-references to the other novels. It was entirely possible to produce an excellent exam without reference to other fiction, but 40% of the exams made no references at all and only 30% demonstrated this behavior in substantial ways.

We also aggregated these results in several different ways to see whether different groups of students performed differently on the exam. Comparing the performances of female and male students (see Table 2), a statistical analysis determined that no significant differences in performance occurred, although it is interesting to note that a majority of the women cited text substantially in their exams while a majority of men did not. (We thank Dr. Samuel R. Sommers, Assistant Professor of Psychology, Tufts University, for serving as our statistical consultant.)

Females (N=4) LEVELS	3	2	1	0	Males (N=6) LEVELS	3	2	1	0
Constructing Text	1	2	0	1	Constructing Text	2	2	0	2
Citing Text	3	0	0	1	Citing Text	0	2	4	0
Textual Moves	4	0	0	0	Textual Moves	5	0	1	0
Agency	2	1	1	0	Agency	4	0	2	0
Contexts	1	1	2	0	Contexts	2	1	2	1
Intertextual	1	1	0	2	Intertextual	2	0	2	2

Table 2. Exam Performance by Gender in Response Behavior Domains

When we divided students into three groupings based on their previous literature course experience – 0 previous courses, 1 previous course, 2 or more previous literature courses – again no statistically significant differences in performance were discernible (see Table 3).

0 Previous Lit Courses (N=4) LEVELS					1 Previous Lit Course (N=3) LEVELS					2+ Previous Lit Courses (N=3) LEVELS				
	3	2	1	0		3	2	1	0		3	2	1	0
Constructing Text	1	2	0	1	Constructing Text	1	0	0	2	Constructing Text	1	2	0	0
Citing Text	3	0	1	1	Citing Text	0	1	2	0	Citing Text	1	1	1	0
Textual Moves	4	0	0	0	Textual Moves	3	0	0	0	Textual Moves	2	0	1	0
Agency	2	1	0	1	Agency	2	0	1	0	Agency	2	0	1	0
Context	2	1	1	0	Context	1	1	1	0	Context	1	0	1	1
Intertextual	1	0	1	2	Intertextual	1	0	1	1	Intertextual	0	1	1	1

Table 3. Exam Performance by Previous Literature Course Experience in Response Behavior Domains

Most interesting, however, are the results when we grouped the students by their academic year as first-year students, second-year students, or third/fourth year students (see Table 4). While most of the behavior domains did not demonstrate statistically significant differences in performance, in Developing Interpretive Agency ($p = .053$) and Exploring Contexts ($p = .066$), there were significant differences in performance across the groups; more experienced students outperformed less experienced students.

1 st year Students (N=2) LEVELS					2 nd year Students (N=6) LEVELS					3 rd -4 th year Students (N=2) LEVELS				
	3	2	1	0		3	2	1	0		3	2	1	0
Constructing Text	0	1	0	1	Constructing Text	1	3	0	2	Constructing Text	2	0	0	0
Citing Text	0	0	2	0	Citing Text	3	0	2	1	Citing Text	0	2	0	0
Textual Moves	1	0	1	0	Textual Moves	6	0	0	0	Textual Moves	2	0	0	0
Agency	0	0	2	0	Agency	4	1	1	0	Agency	2	0	0	0
Context	0	1	0	1	Context	2	1	3	0	Context	2	0	0	0
Intertextual	0	0	0	2	Intertextual	1	1	2	2	Intertextual	1	0	1	0

Table 4. Exam Performance by Academic Year in Response Behavior Domains

What makes this noteworthy, however, is one additional measure we used. We came up with an overall performance score for each exam by adding the levels in all six behavior domains (0 - 18). Using these overall scores (see Table 5), we discovered no significant performance differences when the exams were grouped by gender and number of previous literature courses. However, when we grouped the students by their academic year, we found that the more advanced academic status held by the student, the better his or her performance ($p = .001$): First-year students averaged 5.5, second-year students averaged 11.8, and third/fourth year students averaged 16.0. Coupled with statistically significant differences in performance in two of the six behavior domains, academic year appears to be a factor in student critical reading performance.

Score Range 0-18	1 st yr Students (N=2)	2 nd yr Students (N=6)	3 rd -4 th yr Students (N=2)	Females (N=4)	Males (N=6)	0 Prev Lit Courses (N=4)	1 Prev Lit Course (N=3)	2+ Prev Lit Courses (N=3)
Avg Final Scores	5.5	11.8	16.0	12.0	10.0	12.0	10.7	11.3

Table 5. Average Total Scores across 6 Response Behavior Domains (Range 0 - 18)

Another way to examine the results is to determine the percentage of scores at each of the four code levels. Close to half of the total coding scores we issued were at the highest level, level 3, and the combined total of level 2 and level 3 scores exceeded 60% of the total scores (see Table 6).

Levels	# of Scores	% of Scores
Level 3	27	45.0%
Level 2	10	16.7%
Level 1	14	23.3%
Level 0	9	15.0%

Table 6. Total Scores across 6 Response Behavior Domains (N = 60)

When we contrasted the performances based on gender (see Table 7), the findings were interesting: 71% of the women's coded scores were at the highest levels (Levels 2 and 3) while 56% of the men's were at those levels. However, slightly more women received scores at the 0 level (17% vs. 15%) while almost one-third of the men's scores were Level 1, meaning a superficial form of the reading response. A statistical analysis, however, showed no statistically significant performance between men and women in any of the six domains nor on their overall performance, as mentioned earlier.

Levels	Male # of Scores (N=36)	Male % of Scores	Female # of Scores (N=24)	Female % of Scores
Level 3	15	41.7%	12	50.0%
Level 2	5	13.9%	5	20.8%
Level 1	11	27.8%	3	12.5%
Level 0	5	13.9%	4	16.7%

Table 7. Total Scores by Gender across 6 Response Behavior Domains

The results by number of previous literature courses (see Table 8) show that students with no previous literature courses experience actually did better (67% of their scores were levels 2 and 3 compared to 56% for students with one previous literature course and 61% for students with two or more previous literature courses), but these differences did not rise to the statistically significant.

Levels	0 Previous Lit Courses # of Scores (N=24)	0 Previous Lit Courses % of Scores	1 Previous Lit Course # of Scores (N=18)	1 Previous Lit Course % of Scores	2+ Previous Lit Courses # of Scores (N=18)	2+ Previous Lit Courses % of Scores
Level 3	12	50.0%	8	44.4%	7	38.9%
Level 2	4	16.7%	2	11.1%	4	22.2%
Level 1	4	16.7%	4	22.2%	5	27.8%
Level 0	4	16.7%	4	22.2%	2	11.1%

Table 8. Total Scores by Number of Previous Literature Courses across 6 Response Behavior Domain

In the other grouping by academic year, however, the differences were statistically significant. The overall results by academic year (see Table 9) show that the most advanced students, third/fourth year students, registered 92% of their scores at levels 2

Levels	First-year Students # of Scores (N=12)	First-year Students % of Scores	Second-year Students # of Scores (N=36)	Second-year Students % of Scores	3 rd /4 th Year Students # of Scores (N=12)	3 rd /4 th Year Students % of Scores
Level 3	2	16.7%	17	47.2%	9	75.0%
Level 2	5	41.7%	6	16.7%	2	16.7%
Level 1	4	33.0%	8	22.2%	1	8.3%
Level 0	1	8.3%	5	13.9%	0	0%

Table 9. Total Scores by Academic Year across 6 Response Behavior Domains and 3, compared to 64% for second-year students and 25% for first-year students.

It is important to acknowledge that the study was focused on a small number of final exam essays. Thus dividing the essays into smaller groups often resulted in exceptionally small groups. Despite the small sample, the trend of the data is encouraging. The primary finding of this study, it should be emphasized, is that desirable

critical reading response behaviors occurred in the course. That means that the course can be defined as a success and provides more than mere anecdote to support the claim that critical reading can take place in a PBL-based literature course. Clearly, there is room for growth in certain forms of response such as making intertextual connections and newer students to the university may perhaps require more teacher intervention in order to achieve better outcomes, but the overall results paint a favorable picture of student achievement in the course.

Implications

For student learning

The results of this study make visible the substantial learning in terms of critical reading that students demonstrated in a PBL-based literature course. While the study did not attempt to establish a cause-and-effect relationship between the pedagogy and the learning outcomes, it does establish that such learning has occurred in a nontraditionally taught literature course. Some inferences therefore may be drawn from the study:

- It would be productive to explore several intellectual development schemas (e.g. Perry, Belenky, Magolda-Baxter) and see how PBL pedagogy, student learning outcomes, and intellectual developmental stages are related. Our research suggests that more intellectually advanced students perform better in PBL courses, not surprisingly, but the main issue is whether PBL of this sort presents a realistic opportunity for all students to succeed. Further study is needed.
- Student learning took place in significant ways that most literature teachers would find gratifying. Even though it cannot be established that the PBL approach led to these results, there are some strong hints that that may be the case: final exams which engaged fully with the course PBL focus were judged to show more substantial critical reading behaviors than exams which did not engage with the course PBL focus; additionally, the exams were focused on novels chosen by the students as part of the PBL process.
- Given that the population participating in the study consisted primarily of the stronger students in the course, it seems appropriate to conclude that the results illustrate in some ways a “best case scenario.” What happened across the board in the course is beyond the scope of the study, but for those who succeeded, as measured by the quality of their exams and the quality of their final grades, the course stimulated significant critical reading responses.

For teaching

The idea of using a problem around which to organize a literature course continues to hold promise. The study shows the kind of critical reading that took place in the course met the objectives set for the course. However, the low rate of enrollment in the study is problematic. Maryellen Weimer writes: “The gap between the one who knows (the teacher) and those who don’t (the students) is much larger than I ever realized. Sometimes you literally cannot figure out what you need to ask. And then when you finally do get a question framed, sometimes the one who knows doesn’t understand the question, probably because it’s framed in a way totally unrelated to what you do know and understand...learning takes courage. Teachers must respect that” (2003, 1, 3).

In future iterations of PBL-based literature courses, it seems essential to find strategies to bridge the gap that Weimer identifies between teacher and student. The knowledge at stake in a literature course is the experience of being a critical reader. Craig Nelson and Robert Grossman’s work on critical thinking and scaffolding seems appropriate here. For

example, in English 124, the professor relied at times on author interviews, critical commentaries, author biographies, and contrasts with other assigned texts when he led class discussions of the reading. He intended his own approach to serve as a model for the students. To some extent, it appears that it did because the student groups also began using the same kinds of extratextual materials. However, their use was often superficial or confused. The steps in between *learning to find* such material and *learning how to apply it* to a critical reading had been skipped, creating a gap that often frustrated both the students and the professor. And the students apparently did not see the value of contrasting a text with other texts they had already read. Scaffolding, by asking students to engage in activities making use of the extratextual materials the teacher provided, might begin to bridge that “gap” and encourage more students to take the courageous step of trying to learn to do something rather different and new for them. As a byproduct, our hope is that the cognitive dissonance would be reduced somewhat and the students would feel more confident, enough to be willing to allow their work to be studied so that a future study would capture a portrait of a more substantial group of students than the ten who participated in this study.

For research

We plan to continue exploring the data we have already collected. There are still other critical reading response domains on the Map that we can investigate, using the same population of exam essays. We would like to apply to the exams other critical thinking rubrics, such as the one developed at Washington State University, to see what information that would yield. We also would like to examine our data in light of student intellectual development theory (e.g. Perry, Belenky et al), as mentioned above, to learn more about how the observable learning might be connected to the students’ developmental level. Finally, we intend to replicate the study in another PBL-based literature course with a larger population of participating students to see if these results can be validated

Perhaps one of the major contributions of the study, however, rests in the design of the Map of Literary Reading Responses which can be employed as a rubric to assess any literature course, be it PBL or not. By tying the selected behaviors on the map to the stated course learning objectives, experienced readers of literary essays could assess the critical reading responses in other literature courses. The Map can readily be converted into a more traditional scoring rubric with a four-point scale and descriptors of each level of response.

Conclusion

Our study describes how students read critically in several desirable reading behavior domains. Courses that offer students the opportunity to think for themselves and to teach both themselves and the teacher can encourage students to read literature critically and actively, to become creators of interpretations rather than consumers. The results indicate that students with limited background in literary study learned successfully although there is some suggestion that more mature students in terms of their academic year might perform better. Thus, we are willing to assert rather cautiously that there is a place for PBL instruction in the literature curriculum. We are confident that the PBL approach has a place in the upper division literature curriculum and are encouraged to continue using PBL in introductory literature courses, despite the challenges it presents.

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Appendix A: Map of Literary Reading Responses

Initial Responses to a Text

- *Forming emotional and/or abstract responses (responding emotionally by making personal connections or developing opinions without making direct connections to the text)*
- *Becoming immersed in plot or character (focusing primarily on what happens in the story and/or reacting to the characters as if they were real people, not representations)*
- *Making personal judgments (evaluating the subject matter, style, plot events, and/or characters based on personal belief/opinion without considering the context of the novel)*
- *Scanning text (not reading closely; overlooking connection/passages; misreading words/phrases)*
- *Resisting interpretation (rejecting interpretation as “reading too much into the text”)*
- *Decoding literal meanings of words (focusing on the literal meaning of words)*
- *Verbalizing confusion (articulating reading difficulties)*
- *Asking factual questions(trying to ascertain what is happening)*

Intratextual Responses to a Text

- **Constructing the text (developing interpretations beyond the literal meaning of the text’s actions; “reading between the lines”)**
- **Citing text (offering evidence to support interpretation/emotional responses)**
- **Recognizing textual moves (observing/assessing authorial choices/strategies in terms of the elements of fiction, e.g. plot, style, theme, etc.)**
- *Judging reflectively (questioning issues raised by the author’s writing choices, including authorial slant or bias, intended or unintended)*
- **Developing interpretive authority/exercising agency (expressing confidence in the value of personal interpretations through argument making; testing their own responses against the text)**

Extra-Textual Critical Responses to a Text

- *Forming an interpretive community (learning from/teaching other readers in the class)*
- *Joining the conversation (recognizing that there is an ongoing conversation underway about the literature by engaging other interpretations in print)*
- **Exploring contexts (speculating about the cultural/biographical/historical backgrounds that influence the text and/or its interpretation)**
- **Making intertextual connections (placing the text within the context of other reading and other texts)**
- *Applying in other contexts (using the “tools” of reading literature outside the course of specific classroom)*

Legend:

Bold = Responses Studied

Indented = Responses not Studied

The Role of Reflective Practice in Integrating Creativity in a Fashion Design Curriculum

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Abstract

Creativity research launched reflective practice resulting in curriculum enrichment. The authors incorporated creativity into the curriculum to improve their effectiveness as teachers and positively affect students' learning. In this article the authors shared their reflective experiences including colleagues' collaborations, student feedback, and a review of theoretical literature.

