

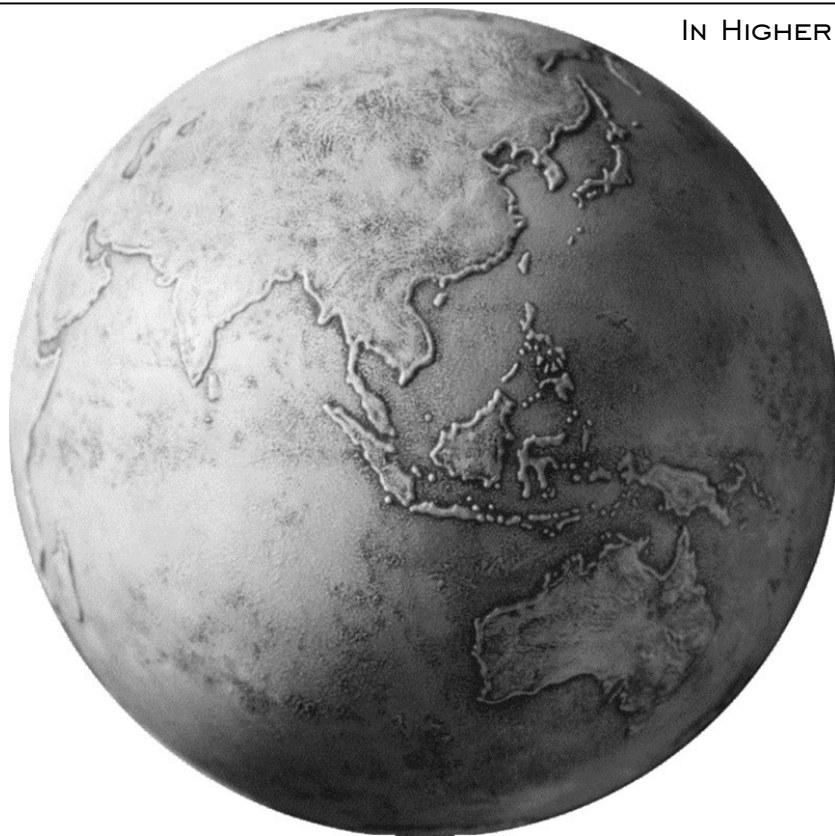
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Purpose

The International Journal of Teaching and Learning in Higher Education (ISSN 1812-9129) provides a forum for the dissemination of knowledge focused on the improvement of higher education across all content areas and delivery domains. The audience of the IJTLHE includes higher education faculty, staff, administrators, researchers, and students who are interested in improving post-secondary instruction. The IJTLHE is distributed electronically to maximize its availability to diverse academic populations, both nationally and internationally.

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The focus of the International Journal of Teaching and Learning in Higher Education is broad and includes all aspects of higher education pedagogy, but it focuses specifically on improving higher education pedagogy across all content areas, educational institutions, and levels of instructional expertise. Manuscripts submitted should be based on a sound theoretical foundation and appeal to a wide higher education audience. Manuscripts of a theoretical, practical, or empirical nature are welcome and manuscripts that address innovative pedagogy are especially encouraged.

All submissions to IJTLHE must be made online through the Online Submission Form. In addition, all manuscripts should be submitted in English and in Microsoft Word format. The following Submission Guidelines pertain to all manuscript types, that is, Research Articles, Instructional Articles, and Review Articles. Ultimately, authors should follow the guidelines set forth in the most recent edition of the Publication Manual of the American Psychological Association (APA).

Review Process

Following a brief editorial review, each manuscript will be blind reviewed by two members of the Review Board. The review process will take approximately 4 weeks. At the end of the four-week review process authors will be notified as to the status of their manuscripts - accept, revise and resubmit, or reject - and will receive substantive feedback from the reviewers. Manuscript authors are responsible for obtaining copyright permissions for any copyrighted materials included within manuscripts. The authors must provide permission letters, when appropriate, to the IJTLHE Editors. Before publication, authors of accepted manuscripts must assign copyright of the manuscript to the IJTLHE.

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Analyzing Differences Between Second and Third-Year Cohorts in the Same Science Education Course

Peter Hudson

Queensland University of Technology

Tertiary institutions need to gather evidence in order to determine the appropriateness of course design for particular year levels. Using a 35-item survey, responses from 127 second-year preservice teachers were compared with 164 third-year preservice teachers from the same university within the same year entering the same science education course. The survey, which was linked to the course outcomes and multiple indicators, measured the preservice teachers' perceptions of their prior knowledge before involvement in a primary science education course. Examining the differences between the two cohorts (i.e., $n=127$ and $n=164$), results indicated statistically significant t -test scores for each of the four constructs (i.e., Theory [$t=6.07$], Children's Development [$t=7.85$], Planning [$t=10.31$], Implementation [$t=11.10$]; $p<.001$) in favor of the third-year cohort. It is argued that each and every cohort of preservice teachers will have different levels of prior knowledge for learning how to teach primary science, hence, a needs analysis can provide evidence for targeting specific and collective needs of course participants. Further research is required for articulating a theoretical rationale for targeting particular cohorts in primary science education.

Prior Knowledge and Reform Agendas

The American Association for the Advancement of Science (AAAS) claims that a scientifically literate public can enhance a country's technological market place position (Bischoff, Hatch, & Watford, 1999). Indeed, scientific literacy has implications for economic gain and for empowering citizens (Jenkins, 1990). Attaining scientific literacy needs to be central to science education (Bybee, 1997). Hence, researchers must continually explore avenues for successful implementation of primary science education reform.

Regardless of reform efforts and professional development programs in science education, too many Australian teachers do not teach the mandatory science syllabus (Goodrum, Hackling, & Rennie, 2001), and so the focus for science education reform needs to be at the formative stages of learning to teach (McIntyre & Byrd, 1996; Roth, McGinn, & Bowen, 1998). Indeed, preservice teachers entering the profession may not receive opportunities for further developing practices once employed as teachers in schools (Hiatt-Michael, 2001). Tertiary science education courses ultimately aim at advancing science education in schools, particularly as these courses draw upon current literature towards achieving science education reform.

Constructivism, which is prominent in current literature for science education reform, is predicated on the belief that knowledge is constructed by learners as a result of their interactions with the natural world in a sociocultural context and mediated by their prior knowledge (Henriques, 1997). Constructivism highlights "the importance of prior knowledge or conceptualizations for new learning" (Matthews, 1994, p. 144), which may also be employed by educators for conceptualizing primary (elementary) science teaching practices for preservice teachers. Identifying students' prior knowledge and misconceptions can assist science teachers to challenge such misconceptions (Shuell,

1987). Effective primary teachers utilize primary students' prior knowledge as focal points for facilitating discussion and challenging conceptual understandings (Barnes & Foley, 1999) and effective staff development is guided by teachers' prior knowledge "as part of the staff development process" (Loucks-Horsley et al., 1990). Science educators must also determine preservice teachers' prior knowledge to more effectively design science education courses. Some universities are planning to model inquiry-based instructional approaches to promote conceptual change in preservice teachers' science knowledge (Henriques, 2001), which needs to include understanding preservice teachers' prior knowledge.

Preservice Teachers' Prior Knowledge for Developing Science Teaching

Assessment of prior knowledge requires defining specific conceptual parameters in order to target learning. For example, educators assessing the prior knowledge of preservice teachers involved in a science education course need to employ assessments in relation to the course objectives. Hence, this study aims to investigate preservice teachers' prior knowledge in relation to the following key objectives (constructs) for a science pedagogy course at one university, that is:

1. The theoretical underpinnings used for developing a science curriculum.
2. The development of children's science concepts, scientific reasoning abilities, manipulative skills, and attitudes.
3. Effective planning for science teaching and learning.
4. The implementation of effective science teaching practices, including successful management of the learning environment.

More specifically, and in association with these key objectives and the literature suggesting particular science education reform practices (e.g., Fler & Hardy, 2001), preservice teachers need to understand current science teaching theories, teaching approaches and models that underpin a science curriculum (e.g., Board of Studies, 1999; Queensland School Curriculum Council, 1999). Constructivism is a current theory advocated for primary science teaching as it promotes hands-on learning with consideration of prior knowledge and students' misconceptions (Skamp, 2004). Implementing reform measures also requires knowledge of approaches and models for teaching primary science (Fler & Hardy, 2001). For example, Gunstone and White's (1981) reworked predict-observe-explain (POE) model provides a simple three-step process for facilitating a science lesson and Bybee's Five Es model (1997) sequences purposeful phases for learning science (i.e., engage, explore, explain, elaborate and evaluate). Such knowledge allows preservice teachers to develop and articulate viewpoints about theories, approaches, and models for teaching science.

Developing teaching practices includes understanding children's science concepts, scientific reasoning abilities, manipulative skills, and attitudes. The National Science Foundation (1998), AAAS (1993), and educators (e.g., Dana, Campbell, & Lunetta, 1997; Henriques, 2001) propose that science teachers facilitate inquiry-based learning environments with effective teaching and assessment strategies to support student development in science education. Indeed, providing inclusive, equal opportunity education requires preservice teachers to understand primary students' development of science concepts, manipulative skills, attitudes, and scientific reasoning (Abruscato, 2004; Fler & Hardy, 2001; Skamp, 2004).

Preservice primary teacher education must include understanding how to plan for effective science education (Gonzales & Sosa, 1993; Jarvis, McKeon, Coates, & Vause, 2001) with key components of a science education program clearly outlined. For example, a rationale, based on theory and classroom context, establishes a program's parameters and provides justification for teaching proposed science education content. Scope and sequences, unit overviews, and integrated science overviews (using matrixes or concept maps) ensure that planning is proactive and projective with consideration of student needs and system requirements (e.g., school policies, syllabus aims and content). Key to effective planning is the employment of outcomes-based education, which enables stronger links between student achievement with more verifiable assessments (e.g., AAAS, 1993; Board of Studies, 1999; Queensland School Curriculum Council, 1999).

Implementing effective science teaching practices relies on effective planning and includes successful management of the learning environment (Fler & Hardy, 2001). Implementing a science education program requires consideration of teaching strategies, hands-on lessons (Appleton & Doig, 1999; Corcoran & Andrew, 1988),

classroom management (Feiman-Nemser & Parker, 1992), questioning skills (Fler & Hardy, 2001), and assessment and evaluation procedures (Corcoran & Andrew, 1988; Jarvis et al., 2001; Hudson, 2005). Science content knowledge is also essential in the planning process (Appleton & Kindt, 1999; Lenton & Turner, 1999), and is an area requiring development in preservice teachers (Hudson, Skamp, & Brooks, 2005). Most importantly, preservice teachers need to critically reflect on becoming effective teachers of primary science in order to develop their pedagogical practices (e.g., Jarvis et al., 2001; Schön, 1987).

Examining preservice teachers' perceptions of their prior knowledge of primary science teaching may lead educators to devise more appropriate science education coursework. Specific assessments are needed to identify strengths and weaknesses in relation to the microteaching components of a course and the perceptions preservice teachers have of their prior knowledge for teaching primary science. These perceptions may also be different for different year levels of preservice teachers. Such identification for particular year levels in a preservice teacher education degree may assist in developing effective educational practices. Hence, this study aimed to examine and compare second and third-year preservice teachers' perceptions of their prior knowledge for the development of their primary science teaching.

Research Design and Method

A survey instrument (Appendix A) was used to gather data on 127 second-year preservice teachers and 164 third-year preservice teachers' perceptions of their prior knowledge for the development of their science teaching at the beginning of the same science pedagogy course during the same calendar year. Each cohort had completed the same number of science methodology units. In addition, all these preservice teachers were involved in the same Bachelor of Education degree at one Australian university. The 35 survey items contained a five-part Likert scale (Appendix 1), namely, "strongly disagree", "disagree", "uncertain", "agree", and "strongly agree". Scoring was accomplished by assigning a score of one to items receiving a "strongly disagree" response, a score of two for "disagree" and so on through the five response categories.

The statements on the survey sought these preservice teachers' perceptions of their prior knowledge towards becoming primary science teachers. The items on the survey represented relevant indicators of four course outcomes (constructs). That is, the course outcome "understands theoretical underpinnings used for developing a science curriculum," identified in subsequent discussion as the construct *Theory*, was linked to the following indicators on the survey: articulate the key components of the science syllabus; provide a rationale based on theory for designing and implementing an effective science program; describe and analyze the theoretical base of science curriculum development; articulate constructivist

principles for teaching science; compare existing approaches for teaching science; articulate different viewpoints on teaching science; and, talk comfortably about teaching science. The remaining constructs were identified as follows: *Children's Development* (Understanding of the development of children's concepts, abilities, skills, and attitudes); *Planning* (Understanding effective planning for science teaching and learning); and *Implementation* (Implementing effective science teaching practices). To further substantiate the instrument's validity, four primary science teacher educators examined the items on the proposed survey. Survey responses with missing or improbable values were deleted (Hittleman & Simon, 2002).

Descriptive statistics were derived using SPSS12 and included frequencies of each survey item under each associated construct, mean scores (*M*), and standard deviations (*SD*, see Hittleman & Simon, 2002). The *M* and *SD* were used to calculate independent *t*-tests that compared the two cohorts ($n=127$ & $n=164$) on each of the four hypothesized constructs (i.e., Theory, Children's Development, Planning, Implementation). Fine-grained analysis using *M*, *SD*, and percentages of individual survey items associated with each construct aimed to provide further insight into these constructs. Calculating *z*-scores, which is the number of *SD*s from the *M*, presented statistical relationships between the second and third-year preservice teachers' perceptions of their prior knowledge

on each of these items. A negative *z*-score is below the mean while a positive *z*-score is above the mean (Kline, 1998).