Introduction

Reflective practice is a vehicle that allows teachers the ability to explore, contemplate, and analyze experiences in the classroom. Reflecting on experiences helps individuals improve their actions and professional practice (Kolb, 1984; Schön, 1983). According to Osterman and Kottkamp (1993, p. 19), "reflective practice is a means by which practitioners can develop a greater level of self-awareness about the nature and impact of their performance." This awareness of one's performance makes individuals think about and mull over their experiences, classroom activities, and assignments, leading to improved practice.

In this study the authors share their reflective experiences including colleagues' collaborations, student feedback, and a review of theoretical literature. Brookfield's (1995) four critically reflective lenses: autobiographies as teachers and learners, students' eyes, colleagues' experiences, and theoretical literature were used to triangulate the data sources. To establish a framework of reflection, the authors reviewed various models of the reflective process. The reflective process the authors applied in this study was Peters' (1991) four-step process that included: describe, analyze, theorize, and act.

Coauthor Murray (2004) conducted a research study entitled *Perceptions of Creativity in a Fashion Design Course*. As a result of engaging in creativity research, Murray started to reflect on creativity, student learning, and the classroom. The intent of Murray's reflective practice was to incorporate creativity into the curriculum to positively affect students' learning. Thus, Murray's creativity research served as a catalyst for this study that attempted to answer the question, "What role did reflective practice have in integrating creativity in a fashion design curriculum?"

The premise of this paper is to demonstrate the importance of reflective practice in curriculum development. Lafrenz and Murray suggest that their reflective activities presented in this paper are supported by qualitative data solicited anonymously from

students' survey responses. The data gathered produced indicators leading to possible conclusions that the curriculum changes had a positive affect on students' learning.

Theoretical Background

Reflection was the major focus of the methodology and theoretical grounding of the study. Teachers use reflection to facilitate their own learning as well as for the facilitation of students' learning. According to Schön (1983, 1987), reflective practice is the integration of theory and practice, a critical process in refining one's artistry or craft in a specific discipline and bringing to the conscious level those practices that are implicit. Schön further describes the reflective practitioner as not just skillful or competent, but thoughtful, wise, and contemplative. Two types of reflection facilitate professionals' learning: reflection-in-action and reflection-on-action (Schön, 1983, 1987). Reflection-in-action occurs during the activity; the activity is reshaped while in progress. Reflection-on-action occurs either following an activity or when an activity is interrupted, a retrospective thinking about an experience. According to Kottkamp (1990), reflection-on-action takes place after an activity and an analysis with the potential assistance of others. Reflection-on-action brings about an understanding of practice and is a way practitioners may learn from their experience (Clarke, James, & Kelly, 1996). Reflection-on-action was the type of reflection the authors utilized when bringing to the surface their practice and beliefs to be examined, critiqued, and developed.

Stages of the Reflective Process Examining the process teachers undertake when reflecting upon their practice is an important aspect of reflection because teachers can improve their practice or students' learning experiences by being reflective practitioners. A number of researchers have developed models or processes of reflection. All of the processes have incorporated different stages or steps that individuals experienced when engaging in reflective practice (Atkins & Murphy, 1993; Boud, Keogh, & Walker, 1985; Dewey, 1933 ; Peters, 1991; Rodgers, 2002; Schön, 1991).

Schön (1991) identified three stages or levels of reflection: conscious reflection, criticism, and action. Boud et al. (1985) presented a four-stage model of reflection: analyze, interpret information, prepare an evaluation report, and prepare an action plan. The four-stage model focused on the behaviors, ideas, and feelings that comprise experience. Atkins and Murphy (1993) conducted a literature review of educational theorists that analyzed processes of reflection. Based on the commonalities of the authors cited, Atkins and Murphy developed a three-stage reflective process that included awareness, critical analysis, and reflection.

Peters (1991) described a four-step process called DATA: describe, analyze, theorize, and act. In the first step, the critical aspect of practice was described. The second step included the identification of assumptions that supported practitioners' current approaches and underlying beliefs, rules, and motives governing teaching and learning. In the third step, practitioners theorized about alternative ways to approach learning, taking theory developed from the previous step, and creating a new theory. In the fourth step, the practitioner tested the new theory. Success of this process would occur only through additional thought and reflection.

The reflective cycle by Rodgers (2002) encompassed Dewey's (1933) conception of reflective thought. Rodgers illustrates reflection as a cyclical process comprised of four phases:

1. Presence in experience: learning to see
2. Description of experience: learning to describe and differentiate
3. Analysis of experience: learning to think from multiple perspectives and form multiple explanations
4. Experimentation: learning to take intelligent action

According to Rodgers, practitioners move forward and backward through the reflective cycle, especially between description and analysis.

After reviewing the literature and various models, Peters' (1991) four-stage reflective process was chosen because the authors could see how to apply the reflective process in the context of the fashion design program. In the first step, Murray described the critical aspects of her practice from a teacher's and then a student's point of view. In the second step, Murray identified assumptions that supported her current approaches and underlying beliefs, rules, and motives governing teaching and learning, specifically related to creativity. In the third step, Murray theorized about new ways to approach or incorporate creativity in her courses and collaborated with Lafrenz in the team skills course. The new theory was tested in the fourth step when the implementation of creative activities, assignments, lectures, and assessments was incorporated in the courses and student feedback was solicited. Then the authors considered whether changes that were made were beneficial to the students and the curriculum. Teachers reflect because they want to improve their teaching experiences and the learning experiences for students. The reflective experience helped the authors of this study to see that creativity existed in the course content and identify areas that needed to be developed.

A number of researchers state the importance of reflective practice. As a result of engaging in a reflective process, individuals acquire knowledge and understanding (Clarke et al., 1996; Schön, 1983), learn from their experiences (Kolb, 1984; Schön, 1983), apply knowledge to practice while being coached by professionals in the discipline (Schön, 1996), and explore assumptions they bring to the workplace (Brookfield, 1995). As reflective practitioners, teachers gain a deeper understanding of their teaching approaches and effectiveness as teachers.

Methodology and Procedures

This study attempted to answer the question, "What role did reflective practice have in integrating creativity in a fashion design curriculum?" The participants were 114 undergraduate students enrolled in a fashion design program. Participants included second-year students in Murray's draping course and third-year undergraduate students enrolled in Lafrenz's team skills course. The ages of the participants ranged from 19 to 26 years. The method of data collection was a survey. Approval was obtained from the ethics board and participation for this study was solicited by using a verbal script. A third party administered and collected the completed surveys so the participants and nonparticipants would remain anonymous.

Two open-ended questions were included in the survey for the participants to express ideas or experiences about creativity and teams. The open-ended questions included:

1. Describe how creativity affected your performance and experience in the classroom.
2. Describe how you were creative when working in teams.

The authors in this study view teacher research as an important methodology offering

practitioners insight into the application of theory to practice. The approach used focused on reflection and teaching practices as a process of research. The authors shared the goal of incorporating opportunities for creative development into the curriculum and explored this goal through Peters' (1991) four-step reflective process.

Brookfield (1995) describes four critically reflective lenses or activities in which reflective practitioners engage: autobiographies as teachers and learners, students' eyes, colleagues' experiences, and theoretical literature. Brookfield's four lenses were used in this study to triangulate the data sources. Triangulation, using more than one method strategy to interpret the phenomenon, was employed in this study by combining teachers' reflections, colleagues' experiences, student surveys, and theoretical literature.

Personal Reflections and Activities

Teachers' professional development stems from classroom experiences (Day, 1993; Rodgers, 2002; Schön, 1983). Research on teaching and learning is important for teachers' development; however, the basis for reflection is practitioners' experiences as teachers and learners (Rodgers). Kolb (1984) proposes that learning from experience occurs in a cyclical fashion; in other words, experiential learning. The authors in this study explored their practices and beliefs through systematic and collaborative reflections of teaching and learning in their classrooms.

Autobiographies as Learners and Teachers

One of the most important insights into teaching is individuals' autobiographies as learners and teachers, one of Brookfield's (1995, p. 29) four critical lenses. Brookfield stated, "Through personal self-reflection, we become aware of the paradigmatic assumptions and instinctive reasonings that frame how we work." The insights for practice drawn from individuals' experiences are likely to have a more powerful influence than methods learned from textbooks or feedback from superiors. According to Brookfield, three opportunities for autobiographical reflection on learning are graduate study, professional development workshops, and conference attendance.

Analysis of autobiographies as learners and teachers was the starting point used by Murray to begin the evaluation process. Through the autobiographical lenses of self-reflection, Murray saw the effect personal experiences as a learner had on how she teaches, the assumptions about how her teaching practices were drawn from those experiences, and the examination of her core beliefs, values, and assumptions about teaching and how students learn.

Murray as a Learner

While working on her Master's thesis, Murray (2004) researched how individuals are creative, whether individuals experience a creative process, and the barriers in the environment that prohibit creativity. Murray examined the learning environment in all of her courses by using reflective practice. Initially Murray's interactions with students in the class were examined to see whether students had the opportunity to define problems, explore, question, experiment, and combine ideas. As a result, assignments, project briefs, and marking schemes were evaluated as well as the approach used to introduce assignments to the students to see if creativity was emphasized.

Creativity research was the catalyst for the authors' reflective practice leading to

changes in the learning environment at a university level program. The coauthor Murray (2004) conducted the creativity research study in partial fulfillment of her Master's degree, *Perceptions of Creativity in a Fashion Design Course*. As Murray was conducting the literature review, coding data, and developing themes of the participant responses, she reflected upon her practice and experiences in the classroom. The reflection questions included:

Am I promoting creativity in the classroom?
Do I create barriers that prohibit creative development?
Do the assignments encourage creativity?
What do I now know more about?
Where do I go from here?

The following were responses to two of the reflection questions answered by Murray:

What do I now know more about?

My definition of creativity was developed as a result of working on my Master's thesis. Creativity happens when an individual takes an idea and modifies the idea until the final product is unique and different from the original idea. The individual uses problem-finding and problem-solving strategies to generate solutions. Researching, consulting with other individuals, and experimenting using various techniques are some approaches that creative individuals use to alter their original ideas. (Murray, 2004, p. 9). Also, I recognize additional ways teachers can foster creativity through assignments and actions such as removing criteria and guidelines from assignments.

Where do I go from here?

I want to encourage teachers to look at their assignments, reflect on their practice, alter criteria, and change conditions in the environment to promote creative endeavors. I want to make others aware of the many aspects of creativity such as problem solving, problem finding, communicating ideas, researching, consulting with colleagues, and experimenting.

Murray used reflective practice to examine course content to determine whether opportunities for creative development were present and available for students. The classroom environment was analyzed to determine if barriers existed in the classroom. Assignments and assessment methods were evaluated by Murray to determine whether opportunities to express creativity were present. Murray considered the potential changes from a teacher's point of view and a student's point of view.

Murray as a teacher

Creative opportunities existed in assignments with few guidelines and criteria. Students were allowed latitude to explore and define the problem within the assignment. Creative opportunities happened through assignments and interactions with students in the classroom. Reflective practice helped to identify opportunities to expand the creative boundaries for students. Reflective activities used by Murray to evaluate her teaching experiences included self-evaluation, listening to student feedback, and reviewing theoretical literature.

Through the in-depth examination of assignments and weekly topic breakdowns, Murray (2004) determined if various techniques were present that fostered creativity. Opportunities for individuals to be creative may occur if numerous techniques are introduced. Creative individuals have the ability to broaden their perspectives and are willing to experiment if they are able to consider new options or alternatives. Learning various techniques used in a discipline enables individuals to have other opportunities to produce original ideas. In the fashion design program, students learn how to create a variety of apparel garments using several techniques.

Draping is an industry method used to develop garments on the dress form. Individuals mould and manipulate fabric on the three-dimensional figure, creating various apparel styles. Students are required to drape basic garments using various techniques and silhouettes. When draping the basic garments, students were learning various principles and techniques. There were few opportunities for students to create original ideas for these garments. Murray wanted to provide situations where students could create original work. Removing guidelines or criteria on some assignments so students could make choices or decisions and develop original work offered one way to encourage creativity. Asking students to create their versions of a technique was another method used to incorporate creative opportunities for students. Showing new techniques to develop apparel garments added to the students' knowledge and provided opportunities to use new techniques.

Colleagues' Experiences

Engaging in critical conversations or observing colleagues in their practice is another one of Brookfield's (1995) four critical lenses. When discussing events teachers have experienced, colleagues describe their own experiences and check, reframe, and broaden their own theories of practice. Reflection within one's classroom is the first step of the reflection process; however, reflection in isolation is an important step in professional growth, but should not be the final step. When teachers discuss their experiences with others, the reflection process is enhanced and teachers' practice evolve (Bruner, 1990).

Collaboration with colleagues increases the probability that teachers will be successfully reflective and more confident in their professional development (Day, 1993). The teachers in a study by Glazer, Abbott, and Harris (2004) believed their reflections were strengthened by collaboration with colleagues, and furthermore, reflection acts as a catalyst for professional growth. After reflecting on her teaching practice, Murray consulted with colleagues, expressing her views about creativity and ways to encourage students to be more creative in other courses. As a result of Murray's reflective practice and collaboration, other teachers engaged in reflection.

Murray met with coauthor Lafrenz to share information about reflection and her professional practice. Lafrenz was inspired to reflect on the creative aspects of her courses, specifically how creative activities and techniques might be incorporated into a team skills course. Collaborative discussions revealed how to be creative and how creativity could be integrated into lectures, assignments, projects, and marking schemes. As a result of the discussions, Murray was invited to the team skills class to present a lecture on creativity.

On a larger scale, teachers within the department began to share ideas, alter assignments, add lectures about creativity, and establish an environment that fostered creative development. The faculty members in the department identified the need for a course on creativity in fashion and enlisted Murray as the course developer. Ultimately, Murray supported and assisted other teachers to implement curriculum changes emphasizing creativity.

Students' Eyes

According to Brookfield's (1995) four critically reflective lenses, seeing ourselves through our students' eyes is the most surprising element in teaching and helps us teach more responsively. Brookfield states

Knowing what is happening to students as they grapple with the difficult, threatening, and exhilarating process of learning is of the utmost importance; without this foundational information, it is hard to teach well. . . . Without an appreciation of how students are experiencing learning, any methodological choices we make risk being ill-informed, inappropriate, or harmful. (p. 35)

Cowan (2004, p. 1) claimed, "Student feedback refers to the process by which students are asked to reflect upon the learning process that they are experiencing or have experienced in order to assist in the further development of our teaching and their learning." According to Beaty (1997), feedback from students encourages reflection, providing rich data for reflection on one's professional practice. In addition, students focus attention on the result of a teacher's work. Beaty recognizes student feedback as having two important purposes. One purpose is to provide an informed impression of how teaching is affecting students' learning, but not necessarily how to improve teaching. The second is the formulation of a conversation with students in the spirit of partnership in a learning environment.

At the end of the academic year, the authors surveyed 114 students from an undergraduate fashion program. Two open-ended questions were included in the survey for the participants to express ideas or experiences about creativity and teams. The students were informed in the verbal script that the survey information could potentially be used to assist in curriculum development. Students work in teams throughout the 4-year program. The open-ended questions included

1. Describe how creativity affected your performance and experience in the classroom.
2. Describe how you were creative when working in teams.

The responses to these questions were categorized by each of the authors to increase reliability. The students' responses helped support the authors' statement that teachers reflecting on their practice positively affected students' learning in the classroom. There were 114 participants who answered the survey (S 1-114). Participants provided written consent to have their responses included in conference presentations or published papers. Student responses to the survey resulted in the emergence of numerous themes. The following are examples of student responses categorized within their themes. The first question was **Describe how creativity affected your performance and experience in the classroom.** The following themes emerged from the students' responses: classroom experiences, ideas, peers, and improved performance.

Classroom experiences

There are aspects of the learning environment that may affect the way students experience learning. The following answers are examples of students' classroom experiences:

1. Creative expression makes designing more fun and worthwhile. By allowing creativity it makes my performance in the classroom positive. (S-17)
2. Other peoples' creativity influenced me. (S-70)
3. Being creative in the classroom helped me to enjoy my classes that I have a hard time in. Those classes are challenging and frustrating, I discovered new ways of learning that increased my ability to learn and retain knowledge. (S-95)

Ideas

Some of the participants were able to identify whether creativity enhanced or expanded on their ideas.

1. Creativity made things easier because I was able to come up with solutions to design problems. (S-26)
2. Creativity pushes me to keep working and not to settle for the first result. Creativity allowed me to be less afraid to take risks. (S-33)
3. Creativity enhanced my ideas. There were ideas put forth that I would have never thought of. I had to learn how to implement these new ideas. (S-54)
4. I feel that creativity allowed me to get more of an experience out of the learning process in the classroom. I was able to let loose and explore because of creativity. (S-76)

Peers

The participants expressed that seeing the creativity and complexity of their peers' work influenced them.

1. Seeing how creatively other members of our class express themselves makes you want to push the boundaries and be equally creative. (S-23)
2. Through class presentations my group saw what other groups were doing and incorporated some of their ideas into our project. (S-64)

Improved Performance

Although all aspects of the learning environment affect students' performance, participants gave specific examples regarding how their performance was improved.

1. The more opportunity the student has to be creative, the better the outcome will be, and the more satisfied the students will be. This means that teachers need to give students freedom and reward students who do something genuinely creative. (S-31)
2. A higher output of creative ideas improves the end result. More options were explored for each design. The goal to do better, not just for myself but for the team, increased my performance. (S-91)
3. In essence creativity affects everything we do, particularly in the classroom. Not

only in fashion where creative ideas are more tangibly brought to life, but also in other classes where creativity must be exercised in problem solving, time management and conflict resolution. Particularly when it comes to time management in the School of Fashion, one must sometimes be creative in planning activities and life to ensure work is completed well and on time. (S-94)

A number of themes related to creative team process emerged from the responses to the second question: **Describe how you were creative working in teams.**

The themes included: brainstorming, problem solving, combining ideas, and seeing things in new ways.

Brainstorming

The participants identified that brainstorming in teams made them creative.

1. I found that being open to other people's ideas and being influenced by them was a key creative factor. Brainstorming ideas in groups generates more variety than working alone. (S-1)
2. I find that brainstorming in a team is fast and effective. Ideas seem to build on one another. (S-29)
3. Despite the common belief that guidelines, possibly strict ones, as well as having to cater to a group of people's individual ideas can inhibit personal creativity, I find quite the opposite is true. Creativity, not only in terms of design, but using creative ideas when approaching brainstorming, compromising, and problem solving are also very important. (S-93)

Problemsolving

Problem solving was identified as a theme from the participants' responses that enabled them to be creative.

1. Problem-solving both in terms of design and group conflict. Combining different people's ideas into one finished project (collaboration). (S-15)
2. I worked with a team member to choose and develop a theme and then designed garments influenced by that theme. Also, we worked together to solve any problems we encountered in pattern drafting or construction. (S-81)
3. We developed more creative designs, solved problems in different ways, and created new ideas for time management and dividing tasks. (S-91)

Combining Ideas

The participants stated that being in a team allowed them to combine their ideas and arrive at new solutions.

1. Being in a group allows for ideas and concepts to begin with and then new ideas arise from mixing or switching something to come up with a whole new creative

- direction. (S-22)
2. Working in teams provided more topics to explore, more imagination involved and more opinion/ideas incorporated which I alone would not have been able to achieve. (S-73)
 3. Working in teams not only generated creative ideas for the garments we developed, but also creativity was used to solve conflict and effectively mesh our individual ideas into one final and cohesive collection. While one can sometimes be more creative on their own, in a team they are forced to use their creativity in different ways. (S-94)

Seeing Things in New Ways

Working with members of a team allowed individuals to consider various views and to see things in new ways.

1. The creative aspect was a result of having to think and design in a way you may not be used to. You have to adapt your approach to your partner's approach, which spawns creativity. (S-24)
2. While working in teams I was creative in new ways because the people you work with may think and see things in a different way and will contribute new ideas and new ways that I too can be creative. I also influenced others with my own creativity. (S-32)
3. I came up with many ideas that my team followed through with. I came up with organizational ideas and deadlines. I came up with ways of doing things that would save us time and that would prevent stress. (S-92)

Rodgers (2002) encouraged teachers to value student feedback as critical to understanding students' learning. Cowan (2004) recognized the importance of students evaluating their learning experiences so that teachers may use the feedback to improve teaching and learning. He stated

In formative evaluation we are, by definition, seeking ways to enhance student learning, and the student learning experience – without asking students to work harder, or to be more intelligent. We seek to improve their lot. If that is apparent, both in the way we introduce a formative evaluation activity and, more importantly, in the way we are seen to respond constructively to what we learn from it, then students will come to appreciate that we really want to know – about what works for them, and why, and what does not work for them. They will also soon learn that our responses can be to their advantage. (p. 4)

Theoretical Literature

Theoretical literature is another one of Brookfield's four critically reflective lenses (

Brookfield, 1995). Brookfield identifies reflection as an emerging body of literature that is grounded in teachers' concerns and sympathetic to teachers' voices, such as personal narratives, autobiographical stories, and research on teacher thinking. Theoretical literature can illuminate general aspects of what individuals may think are idiosyncratic events and processes, provide multiple interpretations of familiar situations, assist individuals to name and understand their experience by approaching the experience from different perspectives, and by providing resources for alternative practices (Brookfield). Beaty (1997) says that reflection requires research on students' experiences as well as a scholarly approach to understanding theories of learning and teaching.

In this study the authors utilized theoretical literature in the organization of data sources using Brookfield's (1995) four lenses: autobiographies as learners and teachers, colleagues' experiences, students' eyes, and theoretical literature. The reflective model the authors followed in this study was Peters' (1991) four-stage reflective process of describing the practice, identifying current approaches and underlying beliefs related to teaching and learning, theorizing about alternative ways, and creating new theory. Brookfield's four lenses and Peters' reflective model provided structure for the authors in the completion of this study.

Curriculum Development

Curriculum development usually emphasizes the instructional activities that represent the educational change with the focus on the product, not on the learning process of the creators. In this study the authors examined their learning process and the learning process of their students as well as the product, and the incorporation of changes into the fashion curriculum.

Draping Course

The draping course taught by Murray is an intermediate course in the fashion design program that focuses on the research and design of eveningwear garments. Students work independently to develop eveningwear garments using industrial methods. Assignments and projects are completed using a variety of fabrics, textures, and colours for a specific season and market. Students research apparel markets, sketch designs, create presentation boards, drape original designs, and construct eveningwear garments.

Students recreate garments using the draping method after the demonstrations are completed by Murray. Garment criteria are used in the development of the garments including length of the garment or sleeve, number of pleats to add, or shape of a style line. Students use fabric and garment criteria similar to Murray's in order to complete the assignments.

As a result of reflecting on assignments and assessment methods through the teacher's and learner's eyes, Murray changed assignment criteria so that students had the opportunity to use a variety of fabrics for assignments and the possibility to give different versions of the same assignment. Students had the option to choose the length of a garment, incorporate embellishments, and create a different version of Murray's demonstration. Murray now emphasizes creativity in the marking scheme of the

assignments as well as in the introduction of assignments or projects.

Team Skills Course

The team skills course taught by Lafrenz is a segment of an advanced course in fashion design that focuses on the research and design of tailored garments and men's wear groupings or collections. Teams of five or six students are selected by the course instructor to jointly develop a collection of men's wear. Students keep journals to document inspiration, color, fabric, and design development. A critical analysis of completed garments is made by course instructors with reference to the process and execution of the final garments. Industry professionals evaluate the collections based on the cohesiveness of the garments as a collection, runway appeal, and marketability. Students work in teams to create a cohesive collection as well as practice and develop the skills required to work effectively in groups.

Team activities

Students are assigned in-class team activities throughout the first term that address a different team building theory or skill necessary to improve team effectiveness. The students are allowed a specific amount of time to complete each activity. The most important element of any activity is to review the process and improve for the next activity, not necessarily getting a correct answer. The activity reviews consist of all team members contributing their specific observations regarding the identification of successes and difficulties the team had during the activity and ways to improve their team skills for the next activity.

As a result of collaborating with colleagues, one of the in-class activities was changed to a homework assignment allowing students more time to complete their work. The teams are given a specific amount of time to complete each activity. The reason for shifting the assignment from an in-class activity to a homework activity was the time issue related to creativity. According to Wallas (cited in Starko, 2001, pp. 25-27), an incubation period is needed for creativity to occur; lack of time stifles creativity. The activity as a homework assignment received overall higher marks compared to the previous year when the activity was an in-class assignment.

Other creative activities were integrated into the team skills course: problem solving, communicating ideas in groups, collaborating in team settings, and experimenting with a variety of decision-making techniques. In addition, a creativity component was incorporated into the marking scheme of all assignments.

Simulation

One of the areas where teams have difficulties is conflict resolution. Originally lecture topics included the levels, sources, and stages of conflict and conflict management strategies. Discussions took place regarding how to use collaborative approaches to conflict management, but no discussions ensued relating to specific conflicts within the teams. In addition, there were no opportunities for the teams to practice resolving conflicts.

A conflict simulation was conducted focusing on team conflict. Simulations are reenactments of actual events that may occur during interpersonal interactions with clients, patients, consumers, or employees in the workplace. Simulators are individuals trained to reproduce the history, personality, and physical and/or emotional state represented in a specific case scenario.

Students are assigned conflict management readings prior to the simulation. Teams role-play a particular conflict situation with an actor or simulator; each team has an opportunity to apply the readings and their personal experiences to resolve the conflict. At the end of the simulation the teams summarize their observations, the effectiveness of the solutions, how the conflict could have been resolved and/or prevented, and what the teams learned from the simulation.

Creativity Lecture

Students can easily understand creativity in drawing a fashion illustration, selecting colors and fabrics, or designing details of garments. However, the creativity aspect of working in a team often escapes the students. Previously the creativity lecture delivered by the course instructor was developed based on competencies related to change and managing change. Team activities introduced a variety of creative opportunities not recognized as creative by the students, such as problem solving, decision making, and feedback. Murray's Master's research was the perfect vehicle to stimulate discussions surrounding creativity. In addition, the curriculum thrust of the School of Fashion is the movement toward a conceptual model versus a skills-based model and the incorporation of a research-based lecture such as Murray's is preferred.

Murray was invited to the team skills class to present a lecture on creativity based on her Master's research. As a result of the lecture, students discovered new ways to express their creativity. The students learned about areas of creativity that they had not previously considered. Creativity is present in almost all aspects of their currently assigned projects including producing garment designs from the concept stage to three-dimensional garments; creating math formulas for garment cost sheets; and problem-solving solutions for garment patterns and designs. The aforementioned are examples of creative activities used in the fashion program, but when asked, were not considered creative by the students.