Results and Discussion

The following demographics (Table 1) provides key descriptors of the second-year preservice teacher sample ($n=127$; 90 female, 37 male) and the third-year preservice teacher sample ($n=164$; 125 female, 39 male) taken from the preservice teachers' responses on the first section of this survey (Appendix 1). These preservice teachers' ages and high school involvement in science education were not overly dissimilar for both the second and third-year cohorts (Table 1), even though it was expected that more second-year preservice teachers would be under the age of 22. The main differences between these second-year (SY) and third-year (TY) preservice teachers included the involvement of more than one practicum (SY=2%; TY=87%) and, possibly as a result of more practicum experiences, an increase in teaching more than one primary science lesson (SY=5%, TY=69%). Nevertheless, this only represented an increase of 7% for third-year preservice teachers who believed that science teaching was a strength compared with the second-year cohort (SY=24%, TY=31%; Table 1). Further qualitative data and analysis would be required to understand preservice teachers' definition of "strength" in science teaching.

TABLE 1
Demographics of Second and Third-Year Preservice Teacher

Descriptor	SY ¹ ($n=127$)	TY ² ($n=164$)
< 22 years of age	60	47
22-29 years of age	26	34
>30 years of age	14	19
Completed a science subject at high school	70	68
Had not completed a practicum	48	1
Completed one practicum	50	12
Completed more than one practicum	2	87
Had not taught a science lesson	90	21
Taught one science lesson	5	10
Taught more than one science lesson	5	69
Considered science as a strength	24 ³	31 ³

Note. All values are percentages.

¹ SY=Second-year preservice teachers

² TY=Third-year preservice teachers

³ Percentage of preservice teachers who "agreed" or "strongly agreed" that science teaching was a strength.

TABLE 2
Descriptive Statistic and t-tests for the Four Constructs for Second and Third-Year Preservice Teachers' Responses

Construct	SY (n=127)		TY (n=164)		Mean score differences	t-test (df=126)
	M	SD	M	SD		
Theory	2.76	0.73	3.44	0.97	0.68	6.07**
Children's Development	2.86	0.79	3.67	0.91	0.81	7.85**
Planning	2.91	0.74	3.78	0.51	0.87	10.31**
Implementation	2.96	0.70	3.76	0.42	0.80	11.10**

** $p < .001$

Descriptive Statistics and t-tests for the Four Constructs

Analyzing *t*-tests between the two cohorts ($n=127$ and $n=164$) indicated educational and statistical significance for each of the four constructs (i.e., Theory [$t=6.07$], Children's Development [$t=7.85$], Planning [$t=10.31$], Implementation [$t=11.10$]; $p < .001$, Table 2). Mean scale scores were higher for the TY cohort; however both groups agreed or strongly agreed they had more prior knowledge of *Planning* and *Implementation* than *Theory* and *Children's Development* for primary science teaching.

For a fine-grained analysis of each item associated with these constructs, descriptive statistics and *z*-scores of each of the four constructs will be presented and discussed in the following.

Understanding the Theory for Developing a Science Curriculum (Construct – Theory)

The *z*-scores for the first construct, prior knowledge for understanding the theoretical underpinnings used for developing a science curriculum (Theory), ranged

between -4.78 to -6.52 . These *z*-scores were statistically significant ($p < .001$) and indicated the third-year cohort perceived themselves to have significantly more prior knowledge for developing a primary science curriculum on each of these items than the second-year cohort (Table 3). The percentages of second and third-year preservice teachers, who responded agree or strongly agree for each relevant indicator, are shown in Table 3.

Other than “teaching approaches” (Item 18), all indicators for SY were 25% or less, whereas TY ranged between 34-67% for items associated with *Theory* (Table 3). As TY had approximately the same number of science methodology courses as SY, the results further revealed that other factors may be involved with the acquisition of preservice teachers' prior knowledge. It is possible that coursework other than science education (i.e., other Bachelor of Education units) and an increase in practicum experience may have contributed to third-year preservice teachers' increased perception of their prior knowledge for understanding the theory for developing a science curriculum.

TABLE 3
Descriptive Statistics and *z*-scores of Preservice Teachers' Perceptions of their Prior Knowledge for the Construct “Theory”

Item	Indicator	SY (n=127)			TY (n=164)			z-scores
		M	SD	%	M	SD	%	
1	Syllabus	2.63	1.02	20	3.41	0.94	60	-5.41**
3	Rationale	2.71	0.95	21	3.35	0.82	49	-5.07**
9	Theory	2.54	0.84	11	3.12	0.78	34	-4.78**
15	Constructivist	2.81	0.85	18	3.56	0.71	54	-6.52**
18	Teaching approaches	2.98	0.89	31	3.60	0.70	65	-4.95**
23	Viewpoints	2.78	0.91	19	3.40	0.70	49	-5.01**
32	Talking about science	2.85	0.90	25	3.63	0.73	67	-5.49**

Note. For all means, 1 = strongly disagree to 5 = strongly agree.

** $p < .001$

TABLE 4
Descriptive Statistics and z-scores of Preservice Teachers' Perceptions of their Prior Knowledge for the Construct "Children's Development"

Item	Indicator	SY (n=127)			TY (n=164)			z-scores
		M	SD	%	M	SD	%	
2	Scientific reasoning	2.80	0.98	28	3.37	0.84	53	-4.83**
6	Attitudes	3.07	0.93	35	3.88	3.22	66	-5.06**
28	Manipulative skills	2.74	0.87	17	3.39	0.71	48	-5.76**
30	Science concepts	2.81	0.97	23	3.57	0.73	64	-5.93**

Note. For all means, 1 = strongly disagree to 5 = strongly agree.

** $p < .001$

Understanding of the Development of Children's Concepts, Abilities, Skills, and Attitudes (Construct – Children's Development)

The next construct examined the preservice teachers' perceptions of their prior knowledge for understanding the development of children's science concepts, scientific reasoning abilities, manipulative skills, and attitudes (Children's Development). Second and third-year preservice teachers' responses indicated significant differences in the mean scores, which were reflected in the z-scores (range: -4.83 to -5.93, $p < .001$) with a smaller variation in the SD for the third-year preservice teachers (Table 4). Despite a significant effect size for this construct (Table 2) and significant z-scores for each of the associated indicators (Table 4), descriptive statistics revealed that more than 30% from both groups of preservice teachers "strongly disagreed", "disagreed" or were "uncertain" they understood the development of children's science concepts, scientific reasoning abilities, manipulative skills, and attitudes at the beginning of this course. Nevertheless, the percentage difference between SY and TY indicated significant increases in the perceptions of their prior knowledge for the third-year cohort (i.e., a difference of: 25%, 31%, 31%, 41% across each of the items 2, 6, 28, and 30 respectively; Table 4).

Understanding Effective Planning for Science Teaching and Learning (Construct – Planning)

The next construct examined preservice teachers' prior knowledge of their understandings for effective planning for science teaching and learning. Responses indicated significant increases in the mean scores with smaller variation in the SD for the third-year cohort and significant z-scores (range: -5.19 to -7.72, $p < .001$) for each indicator (Table 5). It was expected that percentages on each of the items would be reasonably low for both cohorts, hence, it was surprising that 85% or more third-year preservice teachers agreed or strongly agreed that they could devise clear lesson plans for

teaching science (Item 5), use an outcomes-based approach for planning, implementing and assessing primary science teaching (Item 10), integrate primary science education with other key learning areas (Item 14), and select appropriate activities and resources for teaching primary science (Item 19) compared with 35% or lower for the second-year cohort on these same items (i.e., 33%, 30%, 35%, 19%, respectively). Analysis of percentages also showed further differences in each cohort's perceptions of their prior knowledge of providing primary science lessons that cater for all students regardless of ability, that is, inclusivity (Item 26: SY=18%, TY=73%) and developing concept maps for planning a primary science unit of work (Item 35: SY=23%, TY=72%). However, less than 50% for each cohort did not agree or strongly agree that they could articulate the affective domains for teaching and learning primary science (Item 12) before commencing the science education course. Further investigation would be required to determine other factors that may have influenced the third-year preservice teachers' perceptions of their prior knowledge on items associated with significant percentage differences. Indeed, qualitative data in the form of random interviews may provide further elaboration and insight on these higher percentage items.

Implementing Effective Science Teaching Practices (Construct – Implementation)

Finally, the last construct involved an examination of preservice teachers' prior knowledge for their understandings of implementing effective science teaching practices, including successful management of the learning environment. Responses indicated significant increases in the mean scores with smaller variation in the SD for the third-year cohort and significant z-scores (range: -4.32 to -5.68, $p < .001$) for each relevant indicator (Table 6). In particular, these third-year preservice teachers perceived they had more prior knowledge for all the indicators with some items

registering a difference of 50% or more (i.e., Item 13=56% difference, Item 22=52%, Item 25=50%, Item 29=52%; Table 6). Perceived increase in prior knowledge of classroom management, assessments, questioning skills, and hands-on activities may be due to increased practicum experience and completion of other Bachelor of Education units that may deal with these issues.

The third-year preservice teachers also perceived more prior knowledge for science content knowledge (Item 31: SY=19%, TY=56%; Table 5) even though 24% of second years and 31% of third years agreed or strongly agreed science was one of their strongest subjects (Table 1). Most importantly, 59% of these third-year preservice teachers believed they could teach primary science confidently (Item 33) compared with only 12% of the second-year

TABLE 5
Descriptive Statistics and z-scores of Preservice Teachers' Perceptions of their
Prior Knowledge for the Construct "Planning"

Item	Indicator	SY (n=127)			TY (n=164)			z-scores
		<i>M</i>	<i>SD</i>	%	<i>M</i>	<i>SD</i>	%	
5	Lesson plans	2.98	0.96	33	3.97	0.52	88	-7.72**
7	Scope and sequence	2.81	0.91	24	3.41	0.72	49	-5.27**
8	Program	2.73	0.96	22	3.37	0.73	48	-5.19**
10	Outcomes	2.90	1.00	30	3.94	0.59	85	-7.28**
12	Affective domain	2.71	0.93	18	3.35	0.72	46	-5.30**
14	Integrate	3.11	0.95	35	4.33	0.49	88	-7.81**
17	Independent/collaborative	3.19	0.82	37	3.72	0.81	72	-6.84**
19	Appropriate activities	2.98	0.89	31	3.84	0.54	85	-6.09**
26	Inclusivity	2.82	0.83	18	3.77	0.61	73	-7.70**
35	Concept map	2.83	0.89	23	3.70	0.83	72	-7.40**

Note. For all means, 1 = strongly disagree to 5 = strongly agree.

** $p < .001$

TABLE 6
Descriptive Statistics and z-scores of Preservice Teachers' Perceptions of their
Prior Knowledge for the Construct "Implementation"

Item	Indicator	SY (n=127)			TY (n=164)			z-scores
		<i>M</i>	<i>SD</i>	%	<i>M</i>	<i>SD</i>	%	
4	Problem-based learning	3.02	0.97	35	3.74	0.58	69	-6.00**
11	Strategies	2.81	0.92	24	3.68	0.59	69	-6.78**
13	Classroom management	3.10	0.89	34	4.01	0.50	90	-7.24**
16	Learning environment	3.08	0.87	35	3.83	0.55	77	-7.00**
20	Ethical issues	2.86	0.89	23	3.58	0.68	60	-6.24**
21	Unit of work	2.76	0.96	21	3.70	0.73	70	-7.00**
22	Assessments	2.87	0.92	27	3.82	0.60	79	-7.34**
24	Critical reflection	3.05	0.82	28	3.80	0.67	77	-6.52**
25	Questioning skills	2.96	0.89	26	3.78	0.62	76	-6.81**
27	Evaluate	3.07	0.88	32	3.80	0.66	77	-6.42**
29	Hands-on lessons	3.16	0.94	38	4.04	0.48	90	-8.29**
31	Content knowledge	2.80	0.92	19	3.49	0.77	56	-3.06**
33	Teaching confidently	2.63	0.90	12	3.50	0.83	59	-4.77**
34	Positive attitudes	3.23	0.92	39	3.94	0.57	85	-8.06**

Note. For all means, 1 = strongly disagree to 5 = strongly agree.

** $p < .001$

cohort, and there was a significant difference in positive attitudes towards science teaching for the third years (Item 34: SY=39%, TY=85%). Questions that can be further investigated include: what is the relationship between participants' perceptions of science as a strength and their science content knowledge?, how does preservice teachers' understanding of teaching approaches assist in talking about science education?, and what coursework other than science education assists in developing the preservice teachers' prior knowledge of classroom management or hands-on experiences for science education? Although the third-year cohort had approximately the same number of science methodology coursework in the Bachelor of Education as the second-years, 90% of third-year preservice teachers perceived they had prior knowledge of classroom management and hands-on experiences for primary science teaching compared with only 34% (classroom management) and 38% (hands-on experiences) for second years.

Further Discussion and Conclusion

This study argues that each and every cohort of preservice teachers will indicate different levels of prior knowledge for teaching primary science. Statistically significant *t*-tests and *z*-scores indicated third-year preservice teachers perceived they had more prior knowledge for teaching primary science than their second-year counterparts even though they had completed the same number of science methodology coursework. The greatest mean score differences were linked to *Planning* and *Implementation* for each cohort. This implies that both cohorts perceived they had more understanding of planning and implementing primary science teaching practices than their theoretical knowledge for science curriculum development and their understanding of children's development for teaching science education. They may have incorporated information and ideas from other key learning curriculum courses for their understanding of planning and implementing primary science teaching practices. If each of these constructs is considered important for developing primary science teaching practices and addressing reform agendas (e.g., Fleer & Hardy, 2001) then educators may need to target *Theory* and *Children's Development* more comprehensively.