Implications for Curriculum Development

On an annual basis the fashion curriculum is examined in detail to determine if improvements need to be incorporated into the program. The emphasis is to enhance student learning by evaluating the effectiveness of the existing assignments and projects, reviewing assessment methods and criteria, and assessing course topics. Suggestions for improvement are discussed and in many cases integrated into the curriculum.

The School of Fashion curriculum changes often address students' concerns. At the end of the term, in addition to formalized assessments, teachers have discussions with students to determine areas that worked and areas that needed improvement. Teachers record students' reflections as possible improvements and solutions that may enhance student learning and faculty teaching in the classroom.

The formation of a community of respect among teachers is essential to create an environment for successful reflection and successful teaching and learning (Rodgers, 2002). Reflective practice allows teachers and students to see the benefit of exchanging ideas and the willingness to incorporate changes into the curriculum. The process of curriculum development is ongoing because teachers are open to change and constantly reflect on their experiences.

Conclusion

The authors in this study attempted to answer the question, "What was the role of reflective practice in integrating creativity into a fashion design curriculum?" Initially coauthor Murray's reflective practice was an outgrowth of her Master's research on creativity, thus creativity was the catalyst of her reflective practice. The intent of Murray's reflective practice was to incorporate creativity into the curriculum to positively affect students' learning. As a result of engaging in critical conversations with coauthor Lafrenz, creativity was incorporated into the fashion curriculum. The curriculum changes were followed by data collection from students to help determine the effectiveness of adding creativity into fashion courses.

Reflective practice, according to Brookfield (1995, p. 214), "has its roots in the enlightenment idea that we can stand outside of ourselves and come to a clearer understanding of what we do and who we are by freeing ourselves of distorted ways of reasoning and acting." Creating self-awareness of one's practice allows educators the opportunity to consider alternative ways of doing things. In this study the authors triangulated four data sources: reflective experiences, colleagues' experiences, student surveys, and theoretical literature. The model used for the authors' reflective process was Peters' (1991) model describing the practice, identifying current approaches and underlying beliefs related to teaching and learning, theorizing about alternative ways, and creating new theory.

Reflective practice had a positive impact on the authors by increasing their level of self-awareness. As they reflected on their strengths and areas that needed development in the classroom, they acquired knowledge and an understanding of student learning. The authors gained insight into the effectiveness of their teaching and improving their practice. From their personal experiences and the experiences of their colleagues, they were able to create an environment that enhanced student learning.

The authors' reflective activities were supported by qualitative data from students' survey responses. A number of themes emerged from the qualitative survey questions. The themes that emerged from the question, "Describe how creativity affected your performance and experience in the classroom" included positive experiences, generation of ideas, working with peers, and improved performance. The four themes that emerged from the question, "Describe how you were creative working in teams" were brainstorming, problem solving, combining ideas, and seeing things in new ways. The data produced indicators leading to probable conclusions that the incorporation of creativity into the curriculum had a positive effect on students' learning.

The reflective experience is an ongoing process of making changes to enrich a curriculum. Educators are striving to be effective, and students want to be creative, particularly in a fashion program; therefore the curriculum needs to reflect both parties' concerns. The authors recommend educators engage in reflection to increase an awareness of teaching, to learn from experiences, and to improve their teaching practices. Specifically the authors recommend that teachers engage in critical conversations with colleagues. Conversations with colleagues enhance one's ability to determine educational philosophies, instruction, and responsibilities to students' growth (Bruner, 1990). The authors in this study discovered consulting with a colleague provided opportunities to learn about and explore alternative teaching strategies. In this study consulting with a colleague occurred at each stage of the reflective process: the experience, the description of the experience, the analysis of the experience, and the experimentation stage.

Recommendations from the authors include the generation of additional reflective collaboration with multiple colleagues within the School of Fashion and outside the department. Creativity should be introduced, reinforced, encouraged, and celebrated throughout all courses in project briefs, project evaluations, studio critiques, and the presentation of subject matter.

The authors collected feedback from students at the end of their courses. In addition to summative evaluation, the authors see the value in collecting information from students at various points throughout the term when developing new curriculum programs. Beaty (1997) stresses the importance of obtaining student feedback throughout the teaching and learning interaction instead of waiting until the end. Teachers can only influence the students' experiences during the course by asking questions teachers are willing and have authority to change. Beaty speaks about reflective practice and the professional role of teachers in higher education:

Reflective practice is important to the development of all professionals because it enables us to learn from experience. Although we all learn from experience, more and more experience does not guarantee more and more learning. Twenty years of teaching may not equate to twenty years of learning about teaching but may be only one year repeated twenty times. There are many times when our normal reactions to events are insufficient themselves to encourage reflection. We should not rely solely on our natural process of reflecting on experience, but actively seek ways to ensure that reflection itself becomes a habit, ensuring our continuing development as a professional teacher in higher education. (p. 8)

Many authors state the importance of reflective practice. As a result of engaging in a reflective process individuals acquire knowledge and understanding (Clarke et al., 1996; Schön, 1983), learn from their experiences (Kolb, 1984; Schön, 1983), apply knowledge to practice while being coached by professionals in the discipline (Schön, 1996), and explore assumptions they bring to the workplace (Brookfield, 1995). As a reflective practitioner, teachers gain a deeper understanding of their teaching approach and their effectiveness as teachers. Additional research could focus on tracing the effects of reflection on educators' practice and its connection to students' learning.

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Use of Technology to Improve Teaching and Learning in a Religion Class

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Abstract

New computer programs have multiplied the options for accommodation to diverse learning styles in college classrooms. The program, Blackboard, stirred interest and creativity in a Religious Studies class, "Writings of John." Since it was a Writing-Intensive class, students posted their papers on Blackboard and received the comments of their classmates for suggestions to improve their work. Blackboard helped the professor to fulfill her objectives to improve the writing ability of the students because they demonstrated the ability to think critically, analyze carefully, and produce creative applications to gospel stories.

Introduction

Computer programs have proved useful in appealing to the various learning styles of college students. Students reported that the use of Blackboard in a writing intensive class, "Writings of John," helped them to improve their writing ability. The professor saw a growth in the student's ability to reason, argue constructively, think critically and apply ideas creatively to life. "Writings of John" is an upper-class writing-intensive course which requires three six-page papers along with three exams. Students and the professor in their evaluation of the course claimed that the discussion board area of Blackboard helped students to improve their writing ability because it gave students another option to accommodate their diverse learning styles.

Instructors have long recognized the need to accommodate to the learning styles of their students by using a variety of teaching techniques (Davidson, 1990; Kolb, 1984; Rasmussen & Davidson-Shivers, 1998; Wynd & Bozman, 1996). Grasha (1996) has defined learning styles as "personal qualities that influence a student's ability to acquire information, to interact with peers and the teacher, and otherwise participate in the learning experience" (p.41). Learning styles vary with age, achievement level, culture, global versus analytic processing preferences, and gender (Shaughnessy, 1998).

My students had a varied background of ethnicity, gender, academic achievement and majors from humanities, the natural and social sciences. Most of them had experience with technology, a few of them with Blackboard, because all of them were juniors or seniors. New technologies, such as Blackboard, have been developed that capitalize on the diverse talents, abilities and interests of students that enhance their learning. Recent studies have examined effective ways of integrating technology into the curriculum to accommodate various forms of student learning (Schneiderman, Borkowski, Alavi, & Norman, 1998; Spotts & Bowman, 1995).

In order to discourage indiscriminate use of the new technological programs, studies were done to examine their effectiveness to improve student learning (Brouwer, 1996; Grasha, 1996; Jonassen, 2000; Rintala, 1998). It seemed worthwhile for me to try to incorporate some of these ideas that might help my students improve their learning skills. Students were using internet discussion rooms and blogs so they showed an

aptitude for this activity which I thought would transfer well to the use of Blackboard.

Using Blackboard for “Writings of John”

Since most of the students in this upper level writing-intensive class were familiar with the Internet and discussion rooms, the use of Blackboard’s discussion board seemed appropriate. It was necessary to adhere to the advice of the studies like Rintala, (1998) and Brouwer, (1996) that warned educators to accommodate their choice of technologies to the interests and experience of the students. Some of the students had used Blackboard in previous classes and all of them were familiar with the computer. The course covers the *Gospel of John*, the *Letters* and the *Book of Revelation*. Because it is a writing-intensive course, three six-page papers were assigned. The first paper was to write a present day application of a gospel incident. The second paper was a creative incident based on the teachings of Jesus in the gospel and the third was a research paper on the *Book of Revelation*.

First Written Assignment

After studying the gospel, a video was shown based on the incident of the woman at the well. It was a contemporary application of the Samaritan woman story with a woman sitting on a porch step on a hot summer day next to a pitcher of ice water, which she had shared with her departing neighbors. A black male construction worker who was not from the neighborhood came by and asked for a glass of water. The rest of the video was similar to the story of the Samaritan woman in the gospel. After a discussion of the film, the students were asked for their first paper to write a contemporary application of any story in the *Gospel of John*. The directions included the following:

Scriptures are documents written by people of faith communities at a particular time in history, immersed in their own particular problems, trying to make sense of their relationship to God. Although the *Gospel of John* was written for persons in the first century, much of the wisdom in the document can be applied to modern times. Choose an incident in the gospel of John and write a creative account that could apply to a present day situation.

The students were asked to post a summary of their papers on Blackboard in the discussion board area. Each student in the class of twenty was asked to comment on the summary and give suggestions for improving the plot. The professor did likewise and soon the twenty students had twenty comments on their summaries. The students then wrote their papers and posted them on Blackboard for other students and the professor to read and make comments. The students then brought the hard copies to class incorporating the suggestions made by the professor and other students in Blackboard. We spent one class with the students correcting, editing and making comments on each other’s papers. I felt this was important because some students had never read an A paper and questioned why they received B or C on their written work. It seems that they had nothing to compare to their own work.

My desired learning outcome for the exercise was to test the higher-level skills of analysis, evaluation and application of theory to practice. I wanted the students to produce an appropriate creative response to the gospel story and to articulate it in a story of their own. It seemed to me that my learning objectives were met in that the

narrative descriptions evoked scenes whose details were appealing to the senses. The incidents were tight with enough details to inform the audience, yet keep the plot coherent. The applications made to life were most realistic and contemporary. I hoped that the posting of their summaries and drafts on Blackboard would elucidate responses from their classmates that would not only help the writer, but also give ideas to the commentators for their own papers. Students were asked to write comments on the use of Blackboard as a method of improving their writing skills.

Anonymous Evaluations by Students of the Activity

- I liked using Blackboard because it gave me ideas to start my own paper.
- I appreciated getting other students' perspective on my paper.
- It helped me to get to know my classmates better
- I learned that sharing my ideas with others was a good thing, because their suggestions and comments strengthened my thoughts.
- It was a very unique and helpful tool for students to submit their papers on Blackboard and make comments on each others' papers online.
- Everyone had the opportunity to come up with an inspiration in starting a paper by looking and realizing what others thought.
- Even though I made comments on others' papers, it helped my humility to see the honesty in the comments they made on my paper.
- I found the use of Blackboard very helpful in writing my story because it helped me to organize the paper. By putting our story plot first and then the whole story, I was able to obtain a more practical approach to the assignment.
- I could see how others were approaching the same assignment in such various ways.
- I profited from the comments of others, both negative and positive
- I got more input on what was needed to be changed because of Blackboard.
- By talking to each other using Blackboard, we came to know each other's names and got to know each other better.

I also asked for anonymous comments in writing on the reading, editing, and commenting on the drafts of their papers. Some of the comments included the following:

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I also asked for anonymous comments in writing on the reading, editing, and commenting on the drafts of their papers. Some of the comments included the following:

- My favorite part of the project was reading each others papers in class, making corrections, and then getting my paper back and seeing the corrections others made on my paper.
- When we exchanges papers where each of us had the opportunity to read everyone's paper, I personally learned techniques which helped me to develop my paper.
- The corrections that my classmates made on my draft paper helped me to develop my writing skills.
- I liked editing the papers in class because it helped me to catch some mistakes that I missed on my own paper.
- I was impressed with the examples of such good writing. It gave me an impetus to improve my own.

Not all comments were positive as the following one illustrates from an older student: "Commenting on students' papers is challenging to me. Stories can be very painful experiences. I would leave it to the instructor."

Professor's Evaluation of the Activity

I thought the quality of writing improved as it went from the summaries and drafts posted on Blackboard, to the drafts brought to class, to the finished copy handed in for the professor to mark. The mechanics improved so well in the final copy that there were very few minor corrections to make. Specific details were incorporated into their stories that made the reader more conscious of the environment. Students showed a progression in compassion for their characters from the drafts to the finished product. The conclusions became less judgmental in the final papers than in the earlier drafts. In stories that were applications of the "Woman Caught in Adultery," both genders of students made the culprit a man.

My own objective was to test students' ability to analyze objectively the circumstances and possible solutions to situations similar to those in the gospel. Students displayed an understanding of the problems that arise due to ethnic and racial prejudice situated in America. They used incidents involving the mistreatment of Blacks and tied them to the story of the man born blind in the gospel. Similar applications were made to incidents in Palestine and Israel where individual families forgave each other for violent reactions. The students were able transfer to a particular story the universal principles of

forgiveness and love in their adaptation of the woman caught in adultery stories. They applied well the message of compassion in their renditions of the help given victims of the Hurricane Katrina and homeless persons which they tied to the multiplication of the loaves and fishes. A Muslim student described the hospitality given to a homeless Israeli family by a Palestinian family. Students were able to evaluate the implementation of the universal messages by citing the examples of meaningful sacrifice and generosity on the part of their characters. Evidence of involvement of their imaginations showed in some stories that involved animals as the main characters. I think the most meaningful expressions that I heard from the students were that they were having a good time writing their stories.

Working cooperatively with other students built a sense of community in the classroom that enabled many of them to share in the discussions more fruitfully. There was much chatter and sharing before and after class with students walking out of class together. Many studies on collaborative learning support the theory that students can learn from each other (Ferguson, 1992; Rogoff, Turkianis, and Bartlett, 2001). Aronson and Patnoe (1977) found that collaborative learning practices not only helped the individual but maximized the learning of the whole class. The students did not show resentment or hard feelings at the suggestions and corrections of their classmates because they realized this paper was a draft to be revised before handing in to the professor.

Felder and Brent (1994) found that collaborative learning styles outweighed competitive learning styles because they reduced the levels of anxiety and produced higher levels of self-esteem. I desired outcomes for my students such as greater intrinsic motivation, and greater ability to view situations from the other person's point of view. I noticed that students who were hesitant about sharing their work with others were more willing on the second assignment to do so. They eagerly shared their ideas with each other even before posting their summaries on Blackboard. Students started the assignment early because they wanted to see what the other students were going to write in the second assignment. There was general excitement in the classroom concerning the second assignment and use of Blackboard.

Second Writing Assignment

One of the reasons for the popularity of the *Gospel of John* is its timelessness. Discerning readers can find material for discussion and application to life among its pages. The assignment was made with the learning outcomes of our Humanities Faculty at the college in mind. The material provided an appropriate application of our Humanities Core Learning Outcomes which faculty developed as follows:

1 Conventions

- Students will reflect on the basic questions of life with the goal of understanding the world and one's place in it.
- Students will articulate and defend critically informed values.
- Students will recognize and demonstrate creative thought in producing answers to individual and social questions.

2 Methods

- Students will employ close reading, analysis and discussion (oral and written) of

significant primary texts in literature, philosophy, religion, rhetoric and journalism.

The second writing assignment was a creative writing assignment where the students reflected on an incident or teaching of Jesus from the *Gospel of John* and then wrote their own original story incorporating some of the themes. I was looking for examples of personal and creative responses to our humanities outcome of “demonstrating creative thought in producing answers to individual and social questions.” I thought this would test the student’s ability to integrate the gospel with their own ideas on social issues that coincided with the themes appearing in the gospel.

The first paper had as its object a practical application in contemporary times of the gospel message. The second paper tried to respond to our third Humanities outcome of considering some answers to our individual and social questions. The students used Blackboard again, but this time they only posted their summaries for their classmates and professor to make comments. I asked them if they thought giving a full period to correcting and editing each others papers was an effective use of class time. Every student strongly recommended that they would repeat that exercise. A comment like, “This was the best part of the exercise” made me repeat the activity. Kolb (1984) included in his good practices in undergraduate education the need to develop reciprocity and cooperation among students. I saw the eagerness in which they exchanged papers and the verbal comments of affirmation the students gave to each other. The comments on each others’ papers gave prompt feedback to the owners which they seemed eager to implement.

Many of the students said that they were surprised at their own creative ability and the creativity of their classmates. They claimed that they were challenged to use their imaginations and emotions in their writings, which was a new experience for most of them because they had previously only done research papers. We then analyzed the ability of the author of John to appeal to our emotions, which made so much of it memorable. Students expanded on the theme in John to “love one another” by stressing humans’ abilities to care for one another even to the point of great sacrifice. The theme of forgiveness based on Jesus’ forgiveness of Peter was prevalent in their creative endeavors. Ethical questions involving greed of individuals and corporations were set against the motif of generosity as displayed in the gospel. Care for the environment grew out of the theme of universal love.

A discussion of the gospel’s sensitivity to women and respect for their emotions led to some questions about the authorship. Consensus surrounds the vital activity of the Beloved Disciple, but that figure remains anonymous. Could the description of the disciple whom Jesus loved be possibly a woman? The gospel says that Jesus loved Martha and her sister Mary and their brother, Lazarus. Likewise, Mary Magdalene seems to appear in crucial places throughout the gospel. For each account of a male disciple, there is a corresponding account of a female follower. Usually the female appeared in more favorable light than the male. For example, the Samaritan woman shows more faith than Nicodemus, Mary of Bethany than Judas, Mary Magdalene over Peter and the “other disciple”. The author of our textbook, Robert Kyser, suggests that Martha might be the Beloved Disciple. Other research of Ramon Jusino and Esther A. De Boar centered on Mary Magdalene as the Beloved Disciple because there were only three women at the foot of the cross in John’s gospel.

This assignment brought a discussion of Christology that centered on the humanity of Christ. Since the *Gospel of John* stresses the divinity of Christ, the humanity of Christ appeared to have less value. Looking at the emotions in their own writings and the papers of their classmates posted on Blackboard led the students to wonder about the human emotions of Christ. They noticed his weeping over the death of Lazarus, his impatience with the religious authorities, and his disappointment at the departure of the crowds after his Bread of Life speech. The humanity of Christ began to take on more significance for the students as they began to consider the emotive aspects in each other's writing.

Professor's Evaluation of the Activity

The social themes incorporated into their writings included the problems of evil, ignorance, crime, justice, poverty, social security, and the death penalty, individual and social values that corresponded to our Humanities outcomes. These papers had raised questions, were well reasoned, and came to logical conclusions that were consistent with the gospel themes. Each paper had a central idea with elaborations that reinforced the unity of the main theme. They were well organized using mature and varied sentence structures.

When evaluating their reaction to only posting the summaries, not the entire draft, on Blackboard they responded that they felt they had more time for comments on their companion's ideas. They thought the entire draft was helpful for the first assignment, but not necessary for the second. I noticed that the suggestions from classmates improved from such comments as "good idea" or "good application" to concrete ideas about imperialism, corporate and individual responsibility and care for the environment. I thought the quality of their papers in this creative assignment had improved over the first paper because the ideas seemed to flow with more ease and consistency. The consideration of some of the issues of social justice seemed well organized and argued to logical conclusions. As a whole, the desired learning outcomes of our Humanities faculty were fulfilled by most of the students.

Third Writing Assignment

The third paper was a research paper on the *Book of Revelation*. Most of the students were not familiar with the genre of apocalyptic literature so we spent some time on the historical situations that brought forth such literature. However, many of the students thought it was a book of prophecy predicting events that would happen at the end of the world and were not ready to accept another interpretation. It was necessary to spend some time on the function of prophecy and the prophets in the Hebrew Bible so they could understand that prophets proclaim and do not necessarily try to foretell the future.

The directions for the written assignment tried to adhere to our Humanities core value of student's ability to "articulate and defend critically informed values." My own learning outcome for the students was to expose them to the genre of apocalyptic literature so they might more carefully analyze such books as the *Left Behind* series.

The *Book of Revelation* has been interpreted in various ways. Sometimes it has been considered a book of prophecy about the events preceding the end of the world. Other times it has been interpreted as apocalyptic literature, a genre that calls persons suffering persecution and oppression to display faith in God. Give evidence for each of these interpretations, using reliable sources to support your

arguments. Then describe your own interpretation and give reasons for your conclusion.

Instead of posting their summaries which would not be long enough to explain the reasoning behind their conclusions, they only posted the drafts of their final paper on Blackboard. Some of the students who were leaning toward predictions of events that were to precede the end of the world changed their final hard copy to be given to the professor after reading the conclusions of the other students. I did not encourage comments on the drafts because each person could choose which side of the interpretation they would emphasize, and should not be persuaded to change their point of view. I was only concerned with how well they supported their arguments and how much critical thinking was involved in their conclusions. There were a couple of preachers' sons in the class who had a hard time with the apocalyptic literature interpretations. They began to waver when they saw that the evidence given by their classmates to support the apocalyptic interpretation seemed more reliable than their conclusion of the foretelling end of the world events. Some students who have formed strong opinions may accept more divergent information from their peers than from the professor. Blackboard enabled students to view conflicting ideas without fear of contradiction or grading.

I was pleased that the students did evaluate both points of view by using credible sources to support their arguments. They noticed a difference in the web sites posted by colleges and universities from individual authors. I saw better arguments in the papers using textbooks on the New Testament than from those using web sites as references. Almost all of the students came to the conclusion that supported apocalyptic literature except for two students who cited references from the Hebrew Bible that stressed prophecy as a prediction of future events. Many students saw the danger of the literal approach that led to formation of cults such as David Koresh and Jim Jones. Students not only could understand the historical situation that caused the *Book of Revelation* to be written, but also could also discern the consequences resulting from such literature. Since this paper was their final exam, I could secure no evaluation from the students.

Evaluation of the Use of Blackboard by Students at the End of the Semester

Students were asked to write their anonymous evaluation of the use of Blackboard for homework on the last day of class. Most of the comments were made by more than one student. All of the comments were positive, with a majority of them writing the following remarks:

- It enabled me to appreciate the creativity of my classmates.
- It allowed me to experiment with my own creative abilities.
- It gave me courage to make suggestions to others.
- It helped me to see why I never received A in my previous papers.
- I liked the suggestions I received from my classmates for the drafts.
- My writing ability improved .
- I appreciate more fully the use of technology.
- In this class we became friends because we saw that we shared many of the same values.
- I liked the suggestions of my classmates to improve my paper.
- I liked the idea of applying incidents in the gospel to my life because it made the gospel come alive for me.

- I recognized the stories when I went to church which made the experience more meaningful.

Many said that they were surprised at the variety and number of applications that the students envisioned, which made them see the timelessness of the gospel message. Students were impressed with the ways that people bring their understanding of God to their lived experience. They appreciated the ability of the *Gospel of John* to touch the imagination and emotions of anyone regardless of their level of faith. Students enjoyed dealing with the symbolic as they uncovered the layers of symbolism in John's gospel. Becoming more aware of the dualism in John made the students more aware of the West's propensity for dualistic over monistic thinking. The symbolism attached to the identity of the Beloved Disciple opened many concerns about the use of anonymity.

The *Letters of John* helped them to see some of the contradictory relationships in the community of faith. Many young adults have trouble with what they perceive as the restricting rules put on them by their churches. The Letters showed the need for some authority to safeguard the teachings of the whole church. Many students claim that they believe in God, but see no need for a church. They seem to resent the authoritarian attitude that is exhibited in some of their churches. Examining the conflicts in the early church helped them to see the need for structure in any institution as it tries to maintain its fidelity to the original vision.

Evaluation by the Professor of the Blackboard Experience

From the professor's and students' points of view, the use of Blackboard not only increased students' writing skills, but also improved their ability to think creatively and critically, engage in argumentation, and make application of the reading material. Research on learning suggests that students process their information in different ways (Riding & Sadler Smith, 1992). Students who process information visually were helped by Blackboard because they could actually see other student's work. This helped to balance the auditory appeal for some students who profit by lectures. When giving suggestions to their classmates, they had to go beyond the concrete to the abstract thinking. By changing the use of Blackboard in each assignment, (i.e. posting the entire draft, posting summaries), it gave variety to its use and kept the interest of the students while at the same time maintaining some familiarity with the technology.

In a study contrasting online and on-campus students, Diaz and Carnal (1999) found that the online students were more independent and driven by intrinsic motives than the on-campus students. They claimed that traditional students often work for rewards by meeting the expectations of their teachers and peers. The Blackboard experience helped my traditional students to work independently to post their papers and take the risk of humiliation if their work did not measure up to their classmates. It encouraged collaborative learning that appeals to the learning styles of some students. Students who learn through discussion with others found the visual and auditory techniques helpful. Blackboard enabled the professor to implement some of the learning outcomes in a creative and effective manner. The professor found the enthusiasm of the students contagious and could enter into the class with more satisfaction when seeing that students actually enjoyed their learning.

Suggestions for the Future

Next year when I teach the course again, I may divide the class into smaller groups to read each other's papers in order to conserve on time. I would encourage more thoughtful remarks to be posted on classmates summaries and drafts. Such comments as "Good ideas," "Good application," "Looks interesting", although supportive, were too general. In the second paper, I gave specific directions to look for such things as evidence of creative thought in producing answers to individual and social questions. The students became more specific in their suggestions to improve their stories. Next time I would be more specific in my directions and suggestions for comments to be posted on Blackboard.

I would like to see more research done on the use of technology to intrinsically motivate students. I am not certain if the improved writing quality was due to intrinsic motivation or human respect. I wonder if students who are more familiar with technology have an advantage over students with a limited background when using Blackboard for course content and evaluation. Although the trust level was very high in this upper level class among students who did not know each other before, I wonder if lower level students would be able to handle the criticisms from their peers.

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**Mind the Gap:
An Exploration of Participant Expectations and Facilitator Intentions Via an
Analysis of Outcomes of Workshops Held at Three Ugandan Universities**

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Abstract

When lecturers seek to improve their teaching skills they may initially demand mere performance tips, but what they can come to value more is understanding processes of learning. This was investigated during workshops for lecturers at three Universities in Uganda at which participants were asked to write down what they hoped to gain from the workshops, and then on completion of the workshops they were asked to write what had interested them most and what actions they planned to take. The responses were coded in NVIVO and analysis reveals that expectations were met and also that many found the workshops gave them new views on learning. Alerted by this attempt to "mind the gap" (between expectations and outcomes), lecturers in other Higher Education disciplines may want to implement similar formative assessment of their teaching (and their students' learning) by coding pre-course statements on expectations as well as in-course or post-course evaluative responses.

Introduction

Should the participant, in events or courses for improving higher education pedagogy, have expectations fulfilled in the manner of a fast food shopper? Fast food comes in standard quantities and prices. The customer can point to the picture, request the item and rely on it fulfilling expectations. It is not surprising that post-modern consumer societies increasingly favour outcome-based educational programmes, with outcomes carefully defined in advance, and mix-and-match student options, like the cafeteria style of pre-packaged food, all in transparent wrappings, so the hungry customers can see exactly what to choose. Those of us engaged in serving up workshops for adult learning or continuous professional development might sometimes be tempted to confine our efforts to keeping the clients happy by giving them what they expect – and no more.