Tertiary education courses need to take into account preservice teachers' prior knowledge in order to target the learner's needs. Examination of preservice teachers' perceptions of their prior knowledge for science education can provide insights for designing educational programs and teaching practices specific to the learner's needs. For example, if more than 80% TY indicated prior knowledge for particular science teaching practices (e.g., certain items within the construct *Planning*), then this cohort may not need as intensive lesson plan preparation and knowledge about outcomes, integration, and designing appropriate activities as much as other indicators associated with *Planning* (see Table 5). Conversely, more education may

be required for these third years for understanding scope and sequences, developing science programs, and understanding the affective domain for teaching (Table 5). Hence, educators may more effectively devise preservice teacher education programs for addressing science education reform by initially understanding the cohort's perceptions of their prior knowledge. Further investigation of other courses undertaken by third-year preservice teachers to achieve this level of prior knowledge in science education may also aid tertiary educators for developing more effective science education programs.

There is a need for more coordination, integration and connection between courses offered within a Bachelor of Education degree. In this study, there was no rationale provided for targeting one year cohort over another. Investigation of science education courses at other universities also indicated no rationale for targeting a particular year cohort. As *z*-scores were statistically significant for each item on each construct with lower percentages for the second-year cohort, educators may need to consider the maximum effect of targeting a particular year (e.g., SY or TY). For example, facilitating a science education course to second-year preservice teachers would more than likely show significant increases at the conclusion of coursework compared to targeting third years. However, more research on second and third-year preservice teachers' pedagogical knowledge development as a result of a science education program would need to be conducted in order to determine which group would be more effectively targeted. This type of research may be used to gauge the maximum effect of coursework for particular cohorts, allowing curriculum designers to make better-informed decisions for advancing science education.

Educators in university settings expect teachers and preservice teachers to understand their students' prior knowledge of science concepts before teaching primary science (Abruscato, 2004; Appleton & Doig, 1999). This appears as an essential aspect of addressing primary students' needs and the possibility of employing specific teaching practices to enhance the learning of science education concepts (Fleer & Hardy, 2001). If a needs analysis is essential for primary science teachers' planning for science education then it is also essential for university educators' planning for preservice teacher education. Carefully devised prior knowledge surveys linked to course outcomes can allow university educators to understand the prior knowledge of a particular cohort. A needs analysis should be conducted at the beginning of every course to provide evidence for targeting specific and collective needs of course participants; hence no two courses should be the same if tertiary educators employ flexible practices to cater for participants' needs. Research possibilities can include: (1) comparing third-year and final-year cohorts in order to identify participant needs before entry into the teaching profession; and (2) collaborating with other universities to investigate similar course outcomes and determine practices that may lead to enhancing such outcomes.

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Appendix A
Primary Curriculum and Pedagogies: Science

The following statements relate to your development towards becoming a teacher of primary science. Please indicate the degree to which you disagree or agree with each statement below by circling only one response to the right of each statement.

Key

SD = Strongly Disagree

D = Disagree

U = Uncertain

A = Agree

SA = Strongly Agree

In developing my understanding of primary curriculum and pedagogies towards becoming a teacher of primary science, I believe I can:

- | | | | | | |
|--------------------------------------------------------------------------------------------------------------------------|----|---|---|---|----|
| 1. articulate the key components of the primary science syllabus. | SD | D | U | A | SA |
| 2. discuss the development of children's scientific reasoning abilities. | SD | D | U | A | SA |
| 3. provide a rationale based on theory for designing and implementing an effective science program. | SD | D | U | A | SA |
| 4. provide a problem-based learning environment for teaching primary science. | SD | D | U | A | SA |
| 5. devise clear lesson structures for teaching primary science. | SD | D | U | A | SA |
| 6. discuss the development of children's attitudes for learning primary science. | SD | D | U | A | SA |
| 7. develop a scope and sequence for teaching primary science. | SD | D | U | A | SA |
| 8. articulate the components of an effective primary science program. | SD | D | U | A | SA |
| 9. describe and analyse the theoretical base of science curriculum development. | SD | D | U | A | SA |
| 10. use an outcomes-based approach for planning, implementing, and assessing primary science education. | SD | D | U | A | SA |
| 11. implement appropriate primary science teaching strategies. | SD | D | U | A | SA |
| 12. articulate the affective domains for teaching and learning primary science. | SD | D | U | A | SA |
| 13. model effective classroom management when teaching science. | SD | D | U | A | SA |
| 14. integrate primary science education with other key learning areas. | SD | D | U | A | SA |
| 15. articulate constructivist principles for teaching primary science. | SD | D | U | A | SA |
| 16. manage the primary science learning environment effectively. | SD | D | U | A | SA |
| 17. demonstrate a social capability to participate and work both independently and collaboratively in science education. | SD | D | U | A | SA |
| 18. compare existing approaches for teaching primary science. | SD | D | U | A | SA |
| 19. select appropriate activities and resources for teaching primary science. ... | SD | D | U | A | SA |
| 20. address ethical and attitudinal issues related for implementing a primary science lesson. | SD | D | U | A | SA |
| 21. design a primary science unit of work. | SD | D | U | A | SA |
| 22. assess the students' learning of primary science. | SD | D | U | A | SA |
| 23. articulate different viewpoints on teaching primary science. | SD | D | U | A | SA |
| 24. critically reflect on becoming a more effective teacher of primary science. | SD | D | U | A | SA |
| 25. use effective questioning skills for teaching primary science. | SD | D | U | A | SA |
| 26. provide primary science lessons that cater for all students regardless of ability (i.e., inclusivity). | SD | D | U | A | SA |
| 27. critically evaluate my primary science teaching. | SD | D | U | A | SA |
| 28. demonstrate an understanding of the development of children's manipulative skills for investigating science. | SD | D | U | A | SA |
| 29. use hands-on materials for teaching primary science. | SD | D | U | A | SA |
| 30. discuss the development of children's science concepts. | SD | D | U | A | SA |
| 31. teach primary science with competent content knowledge. | SD | D | U | A | SA |
| 32. talk comfortably about teaching primary science. | SD | D | U | A | SA |
| 33. teach primary science confidently. | SD | D | U | A | SA |
| 34. demonstrate positive attitudes towards teaching primary science. | SD | D | U | A | SA |
| 35. use concept maps for planning a primary science unit of work. | SD | D | U | A | SA |

Spiritual Transformation in a Secular Context: A Qualitative Research Study of Transformative Learning in a Higher Education Setting

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The offering of a graduate-level seminar at a major, public, North American university on the spiritual and moral dimensions of educational leadership provided the authors the unique opportunity to research the connections between higher education and spirituality, to determine the extent to which spiritual transformation might be possible within a secular institution. The study's 17 student seminar members were challenged, through reframing exercises and case studies, to enter empathetically into the inner life of colleagues, their own students, supervisors and supervisees in order to experience a shift in consciousness, from the egocentric to the compassionate. Employing participant observation, interviews and term assignment analysis the researchers were able to document and account for significant incidents of personal and spiritual transformation, lying along a continuum from the epochal to the incremental (Mezirow and Associates, 2000). The data, then, lend themselves to the conclusion that spiritual transformation might not be incompatible with higher education's traditional role of knowledge and skill transfer.

University education celebrates the life of the mind. Academic specialists teach and research in an environment that honors objectivity and rationality in the pursuit of truth. Recently, however, a significant, if still embryonic, complimentary force, in the form of transformative education, has emerged in sectors of North American higher education to challenge the dominance of the prevailing technical-rational-instrumental worldview. The alternative perspective of transformative education finds one expression in the rise of a series of courses, seminars and even programs, on topics centering on spirituality and its relationship to transformative learning (Duerr, Zajonc & Dana, 2003; Kazanjian & Laurence, 2000).

Very little systematic, empirical research, however, with few exceptions (e.g., Tisdell, 2001, 2003), has been carried out on the nature of students' encounters with the challenge of participating in a university course where spiritual insight and personal transformation, while not required nor necessarily expected, are nevertheless an implicit option, if not in the course syllabus then in the context the instructors set (Tisdell & Tolliver, 2003, pp.386-89). This article seeks to take one step towards remedying this research deficit by reporting the findings of a semester-long study of a graduate level course in the spiritual dimensions of educational leadership where the 17 enrollees were invited not only to study spiritual principles of leadership, but to translate these principles into active practice in their personal and professional lives.

Dirkx (1997) in his discussion on the nurturing of *soul* in adult education recognizes the spiritual and transformational dimensions of teaching and learning and notes that while

learning continues to be framed within a technical-rational view of knowledge, in which we learn instrumentally to adapt to the demands of our outer environment, bubbling just beneath this technical-rational surface is a continual search for meaning, a need to make sense of the changes and the empty spaces we perceive both within ourselves and our world. (p. 79)

Within any number of higher education courses, such issues and questions do bubble forth, but addressing these issues directly is rarely the overt agenda of these courses. In contrast, our interest here is emerging courses with explicit spiritual objectives, objectives that emphasize the search for meaning and that allow for the possibility of spiritual transformation in terms of transformative learning.

As we address the possibility of spiritual transformation in higher education, it will be important for us to make a clear distinction between spiritual transformation and transformative education. Transformative education and learning are a series of phenomena that can and do take place in a broad range of higher education settings (O'Sullivan, Morrell & O'Connor, 2002); while spiritual transformation is a subset of these phenomena and an area of teaching and practice that is just beginning to receive scholarly attention. Although not always recognized or the subject of systematic research, transformative learning is far from an uncommon occurrence in post-secondary education, transpiring when students experience significant shifts in perception and behavior upon encountering theories and data that diverge from previous knowledge and understanding, as, for example, when a student might move from

anthropocentrism to biocentrism in the study of ecology. Spiritual transformation takes place when students undergo a shift in consciousness in terms of beliefs and practices around their conception of ultimate meaning and right action, one manifestation, then, of transformative education and learning.

Teaching and Learning for Spiritual Transformation in Higher Education

During this past decade, the interest in spirituality has increased significantly and has been discussed and written about within various contexts such as business, (Fox, 1995) and health care (Do Rozario, 1997; Wright, 2004). Specifically, within the education setting, authors such as Jones (1995), Bohac-Clarke (2002) and Miller (1999) have begun to make connections between teaching practice and spirituality, particularly at the K-12 level. In addition there has been an increasing interest in the spiritual and transformative dimensions of adult learning (Dirkx, 1997; Hunt, 1998; Westrup, 1998; English & Gillen, 2000; Tisdell, 2000). These authors have made links between spirituality and transformative learning, spirituality and adult development, and spiritual learning processes in adult learning. Qualitative research studies that have linked adult education and spirituality have been conducted by Groen (2004) and English (2001). These studies have explored the connections between adult education within the workplace and international development respectively.

However, researchers have only just begun to investigate the connections between adult learning, spirituality and transformative learning within the higher education setting. Tisdell (2001) conducted a qualitative research study that linked spirituality and higher education together by exploring the themes of social justice, spirituality and cultural contexts for 16 women who work in higher education and community development contexts. Shahjahan (2004) brought a student perspective to the struggles and dilemmas of expressing one's spirituality in secular higher education. Then Tisdell and Tolliver (2003) shared their theoretical perspective and practical experiences on infusing a spiritual dimension into the university classroom in order to assist students to reclaim their culture identities and overcome a sense of internalized oppression.

The report by Tisdell and Tolliver (2003) and then the complete study by Tisdell (2003) on the role of spirituality in the lives of 31 post-secondary educators and community activists illustrate quite well the scope of empirical research to date on the practice of spirituality in higher education. Employing qualitative post-structuralist methodology, Tisdell and Tolliver (2003) documented the ways in which their participants

used spirituality to make sense of *internalized oppression* and the multiple identities of race, class and sexual orientation as they seek to express their own authenticity. Though not without struggle, their subjects for most part reported the efficacious nature of spiritual perspectives. But what is absent in these studies, and in the research literature to date, and what the present study seeks to remedy, is an account of the dynamic interplay between an instructor with explicit spirituality objectives and her students, who attempt to both understand and practice them.

Recently, two United States national surveys have appeared which lend credence to the contention that courses with spirituality dimensions are an emerging phenomenon in North American higher education, though as pointed out above, the courses themselves are yet to be the subjects of systematic empirical research. As part of a nation-wide survey, *The Spiritual Life of College Students* (Higher Education Research Institute, 2005a), UCLA's Higher Education Research Institute (HERI) asked its members to submit course syllabi "that they considered to be distinctly spiritual in nature" (Higher Education Research Institute, 2005b). Thirty-nine syllabi were received, from disciplines as diverse as the natural sciences to business and management, with titles such as *Spirituality and Leadership*, and *Ethical and Spiritual Dimensions of Leadership*, course names not dissimilar from the seminar that is the subject of this study. Then, a survey conducted by Duerr, Zajonc & Dana, (2003) documented "academic programs and other initiatives in North American universities and colleges that incorporate transformative and spiritual elements of learning" (p. 177). In the conclusion of their review they indicate that since there was only "fragmentary evidence for such research [pedagogical efforts around transformative and spiritual learning] ... studies on the student experience of the transformative/spiritual classroom would be helpful" (p. 205). Through this qualitative research study, we have begun to address this identified need.