The problem with this is that untutored expectations fall short of the potential vision. What people think they want will not capacitate them for the length of the journey. Higher Education teachers, immersed in their various disciplines, often think that all they need to improve their teaching is a few "tips" and "techniques" to deliver the content better. They are unaware that what is needed first is a re-orientation towards the relational essence of teaching: they have to discover how to relate better to their learners before they can understand the rationale for the various "tips" in better delivery of content. Similar gaps between student expectation and curricular aims are common in many disciplines in higher education. To draw attention to it, I often repeat what a zoology lecturer told one class: his students arrive in Week One delighted to have achieved a place in a course that they anticipate will lead to a glamorous career in the South African Game Parks (safari, the Big Five, adventures in the veld), but he has to gently reveal to them that most of zoology is the study of much smaller wild life, such as beetles. I emphasize that it is the teacher's job to be aware of student expectations, and to skilfully achieve some alignment along the way between expectations and outcomes. So if that is

what I believe, how do I achieve this, faced with an anticipated gap between participant expectations and facilitator (i.e. my own) goals in workshops advertised for the professional development of lecturers?

The opportunity came, with some sabbatical weeks in Uganda, to run workshops at three Universities: Uganda Christian University (UCU); Uganda Martyrs University (UMU) and Makerere. None of these had been running pedagogical workshops for lecturers in the recent past. For rigorous research purposes, it might have been considered better to have scheduled the lectures in the same way, and to have utilized similar samples of participants. But this project was dependant on what could be organised in the three institutions in the time available (July 14th – August 27th 2005, broadly a vacation period), and the data collection was improvised alongside the primarily pedagogical programmes. These programmes were structured around the well-established themes in faculty development of active learning, peer-work, multiple intelligence, affective impact, and improving the learning environment. (Angelo, 1993; Brookfield, 1995; Chickering, 1969; Finkel, 2000; Gardner, 1993; Weimer, 2002).

Qualitative Analysis of Student Evaluation

Before going into the details of the Uganda project, it is as well to draw attention to certain features of this type of research. It began as an improvised attempt to gather participant responses to workshops. The feedback was required to assess whether it was worth giving further workshops and of what type, at all three institutions. The act of responding was not only to gather data: it was also part of the formative learning of the participants, in “classroom assessment techniques” (Angelo and Cross, 1993). This write-up of the process is intended not only for those involved in similar faculty development or for those particularly interested in Uganda, but also for faculty themselves, in their various disciplines, who might wish to follow up with closer scrutiny of how their students verbalize their feedback responses. Many institutions have gotten into a groove of evaluating by an institutionally imposed likert scale response sheet, with totals used for promotion portfolios. But many higher education teachers realize that open-end verbal responses give them richer insights into what is going on in the mind of their students.

Such responses can be categorized using software such as NVIVO. Categorizing different concepts of student learning has been a long established in phenomenographic research (Marton, Hounsell et al. 1997; Prosser and Trigwell 1999; Richardson 1999; Ashworth and Lucas 2000). Phenomenography differs from phenomenology and other forms of qualitative research in its focus on variation and the claim that the categories noted fill all the “outcome space” of the activity perceived (Trigwell 2000) , as with the numerous studies of “deep” and “surface” learning (Marton, F. and Säljö; Ramsden, P). Such research has been eagerly taken up and used in pedagogical work with higher education teachers, which shows the usefulness of having just a few descriptive categories around which to structure further analysis. Others, such as Henderson (2003), point out that studies of concepts of learning produces “dichotomous representations.”

Investigation into the higher education teachers' constructs of teaching and learning is valuable research that goes alongside faculty development. There are various ways of doing such investigations. The Phenomenographic research into the nature of student learning, as described above, has fed into work of faculty development/teaching and

learning units across the world; notably via the 13 “Improving Student Learning” Symposia that have been convened by Oxford Brookes OCSLD since 1993. In so far as the work of these units is staff *development*, it involves changing participants’ constructs. Thus titles of published reports of such projects specifically reveal this change:

“Changing Lecturers’ Conceptions of Teaching and Learning through Action Research ” (Gibbs, 1995) *“The Conceptual Change Approach to Improving Teaching and Learning: an evaluation of a Hong Kong Staff Development programme”* (Ho, A. Watkins, D. and Kelly, M.) Higher Education 42, 143-169. *“New lecturers’ constructions of learning, teaching and research in higher education”* (Nicholls, G. 2005)

There are diverse research tools for investigating this: Graham Gibbs used the action research paradigm. In describing his own earlier work in staff development, he indicates that although it may have helped lecturers in deciding what to do and not to do, it had “no theoretical underpinning” and “seldom challenged lecturers’ conceptions of teaching.” He has gone on from this to do impact research, via survey methods and an Approaches to Teaching Inventory, to see if the issues promoted by faculty developers actually result in improved teaching as perceived by the students (Gibbs and Coffey 2004). Nicholls (2005) research used Kelly’s Personal Construct theory (1955) to elicit from 20 new lecturers their constructs of key academic roles. She cites Sherman et al (1987) on the progression of teacher development from Stage 1 “when teaching is the giving of information” to stage 4 where “teaching is a complex interaction that is unique and dynamic.”

In the case of this research, the workshop facilitator had a prior notion that the lecturers in Uganda would need to shift from an excessively transmission mode of “the giving of information” to a more interactive mode. So this was one of the main objectives of the workshop and a main focus of interest when coding the data. But another feature of research that claims phenomenology as intellectual heritage (Richardson 1999) is that the researcher should be “bracketing out” pre-conceptions or prior assumptions about the activity. As the person coding the data from the comments was also the workshop facilitator (and writer of this article), it is problematic to claim “bracketing out.” But does such “objectivity” matter if the project is primarily action research aimed at improvements? (Guba and Lincoln 1989; Toulmin and Gustavsen 1996) Thus the investigation below can be regarded merely as an exercise in formative evaluation, useful primarily in its particularly Ugandan context. But in publishing such an investigation there is an assumption that readers will be able to discern more general applications, both in faculty development and also in how to do qualitative research in their own disciplines on student expectations and responses

Background Data on the Ugandan Workshops

The differences in delivery were as follows:

At UCU:

Week 1, Workshop 1 entitled “Active Learning” (2 x 90 mins.) Mon- Fri, to lecturers from the different faculties (i.e. same workshop 5 times).

Week 2 Workshop 2, entitled “Facilitating Learning” (2 x 90 mins.) was offered in the same way, with the same groups invited to return on the same day.

Then after a break of a week, further topic-related workshops were offered to those from any of the earlier participants keen to return for more. The topics were:

- Student Development Theories
- Facilitating Learning in Small Groups
- Curriculum
- Assessment
- Materials Development
- Evaluation
- Mentoring
- Experiential Learning
- Language Issues in Learning

In all, some 56 individuals participated in at least one workshop with a core of about 8 individuals attending many of the topic-related workshops in the third week.

At UMU, the same programme was condensed into four and a half days, with a smaller number of participants (27), with a core of about 4 attending multiple workshops.

At Makerere, the week available coincided with the start of registration week for the new academic year. One workshop of 90 mins + 120 mins was arranged, attended by some 25 lecturers, from a wide range of disciplines.

The Expectations Questions

At UCU, as participants came into the first workshop they were asked to write down at least 2 things they wanted to learn from the workshop. This was collected at the end of the workshop. Another questionnaire (Appendix 1) was given out at the beginning of the second workshop that asked about the first workshop (see section below). Then, together with the staff development team that was emerging, another questionnaire (see Appendix 3) was devised which was utilized for all the topic-related workshops of the third week. This same questionnaire was then used at UMU and Makerere. The responses were transcribed into NVIVO and then codified. In all, some 26 different expectation nodes were identified (Appendix 4), but most of these had only 1 or 2 instances. Profile counting of instances at these nodes showed:

Node	UCU	UMU	Makerere
Teaching Methods	15	9	14
Inter-active learning	5	12	2
Personal Intellectual Development	3		
Deliver materials	3		
Information giver	4		
Lecturing	7		

Obviously this type of profile analysis does not conform to the strict criteria of quantitative research. Also it should be pointed out that the coding was done impressionistically by only one researcher (see Appendix 2 for typical wording extract for nodes relating to teacher-dominant views of learning). But what is revealed above seems to show that the greatest number of respondents (38) arrived at the workshops expecting to learn some new methods or techniques, “tips for teachers.” But further examination of the table reveals that there is an interesting difference between UCU and UMU: whereas at UCU at least 14 couched their expectation in terms of a teacher-dominant view of learning (in the nodes “deliver materials,” “information-giver” and “lecturing”) the UMU participants (12) expected to learn something more “interactive.” It is interesting to speculate the possible reasons for this. Both are private Universities of Christian foundations: UCU has developed from a former Protestant Theological College, and UMU is a Roman Catholic foundation. Do Protestant preaching traditions tend to shape a teacher-dominant view of pedagogy while the RC liturgy-centred worship a more interactive one? Or did the UMU sample contain more individuals (some of them in religious orders) who have more experience of workshop-style sessions of faith development? It should be noted that the method of questioning was entirely open-ended: the respondents put what they wanted in their own words. However, the title of the workshop may, of course, have influenced them. This was especially true of the later topic-related workshops where some respondents simply echoed the title in their expectation section of the questionnaire. It is also possible that some were influenced by the first workshop with its emphasis on active learning to re-phrase their expectations towards more active learning. Even so, it is noteworthy that at UMU they (a smaller group) picked up the inter-active emphasis rather more than at UCU.

Outcomes

The participants were not initially told the outcomes for the workshops. But midway through workshop one, their attention was drawn to a page in the workshop pack where the outcomes of the Introduction to Higher Education Practice (HEP) of the University of KwaZulu-Natal (UKZN) are printed out. The pack itself contained the first 4 session outlines of the version of HEP delivered in 2004 in South Africa. Session 1 has explicit sections on “Class Bonding” with some extended comment on how participants learn from each other, and also on “Modelling” which explains how the facilitators of the sessions would be modelling some of the techniques which are advocated (for example, if what is advocated is getting to know your students, then several ways of getting to know your students were being tried out in the class). To summarize the content of the initial two workshops (Active Learning and Facilitating Learning):

Getting to know your students – their names, their expectations, their motivation, their experience of the subject, etc.

What is Learning – in three cycles: narrative (each one tells another about a significant learning event); verbal (looking at own definitions of learning) , and “picture smart” (interpreting pictures as symbolic of learning). Learner-centred and active learning “teacher teaching less so that the learner may learn more” transl: Comenius, quoted in Angelo (1993).

Some theory

- Multiple Intelligence, (Gardner, 1993) explained by facilitator and demonstrated in picture smart exercise;
- other Education Psychology constructs done as own work with each volunteer giving explanation at the next UCU workshop;
- Student Development theory, a summary of Chickering (1969) included in the reading pack)

Recommended “Activities” to try out with your own students.

The topic-related workshops were delivered in the same inter-active way, with lots of opportunity for participants to share experiences.

Theory and Reading

Ugandan Universities have not spent a lot of money on books in recent years, as the exchange rate makes books produced in rich countries extremely expensive. This means that the lecturers, at worst, tend to rely on the set of notes that they themselves have formulated from their own time of qualifying. In the mid-1990s, Makerere pioneered a way of increasing its income by opening up double shifts. The government-sponsored students, or those who had achieved the requisite grades to be so admitted, would do the day shift, and then increasingly large numbers of fee-paying students would be admitted for the evening shift. Thus, in order to get a decent salary, most Makerere lecturers do this double shift. And some of the lecturers at the private Universities also teach in other HEIs or in Makerere. This means that their teaching load is such that there is little time for research or further reading. The roads in Kampala are congested and thus moving between institutions can be time-consuming. Although UCU has a core of staff (the religious, mostly, and some senior staff) who live on campus, other staff come out on the bus – some two hours from Kampala. UCU at Mukono is more favourably situated to retain staff with families, but currently some of the younger staff tend to be employed only part-time (which means they have another job as well). Not surprisingly then, reading is a problem for most of the workshop participants.

A little test of this at UCU was carried out between the first workshop and the second, which were a week apart. The workshop pack consisted of some 33 pages. During workshop 1, various pages to read had been pointed out, mostly readings not longer than a page, for example the list of HEP outcomes; an extract of Dickens (1854) on Gradgrind; Ramsden on deep and surface learning; a Learning Styles questionnaire AND the 6 pages of summary of Student Development theory from Chickering (1969). The questionnaire given out at the beginning of workshop 2 asked what they had done since the last workshop. Nearly all of them said they had talked about the workshop with colleagues (Africa learns by talking!), but less than half had done any reading at all, not even of the one pagers. Only 2 had read the Student Development theory pages (and one of those was the professor responsible for inviting me). Only about 4 or 5 of the 8 or so who had promised to present an Educational Psychology construct from the list, actually turned up having prepared it, even though it had been emphasised that they could utilise only one source, and via a search on Google if they so chose. Yet several of them, in the questionnaires on the topic-based workshops, expressed a wish to get

deeper into the theory. This between-workshop check on learning progress was only possible at UCU where there was week between the workshops. This lack of reading was remarked upon to the UCU core team, and repeated at the workshop at the other Universities, which may have influenced their questionnaire responses coded “theory.” The profile analysis shows that UMU was keen on more theory, and Makerere especially keen on Multiple Intelligences.

Profile Coding in NVIVO

Appendix 4 gives the profile coding for all the responses gathered. The first level of each node tree is the responses derived from the *Expectations* question (Appendix 3 question 3). The sub-nodes are from the outcomes questions (Appendix 3, questions 5-7)

Question 5 = “most interesting thing” has a -i suffix to the sub-node name

Question 6 = “action“ has a suffix to the sub-node name

Question 7 = “clarification” has –cl suffix to the sub-node name

For example:

2 assessment (the first level: expectation responses)

2.1 assessmentti (outcomes responses to the question about what interested you most)

2.2 assessmentcl (outcomes responses to the question about what needs clarification)

Scrutiny of Appendix 4 reveals that the nodes that gathered the most responses can be put in a table

Node number	Node name	UCU	UMU	Makerere	Total responses
2:2	assessmentcl	5	1	6	12
5:3	materialscl	8	2		10
7:1	affective	2	4	8	14
11:1	Interactive/staff	2	11		13
13:1	Learnerautonomy	1	4	20	25
16:1	Modelling	8	1	4	13
18:2	Personalintellect.	8	22	6	36
19:1	qualityi	7	7		14
19:2	qualitycl	5	6		11
22:1	Student feedback	4	1	6	11
24:1	tryouts	5	6	2	13
24.2	methods	1	12	3	16

Some of the gaps under the Makerere column occur because Makerere got much less workshop time: in fact, quality issues were not dealt with at all. Some responses from Makerere under assessment do occur because the workshop there, derived from the HEP materials, featured some explanation of the portfolio as an assessment method and this greatly interested some of the Makerere workshop participants. It is noteworthy that UCU responded enthusiastically to the opportunity to learn from other staff. Makerere, which has crushing numbers to deal with and lecture-dominated delivery modes because of double shifts, were most enthused with the suggestions that students could do more work “learner autonomy.” UCU had a higher score for wanting clarification on materials because the workshop on materials had the highest attendance (n=18) because it drew in participants from the technology sector and had a software demonstration. A higher number at UCU (compared to the other Universities) valued the way the workshops not only advocated certain techniques but also modelled them. UCU scores highly on the many responses where the intention to read up on theory was expressed. However a caveat here – as some individuals attended 6 of the topic-focussed workshops, these 22 responses could have come from just a few individuals systematically stating their intention to follow up on theory each time! It could be posited that what this is showing is something of the Roman Catholic Scholastic tradition to reach for the theory and first principles. 24:2 also shows that these participants were most eager to try out new methods too.

Utilizing NVIVO for qualitative analysis of questionnaire responses is not a rigorous statistical research method, but it does shed light on some features in data gathered on the run-for-action research purposes. The total list of responses coded as found in Appendix 4 shows the range of outcomes within the participants – thus 26 nodes of outcomes were perceived in the responses of the 108 lecturers who attended any one or more workshops at any one of the three Universities. It should be noted that this type of NVIVO coding could be regarded as highly subjective. The workshop facilitator, the NVIVO coder and the writer of this paper are all the same person. Did I only code what I was looking for? Have I only picked out for analysis the trends that interested me and which corresponded to the workshop goals? In response to such charges, it should be pointed out that NVIVO does help to objectify textual data because the original verbatim transcribed responses are held in the documents where the coding can be checked by the original coder or by other researchers. After the profile coding revealed which are the most popular nodes, re-checking did reveal some responses that required re-coding with consequent re-adjustment of the profile counts.

Mind the Gap (or what faculty developers can take note of)

Two of the bottom rows of appendix 4 (node 24 and 26) show where there was some correspondence between the expectations of the participants and what was delivered: 38 participants expected tips on methods, and 29 responded on methods either as the thing that interested them most or as something they would try out. The answers under meta-learning, facilitation modelling (n=13) could also be classified here as satisfying expectations for new methods or techniques. Many of those who came to topic specific workshops at UCU or UMU stated their expectations in the terms of the title or topic of the workshop. After the workshop almost the same number (not necessarily the same people) stated the outcome as to what most interested them in terms of that topic, or wanted some further clarification of it. Thus it can be claimed that where there is correspondence between expectations and outcomes, there is client satisfaction.

However, the most interesting thing revealed by the profile count is where there are differences between expectations (layer 1) and outcomes (sub-layers). Another scan of Appendix 4 reveals where the participants learned something they had NOT specified in their expectations or now specified a wish to learn:

- Assessmentcl
- Materialscl
- Affectivei
- Learning from other staff
- Learner autonomy
- Personal intellectual development (mainly reading up on theory)
- Qualitycl
- Student research/studentfeedb (i.e. finding out more about their students)

If a workshop facilitator or professional developer is to be a change agent, then these are the features of this research to focus on. As an experienced faculty developer, I could have anticipated garnering a good number of positive responses for affectiveness, for learning from other staff, and for finding out more about students. One of the single most important things lecturers gain once they participate in such teacher development sessions is to realize that they are teaching students (i.e. people) first and their subjects second, and teaching people involves the affective mode, not just the cognitive. If the workshop is designed to be inter-active, then consistently the participants get pleasure from learning from each other. Other items that feature in the list above can be explained from the situation of Ugandan Higher Education: the lecturers are keen to acquaint themselves with methods of assessment, of uses of I.T., and of quality assurance that have not yet reached Uganda. The Personal intellectual development shows a hunger for more time for reading on pedagogy, time which is not readily available to staff who have to do double shifts and/or struggle through Kampala's blocked or flooded roads to work.

It is particularly gratifying to note where participants learned more or different things from their expectations, as gauged in the NVIVO profile count of Appendix 4. These show the growing points in their professional development as higher education teachers. This investigation to compare expectations to stated outcomes confirms the need for faculty developers to provide training which is not directed at Sherman's stage 1 (methods for improving how to give out information) but rather which is leading participants towards Sherman's stage 4 (learning as complex interactions). This is why it is important to "mind the gap" between expectations and outcomes. We are trying to shift conceptions of teaching and learning so that most can operate at stage 4.

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**Appendix 1 Questionnaire for participants in Teaching and Learning Workshops
Uganda 2005 (use tick for positive answer)**

1. Did you talk about the workshop afterwards with
 - a. fellow participants
2. Did you read any of the material in the pack after the session
 - a. the Fable and Dickens reading
 - b. Outcomes based HP Overview
 - c. Deep and Surface Learning
 - d. Bloom's Taxonomy
 - e. Norms and Roles for Educators
 - f. the Student Development Theories readings
 - g. Other (specify)
3. Did you do the Learning Styles inventory for yourself?
4. Did you score it and find your own learning style?
5. Did you do some work on your allotted educational topic?
 - a. through looking up on www
 - b. looking for books on topic
6. What was the most interesting thing you did/learnt in the last session?
7. What questions do you still have?
8. If more sessions could be offered which topics would you like to attend?

Facilitating learning

- small group work
- project work

Mentoring

Experiential learning

Curriculum

Assessment
Evaluation and quality assurance
Materials Development
Student Development
Language in learning

Appendix 2 Examples of coded comments

Expectations

Teaching methods
tips to give any lecturer in my faculty who could not attend

information giver
new approach to Content delivery

Lecturing
how to get students to listen and understand better

To be helped to make a lecture more stimulating

Delivery
effective delivery/teaching skills

Interactive
How to actively engage my students during lessons

Learner autonomy
how to enable/help students become more responsible for their learning and become self aware individuals

Outcomes

Large classes
cl. -How to handle very large classes (active participation) where resources like books and lecturer rooms are inadequate

Assessment
Please I need more of the portfolio development issue I think I really need it.

Course management
a.- revise my course delivery and assessment and planning

Appendix 3

Evaluation Questionnaire: Prof Mbali's Workshops at Makerere See
<http://www.ukzn.ac.za> – Search – Centre for Higher Education Studies, UKZN

To answer **BEFORE** the workshop

1. Workshop on
2. What discipline do you teach or department do you work in?
3. What do you hope to learn in this workshop?
4. What fears do you have about this workshop?

To answer **AFTER** the workshop

5. What was the most interesting thing you learnt during this workshop?
6. What specific actions do you intend to take as a result of this workshop?
7. What points need further clarification for you?
8. What would you like further workshops on? (tick or add a topic)
 - Facilitating learning in small groups
 - Lecturing tips
 - Curriculum
 - Student Assessment
 - Evaluation
 - Higher Education Systems and Policy
 - Student Development theory
 - Experiential Learning
 - Materials Development
 - Student diversity (cultural, gender, age etc)
 - Language issues
 - Workplace issues
 - Academic publishing
 - Others

Appendix 4

Coderefs = number of excerpts coded for that node

node	Univ	coderefs
(1) /large classes	1	3
(1 1) /large classes/largeclasscl	2	7
(2) /assessment	1	1
(2 1) /assessment/assessi	3	6
(2 2) /assessment/assesscl	3	12
(3) /changing Univ	2	2
(3 1) /changing Univ/staffrelations	2	2
(3 2) /changing Univ/public relations	2	2
(3 3) /changing Univ/policy	2	2
(4) /course development	2	3
(4 1) /course development/courseman	1	6
(4 2) /course development/newways	1	1
(5) /deliver materials	3	5
(5 1) /deliver materials/materialsi	2	7
(5 2) /deliver materials/materialsa	2	8
(5 3) /deliver materials/materialscl	2	10
(5 4) /deliver materials/materialsf	1	1
(6) /discipline specific	1	3
(6 1) /discipline specific/docted	1	1
(7) /ethics	1	2
(7 1) /ethics/affective	3	14
(8) /for new lecturers	1	1
(9) /group-work	2	2

(9 1) /group-work/groupwi	1	2
(9 2) /group-work/groupwcl	1	4
(9 3) /group-work/groupwa	2	5
(10) /information giver	3	7
(11) /interactive learning	3	19
(11 1) /interactive learning/withothe	2	13
(11 2) /interactive learning/withothe	2	5
(11 3) /interactive learning/studenti	3	6
(12) /learn under stress	1	2
(12 1) /learn under stress/cc	3	6
(12 2) /learn under stress/empower	1	2
(13) /learner autonomy	2	2
(13 1) /learner autonomy/studa	3	25
(14) /learning outcome	2	3
(14 1) /learning outcome/OBEcl	2	9
(15) /lecturing	2	10
(16) /meta-learning	2	8
(16 1) /meta-learning/facilitationmod	3	13
(16 2) /meta-learning/metalearningcl	3	9
(16 3) /meta-learning/lifelong learni	1	1
(17) /national recognition	1	1
(18) /personal intellectual developme	3	6
(18 1) /personal intellectual develop	2	7
(18 2) /personal intellectual develop	3	36
(18 3) /personal intellectual develop	3	7
(18 4) /personal intellectual develop	1	1
(19) /quality	2	3

(19 1) /quality/evaluationi	2	14
(19 2) /quality/evaluationa	2	8
(19 3) /quality/evaluationcl	2	11
(20) /student diversity	1	2
(20 1) /student diversity/weakstucl	1	1
(20 2) /student diversity/studiva	2	8
(20 3) /student diversity/multicult	1	5
(20 4) /student diversity/learning sy	2	2
(21) /student management	3	7
(21 1) /student management/holistic	3	6
(22) /student research	1	1
(22 1) /student research/student feed	3	11
(23) /teacher dominance	2	2
(23 1) /teacher dominance/ownneedi	2	2
(24) /teaching methods	3	38
(24 1) /teaching methods/tryouts	3	13
(24 2) /teaching methods/new methods	3	16
*25 1/too little time	1	2
(26) /workshop topic	1	20
(26 1) /workshop topic/worksi	2	21
(26 2) /workshop topic/workshcl	3	20
(26 3) /workshop topic/workshopa	1	10

* coding discontinued on this node because almost everybody mentioned this

The SoTL Trading Zone: An Old Custom and a New Borderland

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We are familiar with the concept of a zone as a place with clear parameters and boundaries for a special purpose. One dictionary defines a zone as “an area, region, or division distinguished from adjacent parts by some distinctive feature or character” (Boyer, et al, 1991, p. 1407). Zones can be physical spaces, abstract entities, or metaphorical allusions. Those old enough may recall having been warned before entering the *Twilight Zone*; others are familiar with driving through school zones, using zone defense, obeying no parking and passing zones, and crossing through time zones. In psychology, Vygotsky (1978) expanded our understanding of potential development by introducing the “zone of proximal development.”

The place where “scholars of different disciplinary cultures come” to exchange the scholarship of teaching and learning (SoTL) is a zone or “borderland” -- a newly emerging “trading zone,” according to Huber and Morreale (2002, p. 21). This borderland exists between the disciplines, “where scholars are busy simplifying, translating, telling, and persuading ‘foreigners’ to hear their stories and try their wares (p. 19). Due to the expanding dialogue across disciplines, this trading zone is clearly broadening (Huber & Morreale, 2002, p. 2).

Trading the Wares of SoTL

Trading the work of SoTL within and across disciplines is a tall order and yet essential to the growth and valuing of this work. As we know, each discipline carefully crafts its approach and language surrounding inquiry, discovery, and knowledge. Rather than restrict SoTL exchange, Huber and Morreale argue, “cross disciplinary conversations” and “reading—and raiding—across the fields” will expand the parameters of this new trading zone (Huber & Morreale, 2002, p. 2). They insist, “Their very divisions, which some find disturbing, can be sources of strength for the scholarship of teaching and learning” (p. 21). Despite their variations, “scholars from different disciplinary cultures come to trade their wares—insights, ideas, and findings—even though the meanings and methods behind them may vary considerably among producer-groups” (Huber & Morreale, 2002, p. 2-3). How can the disciplines access the trading zone to tap this source of strength? How then may we enter this zone? Need we all present findings? In looking carefully at the emergence of this special place between the disciplines, several points of entry come into view.

Points of Entry into SoTL Trading Zones

Every borderland has its weakness, including its ability to recognize its own blind spots. Perhaps our weakness is in welcoming and making accessible multiple points of entry that could expand and nurture dynamic exchange. We can draw our attention to three points of entry into the trading zone for SoTL:

- SoTL Programs of Inquiry
- Formal Events and Artifacts
- Informal Dialogue

Point of Entry: SoTL Programs of Inquiry

Campus based SoTL programs, offer a process of systematic and collaborative SoTL inquiry with significant investment. A structured application process, with some kind of compensation or monetary support, escorts scholars to a point of entry that is well-marked and often long-lasting. This is the point of entry with perhaps the fewest ticket-holders and most likely to be perceived as elitist or likened to a SoTL private club. Program facilitators act as *guides* --experts already familiar with the SoTL trading zone, for those finding themselves in unfamiliar terrain. Through “problematization of student learning,” challenges in teaching and learning become reframed as questions for scholarly inquiry (Bass, 1999). These programs encourage and allow for significant disciplinary differences while mapping out a process for a sustained visit in the SoTL borderland.