The Study

The research reported here took place in the Faculty of Education at the University of Calgary. This is a setting that provides a unique opportunity to examine the connections between higher education and spirituality since the Faculty in its Graduate Division of Educational Research offers seven graduate seminars on aspects of spirituality and education, such as: *Spirituality in a Post-Modern Age*; *Spirituality of Teaching Excellence*; *Spirituality of Inspired Leadership*; and *The Spiritual and Moral Dimensions of Leadership*. These courses attract primarily, though by no means exclusively, schoolteachers who are working on Master of

Education degrees in order to certify as administrators, curriculum specialists, and educational technologists, among others specializations. The spirituality-oriented courses are not required courses in any of these programs, but serve as options.

Methodology

The first author (Groen) approached Jacob (the second author) in the summer of 2003 about the possibility of becoming a participant observer in Jacob's seminar, *The Spiritual and Moral Dimensions of Leadership: Relationships and Emotions in Organizational Environments*, which was to be offered during the fall term in the Faculty of Education at the University of Calgary, where both authors are faculty members. Overall, the study applied an exploratory, qualitative approach (Glesne, 1999; Merriam & Simpson, 2001) based on content analysis of interview transcripts, assignment submissions and artifacts (such as course outline, handouts, references), and field notes taken by Groen during and after each class..

Groen, upon receiving ethical clearance, attended twelve of the thirteen meetings of the seminar over the course of the fall term. As a participant observer she was fully engaged in the small group activities designed for the 17 seminar members, while in the large-group discussions Groen primarily took on the role of observer. In Groen's role as participant observer, she entered the classroom with a desire to learn about the events, actions and interactions that were taking place each week within the classroom. In taking field notes, she focused initially upon a more holistic description of events and activities. As the participants for the in-depth interviews were chosen, she began to take additional notes on their behaviors, body language, and affective responses to the content of the course and the processes of learning that were utilized by the instructor.

By consistently attending the class for several weeks, being explicit in the very first class about her research agenda and her role as participant observer and demonstrating genuine involvement in the course material, Groen engaged in a reflexive process with the learning community and gradually established trusting relationships with the students and the instructor.

The more you appear to be like the members of this social world or the longer you stay in it, the less your presence may affect the everyday routines. In one sense, you become an integral part of the social world ... reflexivity, in this sense, is the package of reciprocal reactions between the researcher and the participants in the setting. (Rossman & Rallis, 2003, p. 50)

In addition, because of the trusting relationships that had been built and Groen's understanding and engagement with the content of the course and learning processes, she was able to appreciate and extend the conversations that emerged within the interviewing portion of the data collection.

Groen randomly selected six students (two males and four females to reflect approximately the sex ratio of 5 males to 12 females in the class) as well as the instructor for two in-depth and systematic interviews; one at the mid-term point and one at the end of the semester. Within these semi-structured interviews, the following topics served as the guide:

- Why did you choose to take/instruct a course in higher education that addresses some aspect of spirituality?
- What were the processes, critical incidents and reflections that were experienced you (by the students and the instructor, respectively), throughout the term?
- For the final interview Groen focused upon two additional topics: Looking back at the end of the course, what is your perspective on the processes and the content of this course in higher education that addresses some aspect of spirituality?
- What significant learning and teaching processes emerged from this type of learning context that might be helpful to others who endeavor to learn or teach a higher education course on some aspect of spirituality?

In addition, the core sample participants, as well as several other seminar members, voluntarily submitted their course assignments to Groen. These reflective essays that engaged both seminar readings and the students' personal experiences were particularly helpful in assessing the degree of transformative learning taking place over the course of the term.

Jacob, as the instructor and as a participant in the study, was not a party to the data gathering, and was unaware of the participants' identities until after the student evaluations for the course were completed and the students' final grades submitted. Once the seminar was officially over, Jacob became an active collaborator in the data analysis.

As collaborating researchers we first analyzed the data separately by hand and then meet to present our findings to each other. Unbeknownst to either of us, in our independent analysis of the data, each of us took a separate approach to engage in the process. Specifically Jacob utilized an inductive analysis approach where the "researcher may identify **indigenous categories** – the

emic view. Indigenous categories are those expressed by the participants; the researcher discovers them through language” (Rossman & Rallis, 2003, p. 283, emphasis in original). Groen’s approach was more “**deductive**, relying on categories she has developed through the literature or through the previous experience that are expressed in the conceptual framework” (Rossman & Rallis, 2003, p. 283, emphasis in original).

As we met to present our themes to each other, it became apparent that they were quite similar; the difference being the Groen had a conceptual framework with which to organize the indigenous categories that Jacob had developed. Working from a common framework and similar categories, we developed a coding protocol for the data, including the topics: initial attraction to the seminar, spiritual/religious background, pivotal spiritual events in biography, perceived crises/problems in present life, and enlightening thoughts/events from the seminar or their absence. Below, after we outline the backgrounds and expectations of the participants, we present the overall conceptual framework that we utilized to analyze our data: epochal and incremental spiritual transformational journeys.

Participants’ Backgrounds and Expectations

The seminar members, including the study’s six core sample participants, ranged in age from their mid-thirties to mid-fifties, and are identified here by pseudonym. They are in varying stages of completion in their graduate studies program in the University of Calgary’s Faculty of Education, with several of the students both at the beginning and end of their programs. The seminar members’ specializations included educational leadership, educational contexts (philosophy, sociology, history), teaching English as a second language (TESL), workplace and adult learning and educational technology.

In terms of initial attraction to the seminar, the core sample participants presented a diverse, yet patterned, set of motivations. *David*, a secondary school administrator, outlined the reasoning behind his enrolling in the seminar in the following way: “[To] be the best I can be in terms of who I am, find that inner peace, be able to help others and maybe if I can discover it, I can maybe pass it on to others.”

David was the only practicing administrator among the core sample participants, though others entertained administrative aspirations. *Fred*, an elementary school teacher, represents these ambitions when he said, “Well, I plan to go into, hopefully, administration one day so the leadership aspect caught my attention.” But beyond the leadership dimension of the seminar, the core sample participants were also looking for subject

matter that held intrinsic interest, and at the same time constituted a change of pace from the more technical courses of their respective specializations. *Karen*, an elementary teacher, characterized her interest in the seminar in the following words: “The most important thing for me was to take something that I felt a certain amount of passion towards ... I think what I was looking for was a place to share, a place to talk about our lives . . .” Then, *Beth*, an adult educator expressed a similar, and complimentary, attraction to the seminar by noting the course offered something she believed her specialization lacked: “I think that there are other things that we need to think about as teachers and I wasn’t getting any of that stuff in any of [my specialization] courses.”

Pam, a Christian educator, expressed the most divergent motivation of the core sample participants in terms of her decision to enroll in the seminar. She said:

I was really, really curious. When you work in a church your world tends to shrink and become very small because your life and your job are so intertwined that your bubble becomes very Christian. I was very interested in broadening my view. I want to know what people who aren’t Christian think about spirituality, so that totally intrigued me. And how are they going to teach a spirituality course that isn’t Christian-based?

Although the most overtly religious of the core sample participants, Pam exhibits a disposition common to them all: the willingness to divorce their religious beliefs, or absence of them, from the spirituality-based principles the seminar was to investigate. In addition to Pam, David and Karen, as adherents to mainstream Christianity, maintained a church-based faith – David as a *liberal* Catholic and Karen as a member of a traditional, mainline Protestant denomination. David exemplifies this willingness to separate religion and spirituality when he says:

For the most part it [spirituality] is areligious. I believe in a God or in a Supreme Being. But spirituality is about having a sense of calmness and being able to deal with life’s challenges in a calm and relaxed way.

The three other core sample participants, Fred, Beth, and *Linda* (also an adult educator) were not raised in a church-going environment, and as a consequence the separation of spirituality from religion did not carry the danger of undermining religious conviction learned as a child. Fred and Linda still remain apart from organized religion, though Beth as an adult has embarked on a spiritual and religious path outside traditional Christianity. She is a Buddhist and a

practicing meditator, with considerable experience at extended meditation retreats. Consequently, she was initially comfortable with a seminar that disassociated itself from religious tenets in order to examine the perennial wisdom (Huxley, 1990) common to the great spiritual traditions, and that drew much of its actual practice from principles of Buddhist psychology (Benoit, 1955).

The core sample participants, then, as group were anticipating a course that might assist them in their quest to improve their leadership skills and extend their graduate experience with a seminar that would provide a meaningful context for their professional practice. They saw spirituality as a vehicle for this personal renewal. In addition, they also were anticipating a spiritual approach that was not inhibited by a specific religious perspective. Even Pam, the most avowedly religious of the group, was willing to suspend her assumption of the equation of spirituality with religion in order to see “what works about it?”

Conceptual Framework

Over the course of the seminar’s 13 weeks many of the seminar members underwent significant transformational learning experiences as they engaged in the course material, assignments and class discussions. As Mezirow (2000) explained, “Transformation refers to a movement through time [in which we] transform frames of reference by becoming critically reflexive of their assumptions and aware of their context – the source, nature, and consequences of taken-for granted beliefs” (p. 19). According to Mackeracher (1996), as adult learners undergo this process, they are reworking their past model of reality for a new reality. “Adults learning focuses primarily on modifying, transforming, and reintegrating knowledge and skills, rather than on forming and accumulating them as in childhood” (p. 37). She also pointed out that as one undergoes this revision of self, the emotional aspects of learning can be tumultuous, as one is very much attached to the values and beliefs that inform the sense of self.

Transformational learning, especially when it involves subjective reframing, is often an intensely threatening emotional experience in which we have to become aware of both the assumptions undergirding our ideas and those supporting our emotional responses to the need to change. (Mezirow, 2000, pp. 6-7)

Groen anticipated that the possibility for some form of transformative learning might occur during the seminar since the explicit objective of the course was not, in the first instance, to *learn about* spiritual

precepts, but to practice them. As the course’s mission statement phrased it: “The objective of the seminar is to provide seminar members with a vocabulary and set of skills that will place them in a position to enter into ‘I-Thou’ [Buber 1984] relationships with colleagues and students in school and work settings” (Jacob, 2003, course syllabus). The course was designed explicitly to engage learners beyond an abstract or conceptual level, to challenge them to learn how to “skillfully manage one’s own emotions – one’s inner life” (Jacob, 2003, course syllabus).

More specifically, the seminar challenged the students to replace anger, resentment and frustration with understanding, forgiveness and compassion, building on the Buddhist aspiration, “May this suffering serve to awaken compassion.” This aspiration was operationalized through a series of reframing exercises exemplified by a line from the Dalai Lama’s daily prayer, “I will learn to cherish ill-natured beings and those oppressed by strong misdeeds and sufferings, as if I had found a precious treasure” (H.H. Dalai Lama, 2004). Spirituality, consequently, as employed in the seminar was an invitation to move beyond a preoccupation with the self in order to enter the inner life of another — in the words of Thoreau, “Is there a greater miracle than to see through another’s eyes, even for an instant” (cited in Brach, 2003, p. 239).

The majority of the seminar members took up the challenge to lose their self-centeredness in a literal fashion. Five of the six core sample participants reported substantive shifts, though to different degrees, in their perceptions, emotions and behaviors in regard to their professional and personal relationships. In addition, based on his reading of the students’ assignments, Jacob saw 10 of the 17 seminar members experiencing a “rotation of consciousness” (Chodron, 2002), though he believes that most students not reporting significant changes in their perspectives still gave evidence of thoughtfully considering the course content.

While shifts in perception and behavior were not uncommon occurrences across the course of the seminar, the style of the transformative learning journeys and the associated feelings the students experienced underwent varied significantly. For example, the transformational journey for some of the participants, while challenging, was a positive experience, as they felt supported and cared for within the structure of the class interaction. For others who underwent significant transformation, there was a sense, at least temporarily, of an isolated struggle without the nurturance of a supportive community.

Also discernable was the passage through several stages of transformational learning, varying from student to student. According to Mezirow (2000) this progression of transformative learning occurs in 10

distinct phases, which are typically set in motion by a disorienting dilemma—a life event or incident that a person experiences as a crisis that cannot be resolved by applying previous problem-solving strategies. As a result, the person engages in self-examination, often accompanied by unpleasant or undesirable emotions, that leads to a critical assessment of assumptions. Although this situation can be painful or uncomfortable, the individual recognizes that others have had similar experiences and have undergone a similar process. Typically, this leads the individual to consider and explore options for forming new roles, relationships, or actions, followed by a plan of action. This plan consists of acquiring knowledge and skills, trying out new roles, renegotiating relationships, and building competence and self-confidence. Finally, the reintegration process is completed when the individual fully incorporates the new learning—new attitudes, beliefs, and behaviors—into her or his life, which develops into a new, transformed perspective (Mezirow, 2000, p. 22; Moore, 2005, p. 403).

Within these of stages of transformational learning, Mezirow (2000) further distinguished between two types of transformation learning journeys; epochal transformation and incremental transformation. We utilize these two contrasting journeys of transformational learning and staged spiritual transformation within a secular context by presenting, in detail, the contrasting stories of Fred and Linda. Fred provides an example of transformational learning that was clearly *epochal*, a sudden, dramatic, reorienting insight as compared to *incremental* change, involving a progressive series of transformations (Mezirow, 2000, p. 21). Although “epochal transformation is more dramatic, they are typically more painful. Slower, accumulated transformations are more common and less austere” (Moore, 2005, p. 403).