A common design feature of these programs is bringing scholars of different disciplines together for an extended program of scholarly inquiry. As individual SoTL projects are shaped in the company of other scholars, research questions, methodologies, analyses, and findings are put on the collaborative table for scholarly, cross-disciplinary conversations. These too, are wares, being traded and admired. The inquiry is molded by the tools of each discipline’s perspective, leading each SoTL scholar to multiple and extended visits to the SoTL borderland, where their rigorous and well crafted wares take shape amid critical discourse and scholarly rigor. The zone accessed through SoTL Programs of Inquiry, becomes a studio space for work in progress as well as the exchange of polished products.

Point of Entry: Formal Events and Artifacts

A second route into the SoTL trading zone may be more easily recognized and widely accessed. Formal Events and Artifacts are intentionally constructed and made into public trading zones in which visitors can easily inspect the SoTL wares. Although the visits are brief and temporary, they are quite structured, focused, and aimed to provoke and disseminate, and even recruit. They include concrete events, colloquia, conferences, or presentations, symposia, brown bags, guest speakers, department meetings, and retreats where SoTL is “diffused” and SoTL artifacts are disseminated. Dissemination of these artifacts in campus monographs, disciplinary journals, interdisciplinary journals, general SoTL and higher education or teaching journals create literary zones for these artifacts, should one decide to entry by way of a written invitation to publish or to subscription to these wares.

Unfortunately and all too often, the Formal Events and Artifacts serve as gateways for the “choir” to mingle. Do we really expect the skeptic or critic to “browse?” While Programs of Inquiry may lead serious scholars to the SoTL zone, the RSVP’s to these points of entry may include the curious, enthusiastic and potential scholars, and only the most easily persuaded skeptic, reluctant or indifferent to “come to the open market.”

Perhaps our exchange will broaden if we expand the meaning of “wares” to include not just the *products or results* of scholarly inquiry, but the *beginning points of future inquiry*. We can include the beginning assumptions, questions, problems, and challenges about teaching that speak to all of us, across disciplines. Skeptic or scholar, browser or trader, we bring ourselves as teachers with expertise within our disciplinary experience (lengthy

or brief) as *our wares* to trade. Our questions might speak across disciplines, spur a SoTL scholar's study underway toward a better design, or spark another to consider reframing a SoTL project. Do I need to be a potter to offer a critique of a pot, a painter to offer an insight about color, or to appreciate the work done?

Since we all can't and aren't likely to engage in SoTL, where do we pick up the trail? Are we left with just picking up the journals of those who've passed us? As one scholar argues, "Limiting Scholarship of Teaching and Learning to refereed publication will assure that Scholarship of Teaching and Learning will have little or no impact" (Atkinson, June, 2001,). Atkinson further warns, if this limitation of SoTL is accepted, "The academy will not be transformed. The status quo will prevail" (Atkinson, June, 2001, 121-7). We need to carefully consider how to construct inviting points of entry to ensure that the trading zone is not perceived as a members-only-club with a private entrance known only to scholars of teaching and learning.

Point of Entry: Informal Dialogues

Informal Points of Entry are largely invisible, seldom glaringly public, and yet perhaps the most potent and well traveled. Invisible footprints (or cookies) map the casual verbal, written, or online exchange. The Informal Points of Entry ensure that the emerging SoTL borderland does not invite, engage or lure only the scholars in Programs of Inquiry or those who enter by way of Formal Points of Entry. Potentially, all of our colleagues could circulate and browse among those with wares to trade, meeting the traders, sampling their wares, and coming in contact with their creative work as they go about their work as faculty, if the points of entry were easily recognized, inviting and accessible and wares were not only findings, results, and scholarly papers.

For example, I am reminded of a casual stroll through an art show. I know where to go to look, be stimulated, exposed to, provoked, refueled, inspired, and to get ideas. In a sense, I am a consumer or 'grazer.' I imagine trying the painter's techniques or methods, tackling a similar challenge my way. Sometimes, the "wares" instead become the backdrop to the social encounters and reconnections that take place with other visitors, or even the artist. Not limited by the immediate time and place, the impact and exchange continues over time, beyond the physical moment to a borderland without concrete borders, long after the show has packed up and moved on. The ideas travel, living on in my reflections and conversations.

As travelers in the borderland of SoTL we can be eavesdroppers, innocent bystanders, avid critics, skeptics, advocates or idea-swappers. In the blink of an eye, a brief, informal exchange can whisk the non-SoTL scholar to the portal of SoTL as if having been beamed up. These informal exchanges may simply be "corridor talk" (Downey, Dumit & Traweek, 1997), and spontaneous rather than planned, unstructured rather than defined. We underestimate the value of these momentary flights into the "zone." Conversations around curriculum planning, strategic planning, preparation for accreditation, departmental program assessment, and email or lunch discussions can provide momentary entrance into the SoTL trading zone. I imagine a virtual SoTL trading zone with *multiple* points of entry for all members of the higher education community, accessible within the permeable borders of our daily encounters, email, and phone calls.

Conclusion

The expanded notion of flexible and multiple points of entry into campus based SoTL

trading zones encourages us to think more openly, broadly, and invitingly about this work. The trading zone becomes a dynamic, permeable zone rather than a static place where one is either “in” or “out.”

The scholarship of teaching and learning noticeably appeared on the margins of teaching and scholarship, and has made important inroads over the past two decades. If the scholarship of teaching and learning is here to stay, it may very well hinge on the effectiveness of the trading zones being more accessible, welcoming, flexible, and worthwhile, but most of all, intentional. It will behoove us to cross one another's borders in the pursuit of learning more about learning through multiple points of entry to exchange the artifacts of SoTL inquiry. Whether visitor or scholar then, the pass-key shared by all who enter these zones is our commitment to student learning:

Their goals are to do better by their students, and they are willing (within limits) to enter the trading zone and buy, beg, borrow, or steal the tools they need to do the job. (Huber & Morreale, 2002, p. 19)

Browse the wares of SoTL with this important goal in mind. Pass with care and curiosity.

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A Teachable Moment: It Made All the Difference!

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The door to the University of Saskatchewan gymnasium opened. There stood three large, muscular young men along with their strength and conditioning coach. The coach asked permission for the group to cross the floor and enter a workout room on the far side of the gym. All eyes turned to look at these impressive athletes ambling across the gym floor. My students were obviously thinking, "Who are these guys?" As they laid eyes on the 'jocks', several young women predictably lost focus on the game they were playing. Minor confusion ensued! Two students bumped into each other while a third was struck in the head by an errant ball!

What happened next was the moment that every teacher only dreams about! As the men crossed the gym and became aware of the activity that was going on, I overheard one of them say, "I can't believe they're paying good money for this!"

"What a total waste of time!" replied another.

"Is this what they call an education?" added the third.

Immediately I knew that I had witnessed a teachable moment. I just didn't know how perfect it was really going to be! I quickly joined the interlopers in the workout room and queried the coach about the identity of these "insightful" young men. I was informed that the NHL lockout had brought these prominent, highly skilled, millionaire hockey players back to the University of Saskatchewan High Performance Centre at this opportune time. I introduced myself and asked permission to repeat their comments to the class. They laughed and said they were more than happy to oblige. I knew that their words would have much more impact than mine, a mere 3M Fellow!

These NHL players had accidentally happened upon the second meeting of my 'Practical Applications' class for pre-service teachers. I had taken my students into the gym to participate in three activities that are on my infamous "wall of shame" – Duck, Duck, Goose; Dodgeball; and competitive relay races. These activities were used as an instructional technique to focus students' attention on the fact that they either contribute little to skill development, eliminate students, result in only a few winners, or are inherently dangerous. At this moment my students had been caught in the middle of a rowdy game of Dodgeball!

I must admit that in the past I have had limited success in convincing my students that the aforementioned games are inappropriate developmental activities for children in a school setting. This day my intention was to have the students experience these games first-hand and then return to the classroom for a discussion on their lack of educational merit. With the knowledge that students can internalize and make meaningful connections when the discussion is based on relevant experiences, I was hopeful that my lesson would be more successful this time.

When we did return to the classroom, there was the usual enthusiasm, of some, for what they had just experienced in the gym. One student quickly offered his opinion, "I'm really good at Dodgeball" and "I've always liked it!" Some shook their heads in disagreement.

The teachable moment had arrived! Here was the opportunity to share the spontaneous and insightful viewpoints of those larger-than-life hockey players. The students' reactions soon progressed from "Who are those guys?" to "I guess what they said makes sense". Now they were able to view the game from a new perspective. The athletes' casual comments gave credibility to my planned learning experience. **It made all the difference.**

The excitement in teaching lies in the uncertainty of events. A planned learning experience became more meaningful purely by accident. The classroom discussion that followed carried the day; and most students were able to come to the conclusion that the activities on my "wall of shame" were indeed inappropriate for an educational setting. I have no doubt that the entire experience will leave a lasting impression with my students. I know that it will with me! J.M. Haile (2005) captured the essence of the experience.

And yet Master teachers create them.

How can this be?

A teachable moment is an emergent property
of the relationship
between students and their teachers.

Master teachers nurture a climate
in which teachable moments
continually arise,
are recognized, and exploited.

This requires the teacher
to be sensitive to student attitude,
flexible in the face of shifts in those attitudes,
vulnerable to negative feedback
and eager to accompany students

in their exploration of new ideas
and new ways of thought." *

* Haile, J.M. (2005). *The Way of the Teacher*. Macatea Productions, Central, SC.

My Life as a Sponge: A Parable

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“Ahhh..... life is good,” I thought to myself, as I lay happily floating in the water. My existence consisted of soaking up the life-giving wisdom of the water. Day in and day out, I expanded with the fullness of water in our pool of learning. Other sponges admired my perfectly round, shapely physique and the brilliance of my color. I knew that my brilliance was the result of absorbing the water every day. In fact, each day I could hardly wait for the chance to once again float in the water, creating shapes, and learning about life with my friends and our teacher. They too were energized by the water and enjoyed the fullness and brilliance that it offered to their round sponge bodies.

Our teacher often reminded us that learning was simply a natural part of life – that we were constantly absorbing knowledge from the water. She explained, “Our life cycle is guided by how we absorb the water, and that when we no longer absorb the wisdom of water, our cycle will come to an end.”

This just didn’t seem possible to me – after all, “there is plenty of water, and of course we want to absorb it,” I said.

So our teacher took out some interesting gadgets and toys and showed us how to measure the depth of our pool of water and then make charts and graphs to compare the measurements with the pool across the way. Our teacher explained why it was important to understand how these measurements could effect our life as sponges. “If there is not enough water to form our pool, we will have no source, no learning, and no life,” she said. “So it is important to become conservationists.”

That was a lot to absorb, so she let us play games and make up stories for the rest of the week. We even made up stories about what to do if there was not enough water in our pool. One day we even pretended to be experts who solved sponge problems. She said some of our stories were so good that we should write them down.

“We have the coolest teacher!” I thought.

One day as we floated along, our teacher demonstrated how the different parts of the water combine to support our brilliance and fullness. She explained that the water was brimming with the knowledge of the rocks and minerals along its path, and that some of the rocks were millions of years old. We couldn’t imagine that many years, so our teacher showed us examples of different types of rocks and how they formed the container for our water. She explained how the process had taken so long, and that it was actually still happening.

Our teacher reminded us again, “It is very important to respect the water as our source of nourishment and wisdom. Sponges need the water.”

One day we talked about where the water came from and where it is going, because we noticed that our pool is always swirling with new water. Our teacher showed us pictures of sponges in other pools that were a long distance from ours. We noticed that they

absorbed water just like us, but were different shapes and colors. Our teacher showed us how to send messages to these strangers using pieces of wood floating on the currents of the water. We had lots of fun telling them our stories and were curious to hear about life in their pool. We wondered how long it would take for our messages to arrive, so our teacher explained how the wind and cycles of the moon moved the water along.

When we noticed that the wood could float just like us, our teacher told us about the different kinds of wood and how it also shared wisdom with the water.

Then we wondered, "What else shares wisdom with the water?"

Our teacher then explained how everything was connected, the rocks and minerals, the trees and plants, the wind, the sun and moon, the water, and us – the sponges. "When you absorb the water," she said, "you absorb something of all that gave wisdom to the water."

What an idea!" I thought. I continued to think about that idea for a long time.

Of course, some days we just played in the water of our pool, allowing our round bodies to create fun shapes and designs. We noticed that we could navigate the pool better when we were full of water in each cell of our sponge bodies. Our teacher suggested, "Perhaps you should try to always absorb the water fully, to your best ability."

The other day I noticed how beautifully the water reflected my brilliant round body – I could see myself talking and laughing. Our teacher explained how the sun made the reflection possible on the water and how light makes pretty colors. She even showed us how to change what we saw by putting on special glasses and explained that some sponges see the colors differently.

"Wow, so we don't all see the colors the same way?" I asked.

For some reason our teacher did not answer but instead asked, "What is your favorite color? When you have chosen one, I want you to think about why you chose this color and talk with your friends about their favorite colors. Also, do you think your color is better?"

We all laughed, "What a silly question! Of course the colors are all good, they're just different!" Sometimes I think my teacher is teasing. So we talked all afternoon about why we each seemed to see the colors differently. Then we played games to create colors in the water and even made pictures to show why we liked our colors best.

One day my teacher noticed me floating alone and asked, "What are you thinking about today, my little sponge?"

"I was wondering if perhaps some of me is actually in the water that the others absorb, you know, like the rocks and colors. Are sponges all sharing our wisdom with each other through the water too?" I asked.

My teacher simply smiled.

I smiled too and thought to myself, "Ahhh...., life as a sponge sure is good!"

The End – or maybe the Beginning!

Reflective Thoughts If education were to allow each child to absorb and integrate knowledge through natural curiosities, holistically, perhaps each child could become like the sponge: whole and healthy, joyful in learning, and brilliant.

If the educator were to teach from a holistic perspective, perhaps she or he could see new designs that might work better.

If we all remember that we are connected, perhaps holistic learning is actually the only way to truly absorb wisdom.