Linda provides a contrasting example where little or no transformational learning occurred, whether incremental or epochal. In addition, we briefly profile the experiences of Pam, Beth, David, and Karen as being examples of incremental transformation. Starting with Fred, we use their own words as much as possible to reflect what this course has meant to them. Then at the conclusion of the case-study material, we draw on an inductive theoretical analysis in order to account for the variations in the transformative learning journeys the seminar members experienced.

Given this conceptual overview of the course objectives, as well as the nature of the data which will follow, one might wonder whether what one sees in practice here could just as well be labeled an *emotionally intelligent* (Goleman, 1995; Salovey, Bracket & Mayer, 2004; cf. Matthews, 2002) approach to personal transformation rather than a spiritual one. There is little question of considerable overlap between

the two approaches since the behavioral outcomes are practically identical: a movement away from destructive emotions (Goleman, 2002) in order to find equanimity in a non-reactive, non-judgmental, empathetic stance towards the intra-personal and the inter-personal dimensions of life. Contextualizing these objectives in a spiritual framework, however, holds potential advantages for both instructor and student. It allows the desired skills to be framed in systems of ultimate meaning (where the purpose of life is to develop these skills, to become *enlightened*) though the recovery of one’s essential nature. On the other hand, if some students find these spiritual assumptions problematic, they may still find the emotional competencies useful, and thus be able to disassociate them from their spiritual trappings.

Findings

Fred’s Story: A Case Study in Epochal Transformation

Fred’s point of departure for his journey on a spiritual path was a confrontation, one he admittedly provoked, between one of his students and himself. Fred (*Mr. J.*) outlined the pivotal encounter with *Bill* in dialogue form in one of his seminar assignments.

Setting: Mr. J.’s grade six classroom

Time: Approximately 30 minutes before quiet reading time.

The scene opens with the students gathered at the front of the room in preparation for listening to Mr. J. read aloud. (Mr. J. has a passion for reading carefully chosen stories and books to his students.) All the students except for one are quiet and waiting with anticipation. The story begins.

Mr. J.: “Okay kids. I’m going to read from our novel.”

Bill, stands and crosses to Mr. J., “Can I read quietly on my own while you’re reading?” Bill, muttering under his breath as he returns to his seat, “I hate this book!”

Mr. J.: “Pardon me?”

Bill: “I didn’t say anything.”

Mr. J.: After a brief pause Mr. J. states rather pointedly, “That is not the kind of attitude I expect my students to have.”

Long pause. Mr. J. is waiting for the student to

apologize for being disrespectful and rude.

They stare defiantly at one another.

An uncomfortable silence grows in the room.

Finally Mr. J. speaks.

Mr. J.: "If that is going to be your attitude, then you can go and sit in the office."

Bill gets up and starts to leave.

Mr. J. continues speaking, "You can return when you can behave like a respectful member of this class."

Bill leaves and then returns after several minutes in the office.

Reflecting in his assignment on this incident, Fred begins to question the self-justifying stories he reflexively tells himself, and then recounts a turning point in the way he frames his world.

Before [this seminar], I would have thought that I handled the situation well. The student was, in my eyes, being disrespectful. Therefore, he had to suffer the consequences — it sounds horrendous to me now, "Suffer the consequences!" I didn't yell. I maintained a calm exterior (which I thought was being a good role model for my students) and I kept the power. I remained in control of the situation. Or did I? Was I really the great role model I thought I was?

I found the answer to that question 30 minutes later [as the students were doing their silent reading] when I read the first two and a half pages in [a seminar text]. I am still amazed at how physically the revelation hit me. I was stunned and saddened. The truth of the situation may have been that Bill was demonstrating a disrespectful attitude. But the deeper truth, the one that mattered, the one that jumped up and smacked me right between the eyes was this: I was disrespectful to him. I had asserted my power as a teacher to show him who was the boss. I made an example of him in front of his classmates. I certainly did not treat him as I would have liked to have been treated. The whole event replayed through my mind . . .

As I thought about how poorly I had treated Bill, I began to sense other connections. There were other images and memories of situations that started to come to my mind. I couldn't stop them. And as

each one played in my mind, I saw the Jekyll and Hyde that was inside. It was a very depressing situation. What had happened to me?

In answering his question, Fred was able to identify patterns of domination, victimization, resentment and anger in his life, if often repressed. But before he could do very much to reconcile these destructive emotions and behaviors with the skills he was learning in the seminar, a final piece of *reality therapy* made its way into his life. His fiancé, with whom he was living, asked him to leave. This was overwhelmingly painful to Fred since he had already suffered through a divorce and the end of a long-term relationship.

Turning to the seminar material as a refuge, and after intense study of the ideas of victimization, he wrote,

I couldn't believe it. I was overcome with a sudden sense of pain and sadness. There was another sensation too, a sense of calm settled in me. Within that sense of calmness I was able to reflect more fully on my past. I was flooded with images of the past — my childish wants and self-righteous attitude when ever there was an argument. I had always thought I was the victim because of what I did. I thought that because I worked so hard that everyone should treat me right ... All the while I was building up anger and resentment that came out in ways that I couldn't even see. Now I could see, I could clearly see why she asked me to leave.

Her asking me to leave was probably the biggest single life-changing event that I have ever had. If I didn't have the guidance of this class, I'm not sure what the outcome would have been. But for now, we are working on healing our relationship.

While Fred's epochal *awakening* was his first conscious and consistent move away from an *I-It* towards an *I-Thou* mode of being, the other five members of the study's core sample had been traveling along their own spiritual paths for at least part of their adult lives. In the next section four seminar members recount how the tools and skills they acquired in the course facilitated additional (incremental) progress in their own spiritual journeys.

Fred's journey of transformative education was more than a basic awareness of his reactive self-justification and habitual sense of victimization. The seminar encouraged the practice of *responsiveness* (Warner 2001), compassion in action. Without equivocation, and without counting the costs, Fred endeavored to respond, reflexively, on a pre-conceptual level, to the needs and wants of students,

co-workers and family, treating their desires just as real as his own. This transcendence of self brought a sense of relief as personal concerns faded to the background. Though at times it nearly exhausted his physical reserves of energy, Fred found this responsive stance to life much preferable to the emotionally draining resistance to others and their needs that he had practiced for most of his life.

*Beth, David, Pam and Karen:
Brief Profiles of Their Transformational Learning
Journeys*

As she worked on the seminar assignments, Beth experienced a progressive series of *incremental* transformations that culminated in a significant turnaround in important personal relationships. As she explained, "I thought that I had put several issues [regarding personal relationships] to rest, but thanks to this course, I came to see that they hadn't been put to rest at all but in fact continued to float around, continued to shape my life in ways that I didn't want." As she elaborated:

I've done lots of meditation, I've studied lots of psychology, I thought I'd put the [the conflict] in its place, in the past with no bad feelings, no buried emotion. I've realized that it isn't so at all, that I'm still carrying some of the anger that used to rule me . . . This course has been difficult. It has made me grow. Growing is necessary, it's unavoidable, it's exhilarating, but it's not always easy. Essentially I'm still at the beginning of this spiritual path. I thought I understood a little. And I do. But don't understand as much as I thought I did and so I'm thankful for being humbled and for being able to open up a little more.

Beth reminds us that transformational learning is often not easy, but can be hard and painful work. "I am glad the course is over. I feel like I have done a lot of thinking about personal issues more than professional issues, but I know the two are linked. I feel I did the work alone, which was difficult. I feel not as bad about myself now as I have in the last few months but I am still glad the course is over."

David, who had taken several of the "spiritual courses" offered within the University of Calgary's Graduate Division of Education Research, described his learning journey during the seminar as follows:

The course has been phenomenal for me because, just the whole notion of learning about attachment and detachment. Just the terminology of attaching onto something that can be stressful, that can suck some negative energy out of you and how to detach

from that and to be able to think through something . . . So I am trying to apply this.

And the fall of 2003 and his enrollment in the spiritual and moral leadership class did present David with a classic opportunity to *apply this*. For several years David had been working through the process of healing an estranged relationship with his brother *Robert*. Just after the start of the seminar Robert invited David to attend his daughter's wedding, and David, with most of the course completed, welcomed the occasion to travel half way across the continent to take the final steps in a healing journey.

After a serious family misunderstanding David told Robert that he "did not wish to ever speak to him again." Seven years passed between David's declaration and the arrival of the wedding invitation. "I was determined to go and make an honest effort to get close to my brother and his family once and for all" was how David saw the challenge of putting into practice the spiritually intelligent skills he had been studying. During the wedding trip David made every attempt to be responsive, from running numerous errands to encountering the vitriol of former in-laws. At the end of the visit the rapprochement seemed complete, and with a deep sense of satisfaction, David summed up his experience in the following way:

I now feel really close to my brother, probably the closest that we have been in a long time . . . I have to admit that at times, my responsiveness was not "textbook Warner [2001]" in the sense that it was not completely devoid of judgment. [But] all in all, it was an excellent visit. On many occasions Robert could not thank me enough for my visit and told me repeatedly that he loved me. I also told him how much I loved him and we both talked about finding time to get together again.

The end point of incremental transformation can be just as dramatic as in an epochal case, if not more so. The series of smaller, evolutionary changes taken together can disguise the overall magnitude of transformation. Pam's experience is a case in point. She had always done her best to live an exemplary Christian life. However, as a young woman she experienced a most distressing incident, one that was to challenge her spirituality right up to the time she became a member of the spiritual and moral leadership seminar.

As a teenager she was the victim of date rape by an older male companion. Healing from the rape, however, became complicated because Pam found herself pregnant. Against her deeply held beliefs she decided on an abortion, leading to considerable anguish that was to last for years.

Before enrolling in the seminar, Pam had spent more than two decades on a healing journey. As a Christian, she believed that it was necessary to forgive *Jim*. She suffered nightmares for many years, but was nevertheless able to move beyond much of the guilt and victimization by rehearsing her story for church congregations, including all male groups. With the spiritual and moral leadership seminar, though, she found there were yet a few more steps to take in order to complete her journey. This is the way she explains the conclusion to that journey:

[I]t [the seminar] made Jim more real to me in that I had never thought of what he has suffered either in his life before he met me or what he has suffered since. For the first time ever I felt more sorry for him than for myself. I may have been the victim, but, given the option, isn't that a lot less painful than being the perpetrator? He has had to live with that part of the situation for all these years. If it was as difficult as it has been for me to heal from that event how much more difficult has it been for him? And I know what it's like to be the perpetrator—just look at what I did to my baby and isn't that a lot worse than what Jim did to me? I had never before seen the fact that he must think and feel about what happened. That was illuminating for me . . . I believe the "end" is here at last.

In contrast to the experiences of Beth, David and Pam, Karen's case is unique. While we place her in the *incrementally-transformative* cases, she very much seems to be situated towards the non-transformative end of the continuum. Unlike Linda in the following case, she was able to embrace the seminar's principles. But similar to Linda, the concrete results from their application proved elusive, though she was able to take consolation in the good things of her life, a not insignificant achievement, and, in many ways, a very spiritual one. Karen, an elementary school teacher found, in Pema Chodron's (2002) characterization, the desire for self-improvement to be an "assault on the self" (pp. 11-12). After working through an assignment in which she attempted to take on empathically the role of someone with whom she was in conflict, Karen came away marginally encouraged but ultimately defeated. As she explained:

Part of what I took away from that [assignment] was failure. I had trouble dealing with the fact that I could not be totally responsive . . . Each time I read a case from [from one of the texts] . . . I became more depressed and wondered why I was unable to see the light or make what seemed like miraculous changes. Changes that would ultimately help me become a much better person — a worthy

person. Someone who knows life as it is, accepts what is happening now and accepts it in a non-judgmental way.

Karen went on to describe how her discouragement started to lift:

Then came the unfolding revelation . . . I know in my heart that the changes I read about didn't happen overnight . . . The dissonance that I have been feeling seems to come from the intensity with which I want this change to happen. The last few weeks have forced me to accept that I am indeed a perfectionist . . . I realize that I am judging and not being responsive to myself.

At this point Karen was to back off the *assault on herself*, by both practicing self-acceptance and emphasizing the positive aspects of her life. As she explained,

What I realized is that I don't have anything to fix right now. I don't mean that in arrogant way at all . . . I started looking at what was good in my world. There are a ton of good things . . . the truth is my life is quite fabulous.

Accepting, then, that the conflict in her life was more aggravating than devastating, and focusing on the more than compensating positives, Karen was able to achieve a degree of equanimity. Moving from perfectionism to acceptance, of both oneself and others, certainly constitutes a kind of transformation, even if it does not completely match the seminar's specifications. And it does not preclude one revisiting parallel practices and behaviors at a more opportune time.

Linda: Absence of Connection

Though it appears remarkable that five of the six core sample participants experienced degrees of personal transformation during the seminar, there is certainly no guarantee, even in a spirituality class where students often self-select themselves into the course based on a likely predisposition towards self-improvement that transformation will necessarily occur. Linda is an example of a seminar member initially interested in personal transformation, but one for whom the course was unable to meet her particular expectations.

While Linda enrolled in the course in part because of a positive recommendation from a former seminar member, as well as a desire to deepen her sense of spirituality, she soon became ambivalent about the direction she would have preferred the seminar to take. On the one hand, an academic analysis of spiritual

traditions appeared to be more in harmony with what she was looking for. The following comments reflect this perspective:

We had skimmed the surface [in the seminar] most of the time. I kind of like to delve a little deeper . . . because I have read about it [self-help literature], because I was always interested in trying to understand myself, that sort of thing. I just find that maybe for a graduate level course, it is not as in depth as other graduate level courses have been for me.

The following comments also demonstrate Linda's holding on to hope that the seminar might somehow open a path to transformation for her.

As I reflect on my experiences in applying the principles in the seminar readings and discussions, I can truly say that I am disappointed with my evolution in the spiritual realm. I took the course in the hopes that I would somehow become a different person at the end of it. This has not happened — so, naturally, I ask myself why or why not? Was it unrealistic to expect that a four-month course would culminate in a new, improved me? Of course, it was. I will never be able to escape myself, and that means accepting certain traits about myself that I find most unappealing. A predisposition to impatience and intolerance have plagued me my entire life so that my mother's words ring true to me as much now as they ever have: "You're going to have to learn how to be more tolerant of other people," she would always say to me. She told me this when I was still very young and no matter how hard I try, I hear those words ring loud and clear when I know I'm not behaving *spiritually*. What I have come to realize is that my mother taught me a great deal about spirituality . . .

She concluded by saying,

I am turned off. I am definitely turned off. As an academic pursuit I don't have a very good impression. I think if I was to delve more into this for me, I would go take philosophy or something like that, I don't know, maybe that is just more where I need to go."

Seminar Dynamics: The Process of Learning

We mentioned earlier that not only did some seminar participants struggle with the course material, but that they also had a sense of working the principles through and then applying them

without the assistance of a supportive community, which in this case would mean other seminar members. This was particularly true for Beth, Karen and Linda. As Beth explained, "I feel I did the work alone, which was difficult." Karen sketched out her expectations for support, which she felt were not met during the seminar.

I really believe in the telling and hearing of stories . . . I think what I was looking for was a place to share, a place to talk about our lives . . . And I think I want other stories to rub up against . . . So, I think one of the things I was really looking for were opportunities to have those conversations in the seminar.

The seminar as a group of participants, however, was not designed to support directly its members in their spiritual journeys. Jacob, as seminar leader, in a typical session, would present a spiritual principle or skill and then divide the class into small groups for problem solving exercises in and around case studies he had constructed, often from the experiences of former seminar members. The groups of three to five students, then, discussed the material he prepared for them before each seminar meeting rather than share how they were coping in the here and now with their own *living* cases. While Jacob monitored the small groups, he did not participate in them. As the small-group discussions were coming to their natural conclusions, the seminar shifted back to large-group discussion mode. While seminar members in these discussions often shared their personal insights and frustrations in their evolution of becoming a more spiritually skillful person or leader, they rarely did so in relationship to the particulars of their own lives.

The sharing and discussion of a seminar member's life experiences came through the assignments submitted and then read exclusively by Jacob as the seminar leader. While that kind of support did not appear sufficient for some seminar members, most of the others seemed comfortable with the process. Seminar members saw Jacob as communicating his personal engagement with the course material and demonstrating he was a fellow-traveler. Pam explained, "It is easy to respond to him and not feel threatened at all — his comments, his feedback are always so positive on all the papers you get back. 'Oh, this is a good thought, or I never thought of it that way, or I needed to be reminded of that.' He makes it personal for himself."

Jacob, however, consciously wanted to avoid the seminar devolving in a series of therapy support groups. He was not sure how he might handle the

possibly volatile emotions that might result through the sharing of personal situations. His objective was to teach and discuss spiritual principles and skills around common predicaments (case studies) with which he anticipated seminar member were or could be involved. Personal problems of seminar members, which often carried a high emotional content, then, belonged on paper, and he worked through these assignments one-on-one with each student.

And yet, while the sharing of experiences and storytelling was not deliberately incorporated into the instructional design, some participants began to naturally share their experiences with the course content toward the end of the semester. Pam explained what began to happen within the small groups:

In the small groups, it has changed from situations out there, to where situations in our own lives are coming up more and being brought into the discussion a lot more. But it just seems like the last couple of weeks that has started. Probably because the relationships have built to this point in and out of class.

Naturally, these informal and unintended support group processes did not apply equally to all seminar members.

Discussion: Accounting for Transformation

The data from this study suggest that it possible that students in a secular setting, a graduate university seminar, can experience a kind of personal transformation that is not limited to intellectual insight, or even emotional renewal. Five of the six seminar members who were part of the core participant sample appeared to have a spiritual experience in the sense of losing their sense of self as they were able to enter the personal space of others, to the extent of making the needs and desires of those others just as real as their own, with reconciliation and forgiveness the spiritual by-products. Or, in the case of Karen, to reach a degree of self-acceptance or responsiveness that qualifies as a transformation experience itself. If our conclusion here is justified by the data, a natural, next question becomes one of trying to identify the prerequisites for this transformative learning. Why do some students appear to experience a form of spiritual transformation, while others seem relatively immune? Drawing from the experiences of the six seminar members who participated in the interviews and submitted their course assignments, as well as the data from the participant observation over the 13 weeks of the seminar and informal interaction with the other 11 seminar

members, we were able to identify four basic elements in this transformative learning journey. These elements are (1) need in terms of a crisis or a chronically unresolved issue that causes distress to one degree or another, (2) an openness on the part of students to new experiences or ideas, (3) course material that resonates with the students in the sense of their finding it useful for the transformative learning they seek, and (4) a supportive yet charged learning environment. Each of these apparent prerequisites, in reference to the data collected, is discussed below.

Need Manifest in Crisis or Unresolved Conflict

In reference to a crisis or unresolved issue, Linda did not give evidence in the interviews or in her assignments of any kind of serious professional, personal or family situation in her life. She was looking for self-improvement and reported that she had read a number of self-help books, but gave no indication of anything approaching a crisis. On the other hand, each of the core sample participants involved in a transformational experience, whether epochal or incremental, faced a relationship *crisis*, of one form or another. In Fred's case it was the likely end of an engagement, one that he desperately did not want to see fail, after a previous divorce and the dissolution of a long-term relationship. In the cases of both Pam and Beth, there were questions in past relationships where forgiveness issues had not been completely resolved. Intriguingly, it was the course material that resurrected dormant conflict that Pam and Beth believed had long since been resolved. In contrast, since David's conflict with his brother was very much a front-and-center issue for him, it seemed he welcomed the seminar assignments as an opportunity to handle it, as he said, "once and for all." And Karen, a self-confessed perfectionist, was able to embrace the ideals of self-acceptance, for herself and the significant others in her life, and accentuate the positives in a life she confessed was actually *fabulous*. Consequently, for the five transformative cases, a pressing need, either conscious or suppressed, appears to have been a key prerequisite in fomenting the change process.

Openness

It appeared as if most of the students within this course and more specifically the six case study participants were open to expanding their spiritual journey. They had an open, evolving and inclusive perspective about their own and others' spirituality, rather than a perspective that was limited to specific religious point of view. Even though Pam initially saw the seminar through the lens of conservative

Christianity, she did not limit herself to that perspective and used the word *curious* to explain why she was there. She was open to the potential journey that the course would offer.

This openness, though, came at a cost for those seminar members who embraced it. They had to confront the *ghosts* of their present and past lives and come to terms with them. Fred overcame a self-centered sense of victimization in order to save a relationship. Beth rediscovered the unhealed wounds from a previous relationship and has begun again the process of reconciliation. Pam, as well, thought that she had buried the pain from her past, but as she confronted it once again, she was able to move forward to find a new level of forgiveness. While David seemed to welcome the invitation the seminar offered for rapprochement with his brother, the steps toward overcoming the estrangement still involved trepidation and required considerable courage. And finally, Karen endured the struggle with emotional discomfort until she was able to accept her life as it was, rather than anticipate the still unrealized spiritual breakthrough the seminar seemed to offer.

This type of spiritual journey, then, requires an ongoing ability to be self-reflective and self-aware, qualities found in almost all of participants. The obvious exception, though, is Linda. It is tempting to conclude that, for whatever reasons, she closed down and did not give the seminar a fair chance. Such a claim, however, rests on circumstantial evidence. Perhaps the more reasonable judgment is to acknowledge simply that the course material did not resonate with her particular requirements, the issue we address in terms of all the course's students just below.

Course Material that Resonates with Student Need

The participants who experienced personal transformation all seemed to be enthusiastic about the course readings. Beth, the long-time meditator, could say that she felt the Warner (2001) text was written for her. Pam was initially put off by one of the other course texts (Katie, 2002), seeing it as a run-of-the-mill self-help work, but eventually found it a most useful resource in her journey to final forgiveness. And David, among others, found concepts like attachment and non-attachment from Buddhist psychology productive adjuncts to the change process.

Linda, on the other hand, could find very little of use in the course material. For her, the 13 weeks amounted to little more than admonitions to *be nice*, and that just about everything she encountered wasn't much different from the good advice she receives from her mother.

A Hospitable Yet Charged Environment

Palmer (1998) in his exploration of six paradoxical tensions within a teaching and learning space indicates that one of the paradoxical tensions is that "the space should be hospitable and charged" (p. 75). Specifically, when the space is hospitable it is

inviting as well as open, safe and trustworthy as well as free. The boundaries around the space offer some of that reassurance [and conversely] the space must also be charged. If students are to learn at the deepest levels, they must not feel so safe that they fall asleep; they need to feel the risks inherent in pursuing the deep things of the world or of the soul. (Palmer, 1998, p. 75)

It appeared as if this tension was held in the seminar, opening the space for risk taking and learning at the deepest levels. In addition, this space also pushed the boundaries of learning with readings, discussions and assignments that honored a more holistic learning process that went beyond cognitive learning commonly associated with a higher education context.

Two illustrative, and polar, examples of the students' reaction to the seminar in terms of its potentially hospitable and/or charged climate come from Beth and Linda. Beth found the seminar difficult, almost exhausting, and was relieved to finally see its conclusion. On the other hand, Linda seemed to see the course as almost too hospitable. She evidenced clear boredom over the last two-thirds of the seminar. Perhaps, in hindsight, she might have been challenged or provoked, having her apparently facile assumptions on the course's objectives and methods called into question. But might this kind of confrontation have undermined the seminar's hospitable environment?

Conclusion

The data collected for this study do indicate that personal transformation in terms of a change in consciousness that emphasizes compassion, through taking the role of the other and making her needs and desires just as real as one's own, can actually take place in graduate education in a university setting. Since the study examined the experience of just one seminar over the course of just one semester, its generalizability is obviously limited. Consequently, more research is needed to extend the focus beyond individual case studies towards surveys of larger groups of students, as well as extending the case studies themselves to more of the range of existing courses in spirituality and personal transformation.

As the investigation of the phenomenon continues, one likely question that will be raised in relation to both this and future research is the appropriateness of the endeavor itself — the invitation to personal transformation. Might spirituality classes, as public spaces, be moving into a private sphere usually reserved for trained therapists and their clients? Could untrained, and thus insensitive, seminar leaders be ill-equipped to handle students with emotional conditions that require clinical attention? And it is certainly likely that these kinds of students would be attracted to a course whose syllabus advertises the possibility of personal transformation.

More intense observation and research will necessarily be required to answer these questions. Conversely, while we wait the research verdict on these issues, we might also entertain a contrary hypothesis as part of the research agenda. Could transformational education through post-secondary courses with a spirituality theme constitute an efficient and relatively inexpensive alternative, or at least adjunct, to the costly and drawn out processes, with problematic outcomes, of individual therapy? Answers to this question, theoretical as well as empirical, could well contribute toward reenergizing the debate on the viability of an expanded role for higher education in a postmodern society — to include not only knowledge and skill transmission but, as well, personal transformation.

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The Pedagogical Challenges Facing French Business Schools in the Implementation of E-learning Initiatives

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This paper will reflect on the pedagogical challenges facing French Business Schools in the implementation of e-learning initiatives. I will show that the top French Business Schools are not the main providers of e-learning in business education, as the task is mainly assigned to private companies or government-subsidized organizations. Some fragmented e-learning initiatives do exist but the usefulness of this technology to enhance the learning and teaching experience is often overlooked in a drive to provide e-learning at all costs. I will argue that e-learning development should be grounded in a comprehensive pedagogical framework. The various challenges facing educators will be analyzed, such as their epistemological beliefs, their roles as teachers, their ability to create a community of inquiry, and their ability to choose pertinent knowledge. In order to put learning on the agenda in French higher education and help the educator understand how students learn, a more detailed understanding of the generational characteristics of student cohorts, their epistemological beliefs and conceptions of learning, as well as their learning styles and preferences is advocated.

E-learning in France

For some, e-learning means a fully online course; for others, it means the use of a course management system. For the purpose of this paper, the European Union definition of e-learning will be employed: "E-learning means using new multimedia technologies and the Internet to improve the quality of learning by facilitating access to facilities and services as well as remote exchanges and collaboration" (EC Publication, 2003, p. 3). While this definition is quite broad, it does contain some key concepts such as *quality of learning*, *facilitation*, *exchange*, and *collaboration*. Therefore, this definition presupposes that the learner is at the center of the learning event facilitated by an educator in an exchange of knowledge that is acquired via collaboration. Ledru (2002) set out four dimensions of e-learning: pedagogical and psychological; technological; economic and legal; and organizational and change management issues. If we apply these four dimensions to e-learning implementation at French Business Schools, we can see that the technological dimension is the only one to have received any serious consideration with business schools investing massively in learning platforms such as Blackboard®, WebCT, or Crossknowledge. While they may purport to be involved in e-learning, a closer look at the French e-learning market tells a different story.

At the moment, the main provision of e-learning in France is divided between: (a) e-learning in firms, offering customized content developed internally or by large companies and then outsourced to private suppliers and (b) e-learning provided by the central government or by regional and local authorities or associations receiving government subsidies.

In the first sector, termed here as the *private e-learning market segment*, Gil (2003) provides an impressive list of the major players such as software

editors (e.g. Sybase, Lotus, Oracle); publishing houses (Foucher Editions d'Organisation, McGraw Hill, Ziff Davis); consultancy firms (Arthur Anderson); TV channels (M6, France 5); and start-ups (SABA, Centra, Online Formapro), all of whom are vying for a slice of the e-learning market. However, many of these providers lack credibility as they are not attached to a reputable business school or university. In France, e-learning in business education will not be successful unless the major players (Grande Ecoles, i.e. public or private higher education institutions that admit students by competitive examination following a two- to three-year preparatory course, and the three or four most prestigious universities) get involved.

The second segment, which I call the *public e-learning market segment*, is served by four main provider organizations as outlined by Baudouin (2005):

1. AFPA (Association nationale pour la Formation Professionnelle des Adultes [National Association for the Professional Training of Adults]) is the main operator of the Ministry of Social Affairs, Labour and Solidarity and aims to guide and train principally the unemployed with no or few qualifications (www.afpa.fr).
2. CNAM (Conservatoire National des Arts et Métiers [National Conservatory of Arts and Crafts]) is affiliated to the Ministry of Higher Education and offers training in economics and management, science and industrial techniques, information and communication technologies, as well as training in work and societal issues (<http://www.cnam.fr>).
3. GRETA (Groupement d'Etablissement du Second Degré [Group of Secondary School Establishments]) provides their public

school facilities and staff in order to offer further vocational training to both employed and unemployed adults. (<http://education.gouv.fr/fp/greta.htm>).

4. CNED (Centre National d'Enseignement à Distance [National Center for Distance Learning]) is part of the Ministry of Education and provides distance education to all educational levels. It is similar to the Open University in Britain. Two thirds of the users are adults, and the CNED had 350,000 users in 2002, 30,000 of whom reside outside France. (<http://www.cned.fr>).

These organizations deal mainly with adult education and further training to individuals wanting to get back into the workforce or those already in gainful employment wishing to upgrade their skills.

Business Schools, the elite in French business education provision, seem to be absent from the e-learning market with only some sporadic and fragmented e-learning initiatives. Boudon (2004) claims that the French Business Schools are "afraid to sell their souls on the net" as they do not want to make their elite content available as this would jeopardize their exclusivity and the added value of a business school qualification. He adds that by making this content public, business schools would inevitably pauperize their brand. Gil (2003) puts the resistance to adopting more Information and Communication Technologies (ICT) in education down to the disappointing results of Computer-Assisted Learning (CAL) in the 1970s and 1980s.

However, business schools are beginning to realize that e-learning is something that is expected of them as well as being a very lucrative endeavor, and as a result, all the major business schools cite e-learning as an integral part of their educational strategies. Lewandowski, (2003) has set out some of the main objectives of e-learning in French business education:

1. To complement traditional education by employing a learning platform such as Blackboard® or WebCT, which facilitates self-evaluation, discussion forums, email access, and online tutoring
2. "To immerse the students in a technological environment with the aim of preparing the student to adapt to the workplace of the future" (p. 92). Therefore, the benefits to the students are twofold: they become familiar with the electronic tools (the *e* in e-learning) by using them intensely and regularly as well as learning at their own pace and in their own time.
3. To maintain regular contact with the students when they are away from the home institution during exchange periods abroad or work placements in industry during their

gap-year. This is considered to be a way to reinforce the various social links between the different stakeholders within the institution such as professors, students, alumni, etc. Alumni networks are very powerful at French Business Schools and many business schools believe that alumni are an education market niche of the future as their skills and competences become outdated.

4. "To enhance further education programs in order to capitalize on the distance learning markets for executive managers, who are mobile, demanding, and not very free to access education" (p. 92). This is a major market that French Business Schools intend to capitalize on over the next few years, as the benefits of such executive education for the business schools are enormous: short-term benefits such as revenue for the provision of executive education courses and teaching experience for business school faculty as well as long-term benefits to include partnerships with key industries to provide work-shadowing and career opportunities for their graduates as well as increased credibility and notoriety in key business sectors both nationally and internationally.

Unfortunately, for the most part, professors tend to put their lecture notes online in the form of PowerPoint presentations, a practice which could consolidate the view that good teaching is the transmission of information (Biggs 2003, p. 218) and as a result fosters even more surface learning. In reality, very little contact is maintained with the students on their gap-year or year abroad, and the interaction between students and teachers is usually carried out via e-mail. As regards executive education, in a French context there is a strong argument for maintaining some face-to-face teaching as the majority of executives are conditioned by their previous educational experience to be passive recipients of knowledge.

E-learning Initiatives at French Business Schools

Different e-learning initiatives can be observed at French Business Schools. Three different types of e-learning initiatives can be observed: the development of virtual campuses; closer collaboration with partner universities in order to offer European online degrees; and blended learning solutions.

Virtual Campuses

Ecole de Management Lyon, a business school which is ranked fourth in France, has created a Virtual Campus. They have divided their online

environment into six sections: *an assessment center* for skill evaluation; *an e-school* with learning support and courses online, forums, email, information sharing space, lists of tasks to accomplish, program information, etc.; *a knowledge center* with practical information and reports; *an advice & support center*; *an entrepreneurship center* – with knowledge bases, practical files and creation tools; and *a service center* with a library, virtual community, course catalogue, diary, internship and employment information, etc. (www.emlyon.net). Audencia Nantes School of Management inaugurated their “Campus Net” (<http://www.audencia.com/index.php?id=73>) in 2003, using a learning platform with rich media such as video, speech, text transcription (with the possibility of subtitles in different languages), as well as appendices with email, inventory of data, forums, etc. Campus Net also uses text messaging to inform students of timetable changes.

Collaboration with Partner Universities

The majority of French business schools have partnerships with foreign universities, who offer similar business programs. Audencia Nantes School of Management collaborates with a consortium of seven other European institutions: GSIM – University of Maastricht; Open University in the Netherlands; IAE Aix (Institut d’Administration des Entreprises d’Aix-en-Provence), a Graduate Management School and Research Centre in Aix-en-Provence in the south of France; University College Dublin in Ireland; Akademie für Weiterbildung e.V. EuroStudyCenter in Germany; EADA Barcelona in Spain; and Leon Kozminski Academy of Entrepreneurship and Management in Poland, to offer a Euro-MBA. This 24-month course offers both face-to-face teaching and an e-learning component given by staff at the various aforementioned schools. This type of initiative is innovative in France and exploits e-learning to provide an international qualification.

Blended Learning/E-Learning

Almost all of the French business schools claim to have some kind of blended learning format in their institutions, that is, a combination of online and face-to-face learning approach. Since 2004, professors at HEC (Haute Ecole de Commerce) in Paris, the leading French Business School, have co-developed courses with Crossknowledge, an e-learning company, to offer blended solutions. HEC also offers blended learning on their executive education programs, as does ESSEC (Ecole Supérieure de Sciences Economiques et Commerciales), a rival business school in the Paris area. ESCP-EAP (Ecole Supérieure Commerciale de Paris), a business school with campuses in five cities (London, Paris, Berlin, Torino, and Madrid) has also reported offering some

sporadic online courses in partnership with other institutions (Vasquez Bronfman, 2003). INSEAD in Fontainebleau initially launched a platform called “Insead Online,” only to drop it and to continue using ICT tools to complement their traditional programs in a blended learning format. Lewandowski (2003) mentions other smaller business schools, which offer e-learning courses. These include CESEC (Centre d’Etudes Supérieures Européennes de Caen, in the Ecole Supérieure de Commerce Normandy group), which has offered an online Euro Bachelor’s degree since 2003 aimed at middle management in small and medium sized enterprises. Another small school, IAE (Institut d’Administration des Entreprises) Poitiers, offers two distance learning qualifications: a Masters in Management Science and a DESS CAAE (Diplôme d’Etudes Supérieures Spécialisées - Certificat d’Aptitude à l’Administration des Entreprises) a third level specialized professional qualification in business administration.

These blended and e-learning courses are provided to students already at the business school but do not respond to the needs of company employees for tailor-made management programs. Therefore, business schools need to provide e-learning solutions to clients outside the classroom to enable the managers to continue learning within their organizations.

Pedagogical Considerations for E-teachers

Having mapped out and situated e-learning in a French context, the pedagogical issues facing teachers will now be addressed. The French education system is unique in European terms in that students usually spend two or three years in post-secondary school courses (called *classes préparatoires aux grande écoles- CPGE*), where students prepare for the entrance examinations to the top business schools. The students are essentially training for an examination and work on average 70 to 80 hours per week. This learning and teaching environment breeds competition, individuality, and passivity in the students while positioning the teacher as the expert and purveyor of knowledge. Once the students arrive at business school, one of the major challenges is to break this learning cycle in order to develop the managerial competencies required in the future workplace. While it is difficult to generalize about teaching styles at business schools, it is true that the profile of the business educator in France is changing following pedagogical reforms in the 1980s and 1990s, with schools aiming at closer cooperation with industry and a greater awareness of the importance of the student personality, all the while respecting the elitist nature of business school education (Lazuech, 1999). With this new style of teacher comes a different pedagogical style with case studies, project-based learning, problem-based learning, and student-centeredness being some of the

methods adopted. However, even if new pedagogical styles can be observed at business schools that place the learner at the center of the learning event, the immediate push and overambitious zeal to offer e-learning programs at all costs means that pedagogical considerations as well as the educational intentions are often overlooked. As outlined earlier, in a French context e-learning policy is often driven by technology. Vasquez-Bronfman (2003) advocates a rejection of this techno centrism, which views all e-learning questions through a technological lens, and he would like more emphasis placed on pedagogical issues and innovation in business education.

Institutes of Learning and Teaching

In order to put learning and teaching on the agenda at French business schools, some kind of Institutes of Learning and Teaching similar to the those following the Dearing Report (National Committee of Inquiry into Higher Education, 1997) in the UK need to be set up. These institutes (sometimes termed as Centers for Teaching and Learning) could have two distinct functions: (a) an e-teacher training function to include the explicit training of e-learning and e-teaching models, which would incite e-teachers to re-evaluate their roles as teachers and raise awareness of key concepts such as “community of inquiry” and “teaching presence” in an online environment; and (b) a pedagogical research function to ensure greater understanding of student learning by studying generational characteristics and qualities and learning styles and preferences.

E-teacher Training

Explicit Teaching of E-learning Models

The most pervasive models employed to describe teaching and learning with technology are constructivist and conversational in nature (Laurillard, 2002; Bates & Poole, 2003; Salmon 2003; Paulsen, 1995). Some of the frameworks and models for the effective use of technology in higher education are outlined below. Laurillard (2002) argues that teaching at university should favor reflection on analysis and explanation of the student’s direct experience of the world, an activity she describes as mediated learning (p. 22). Her conversational framework advocates dialogue as a practical and theoretical level between teacher and student. The interaction between student and teacher are made explicit and the technology supports this interaction in that it can be a) discursive: teachers and students exchange their conceptions and set learning goals; b) adaptive: the focus of the dialogue is amended based on student feedback; c) interactive: teacher provides feedback on tasks undertaken and students endeavor to achieve the task; d) reflective:

the learning process is supported by the teacher, who helps the students to reflect on their learning (Laurillard, 2002, p. 78). Therefore, teaching and learning is seen as a dialogic and interactive negotiation of meaning between the tutor and student.

Bates and Poole (2003) advocate that teachers assess their epistemological position in higher education, as technology can accommodate a wide variety of positions such as objectivist or constructivist approaches, and this will ultimately influence not only online teaching but the design of technology-based instruction. They proffer a model for selecting and using technology entitled the SECTIONS model: Students, Ease of use, Cost, Teaching and learning, Interactivity and user friendliness, Organizational issues, Novelty, and Speed. This model is useful for teachers as it encapsulates: a) Learning and teaching issues: student demographics, student styles and preferences, teacher epistemology and conception of teaching and learning, presentation requirements in course content, etc.; b) Technological issues: ease of use and reliability, speed of connectivity, mounting and changing of courses, interface design; and c) Institutional issues: cost of resources and technical support, institutional support, unit cost per learner. The advantage of this model is the sound theoretical and pedagogical underpinnings which help teachers to make critical decisions on technology use in higher education.

An extremely helpful model to understand the online learner development is Salmon’s (2003) 5-stage model. This model provides a structured, incremental approach to the various stages of participation in an online course and displays how the teacher (or e-moderator in this case) masters the various e-moderating pedagogical skills while the student gains valuable technical skills. The amount of interactivity increases through the five stages: 1) access and motivation: where the student is welcomed and encouraged to become an integral part of the new learning environment; 2) online socialization: where the learning community is consolidated by requiring the student to post synchronous and asynchronous messages; 3) information exchange: where course-related information is provided and collaborative learning really begins; 4) knowledge construction: where knowledge is built due to increased online interaction and discussion; and 5) development: where the acquired knowledge is further consolidated and there is increased reflection on whether the various learning outcomes have been reached. Salmon (2005) has described various interactive synchronous and asynchronous activities with the aim of fostering group and individual learning goals online. Paulsen (1995), as one of the early pioneers of communicative online education, has also provided a very full and informed outline of definitions, techniques and practical advice on pedagogical techniques for computer-mediated communication.

I would, therefore, suggest that the Institute of Teaching and Learning train the business educators in all the aforementioned models. The models should be taught online using a learning platform as this would have a twofold effect: provide the business educators with the necessary online pedagogical knowledge and familiarize the educators with the learning platform so that they experience the technology as students.

Identification of E-teacher Role

French educators cannot maintain their traditional role of expert and purveyor of knowledge in an online environment, and therefore, there needs to be a cultural shift. Ryan and Hall (2001) have described this cultural shift in higher education as a “move away from teacher-centered didactic exposition to a more resource-based immersive and learner-centered environment” (p. 4), with a key challenge being staff awareness of this shift, which should form an integral part of e-teacher training. Berge (2000) has outlined some of the changing roles of teachers in an online environment and this would suggest that the teacher becomes a questioner rather than provider of answers, a part of an instructional design team rather than an isolated teacher, and an equal in the learning event thereby deconstructing the teacher-learner hierarchy.

A discussion of the various different terminology associated with the new role of teachers could be initiated by referring to the work of Salmon (2003) for example, who sees the teacher as an e-moderator that presides over an online discussion and uses expertise in order to promote human interaction and collaboration with the aim of facilitating, conveying, and constructing knowledge and skills. Salmon (2002) goes even further in her explanation of the role of university teachers in the knowledge media age by describing four planets: *Contenteous*, which favors the expository method of teaching; *Instantia*, which meets the requirements of a protean society by offering a learning object approach; *Nomadict*, where the preferred approach is mobile learning (m-learning) and finally *Cafélatia*, a planet built on learning communities and interaction. All of the planets described define the differing roles of teachers as content expert, flexible and spontaneous online trainers, mobile portfolio teachers, and e-moderators. The business educator must be confronted and cater to all the aforementioned planets and not just the transmission expert position. Laurillard (2000) sees the role of the teacher as a *guide* as her conversational framework is strongly influenced by Vygotsky (1978), whereby the teacher or the more able peer offers guidance and acts as a “scaffold” to enable the learner to achieve task accomplishment.

The nature of online collaborative learning and online discourse will also require some elaboration.

Here Pincas' (2000) research will be helpful to delineate some of the features of online discourse, which she considers as problematic in e-teaching because online “talk” is in fact written language, and there is a fear that the interaction will be cold and impersonal as the non-verbal cues are missing. Educators will therefore need to learn to structure the online talk to enable the learner to develop comfortable interactions online. The online discourse will need to be managed to ensure that turn-taking, sequencing, group discussion, and referencing do not hamper learning. This shift in teaching methodology is not easy for business educators, who are used to the expository method. This is why I see one of the main missions of the Institute of Teaching and Learning as providing the educators with both a theoretical and practical pedagogical program.

Awareness of “Community of Inquiry” and “Teaching Presence”

Business school educators need to be particularly aware of two key concepts in e-learning, namely “community of inquiry” and “teaching presence.”

As e-learning is not inherently learner-centered, there is an onus on the teacher to create the learning environment that motivates students and facilitates worthwhile learning activities and outcomes. Garrison and Anderson (2003) ascribe the success of this virtual learning environment to the establishment of a community of inquiry with three underlying elements: social, cognitive, and teaching presence. A community of inquiry creates the learning space where students accept responsibility for their learning through “negotiated meaning, diagnosing misconceptions, and challenging accepted beliefs” (Garrison & Anderson, 2003, p. 27).

The teaching presence is the element that brings all other elements together in that the teacher designs, facilitates, and directs the cognitive and social processes in order to achieve the desired learning outcomes. This puts the teacher in the role of designer, facilitator, and learning director. In addition to the principle of teaching presence, Pelz (2004) provides two other principles to ensure effective online teaching: put the students in charge of their own learning, and ensure interactivity between all those involved in the learning event.

Pedagogical Research

Generational Characteristics of Student Cohort

Prior to implementing an e-learning program, the educator must consider the characteristics of the students they have before them, and this involves pedagogical research into the student experience.

Some research has attempted to categorize student generations and attribute them various characteristics. Students born between 1980 and 2000 are referred to as *Millennials* (Howe & Strauss, 2000; Raines, 2002). Howe & Strauss (2000) attribute various characteristics to students in this age bracket such as a close proximity to their parents and a great respect for their values, a fascination with technology, a focus on grades and performance, and an interest in social interaction and group activity. Oblinger & Oblinger (2005) describes this generation as digitally literate, connected, and immediate with a keen ability to multitask. They also stress the desire for social interaction in classroom activities where team-based learning and experiential learning is preferred. While some may discredit this type of research as being anecdotal in nature, there is a strong argument for using the learner as a starting point in the implementation of e-learning in higher education. This requires an understanding of what the learner brings to the learning event so as to achieve what Biggs (2003) describes as constructive alignment, whereby various components are aligned such as the curriculum, teaching methods, assessment procedures, climate in student interaction, and the institutional climate.

Learning Styles and Preference Research

Students exhibit different learning styles and preferences. To what extent testing these learning styles can influence pedagogical and instructional design is questioned (Coffield, Moseley, Hall, & Ecclestone, 2004). However, there is an argument that awareness-raising of learning styles will result in increased self-reflection of learning strengths and weaknesses and will help students comprehend the idea of metacognition and enable them to enlarge their repertoire of learning styles. A great quantity of learning style inventories already exist (e.g., Allinson & Hayes, 1996; Myers & McCaulley, 1985; Honey & Mumford, 1986; Kolb 1999) and they can be employed to research the student learning experience. The two most cited in the literature are Kolb's (1999) Learning Style Inventory and Honey & Mumford's (1986) Learning Style Questionnaire. Honey & Mumford's (1986) questionnaire probes attitudes and behaviors of learning preferences and is used for personal or organizational development rather than for assessment or selection purposes. The questionnaire has been widely used in business contexts and there is no reason why it cannot also inform pedagogical development. Therefore, I would suggest that empirical research be carried out using the available instruments and existing research employed in order to ascertain the learning profiles and styles of French business students prior to embarking on costly e-learning initiatives. These research

findings would inform the e-learning pedagogical design.

Conclusion

French Business Schools are relatively absent from the e-learning market and have only offered sporadic and fragmented courses. There seems to have been a focus on using technology as simple notice-boards to complement face-to-face classes rather than offering full courses that are delivered, supported, and assessed online. This phenomenon has been attributed to the prestigious nature of business school education and to the fear that the "elite" content would be offered up to public scrutiny as well as the deception experienced with computer-assisted learning. While some business schools have gone to great efforts to create virtual campuses, others content themselves with collaborating with foreign university partners or offering blended learning solutions. The majority of business educators exploit some kind of learning management system such as Blackboard® or WebCT, which bring with them the danger of a techno-centric vision of e-learning and a lack of pedagogical innovation and consideration. In order to face up to the pedagogical challenges in e-learning implementation, Institutes for Teaching and Learning should be set up within business schools to provide e-teachers with the key skills required to teach online. This institutes should also take on a pedagogical research role to inform teachers of the student experience, which is argued here as the starting point in the implementation of any e-learning initiative.

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“I Fight Poverty. I Work!” Examining Discourses of Poverty and Their Impact on Pre-Service Teachers

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This paper examines some of the dominant discourses related to poverty and education such as those offered by the prominent political ideologies, those presented by educators who write about poverty, those embedded in popular culture, and those surrounding current teacher education curricula. Furthermore, this study evaluates the impact these discourses have on teacher education students, and ultimately on the students they engage. The results of a 15-item survey, distributed to teacher education students at a Midwest university, reveal their perceptions on poverty and offer many potential departure points for educators to consider. Additionally, this paper analyzes the implications of the data for teacher education curricula. The results of the study revealed that teacher education students employ conventional discourses and idioms in their understanding of poverty. The study makes clear that to adequately deal with issues of poverty in their classrooms, teacher education students need to be conversant with the multiple discourses of poverty and require opportunities to develop empathetic responses to poverty and learn to think about poverty from multiple points of view. Additionally, teachers need to learn a range of strategies that will shatter their assumptions about poverty and in turn prepare them to respond in a variety of ways.

Driving down Main Street in the year 2000, I (the first author of this paper) am delayed at a stop light just a few yards from a local restaurant/bar, centered within a small village next to the local Dairy Queen, the baseball card/Beanie Baby trading store, the post office, the gas station, and the public library that is often mistaken for a child's play house (it really is that small). I am confronted with a small designer license plate hung in the restaurant's window that reads “I Fight Poverty. I Work!” This village, surrounded by corn and soybean farms that often employ migrant farm workers, is a few miles away from one of the most impoverished communities in the state – a state that historically has had a very high poverty rate. In between this village – which is “fighting poverty” by adhering to the ideology that poverty is self-made by those individuals who refuse to work and can only be undone by deciding to work – and the impoverished neighborhoods a short distance away is a public university that graduates about 800 teacher education students per year, 80% of which come from its surrounding communities. I often wondered what situated knowledge my students bring into teacher education courses regarding issues of poverty. How do they build understanding about poverty, what discourses influence their understanding, and what impact might this have on their professional practice as teachers?

Understanding the discourses of poverty is crucial for teachers. Eradicating poverty is a global priority in which the role of education is central. As Julius Nyerere, former President of the United Republic of Tanzania asserts, “Education is not a way to escape poverty - It is a way of fighting it” (Nyerere, 1974, p. 24). In the last decade, the international community has

repeatedly committed itself to fighting poverty through education. In 1995, the World Summit for Social Development in Copenhagen asserted that poverty was a severe injustice and an abuse of human rights. The United Nations General Assembly declared the period 1997 to 2006 as the First United Nations Decade for the Eradication of Poverty. In the year 2000, the theme of eradicating poverty continued during the World Education Forum held in Dakar where the international community underscored the need to eradicate poverty and declared that the only way forward was to work toward this aim through education. If the role of education in this process is considered crucial, it begs the question, what is to be done in this regard? In a keynote address at the American Educational Studies Association in 1999 entitled, “Critical Cultural Analysis: Understanding Systemic Poverty,” Gordon Chamberlin claimed that scholars and statisticians have been studying “the Poor,” not “Poverty,” and he suggested that teacher education scholars ought to feel morally obligated to infuse issues of poverty into our university curricula. Chamberlin sharpened the focus and helped educators become better observers of teacher education students' perceptions. Their lived-experience was shaped by a dominant discourse that did not account for multiple interpretations of the causes of poverty and rendered them “helpless” and “unmotivated” as future educators to address such issues.

In this address Chamberlin outlined many hurdles, such as the myth that “everyone knows about poverty,” the confusion between the terms “poverty” and “the poor,” the invalid calculation of the “poverty line,” the limited resources on the causes of poverty, our over-commitment to statistics, the distinctions made between

the “employed” and the “working poor,” and the unexamined world of the non-poor, a view that is, in part, created and sustained by university culture. Chamberlin raised questions for teacher educators that presented them with a challenge to disrupt and displace teachers’ perceptions about the poor and in place of these, to create an awareness and critical understanding of poverty. The conference helped to formulate the following research questions:

- RQ 1: What perceptions do teacher education students have about the poor?
- RQ 2: How do these perceptions influence their thoughts about teaching?
- RQ 3: How prepared do teacher education students think they are to encounter poverty issues in relation to their teaching?

Literature Review

In this section we explore several constructions of poverty. We begin with the official construction of poverty, represented by statistics and data about the poor, followed by perspectives on the causes of poverty, and finally with the responses of educators to reducing and eliminating poverty and its effects.

Data about the poor

Official figures on poverty in the United States come from the U.S. Census, conducted once every ten years, and the annual Current Population Survey (CPS), distributed to households in every state. The Annie E. Casey Foundation annually reports on the condition of the children in the U.S., including estimates of child poverty, through the *Kids Count* project. The Children’s Defense Fund regularly publishes empirical data about U.S. children including poverty statistics.

The Census Bureau has revised its method of estimating the poverty threshold four times, in 1966, 1974, 1979 and 1981. These revisions changed the estimate of the poverty rate. The first two revisions slightly reduced the estimated number of poor, whereas the more recent revisions slightly increased the number. (*Who is poor?*, n.d.).

Additionally, the Institute for Research on Poverty reports:

[In the] late 1950s, the overall poverty rate for individuals in the United States was 22 per cent, representing 39.5 million poor persons. Between 1959 and 1969, the poverty rate declined dramatically and steadily to 12.1 per cent. As a

result of a sluggish economy, the rate increased slightly to 12.5 per cent by 1971. In 1972 and 1973, however, it began to decrease again. The lowest rate over the entire 24-year period occurred in 1973, when the poverty rate was 11.1 per cent. At that time roughly 23 million people were poor, 42 per cent less than were poor in 1959. The poverty rate increased by 1975 to 12.3 percent, and then oscillated around 11.5 per cent through 1979. After 1978, however, the poverty rate rose steadily, reaching 15.2 per cent in 1983. In 1996, the poverty rate was 13.7 per cent. . . In 2003, 12.5% of the total US population lived in poverty, up from 12.1% in 2002. (*Who Is Poor?*, n.d.).

Furthermore, “[t]here are substantial differences between the overall poverty rate and the poverty rate of individuals in certain demographic subgroups. Most notably, blacks, individuals in female-headed households, and Hispanics have poverty rates that greatly exceed the average.” (*Who Is Poor?*, n.d.).

The Annie E. Casey Foundation “is the 12th largest private foundation in the US with assets of more than \$3 billion. [They] rank 7th in the country for charitable giving. Established in 1948 by Jim Casey, founder of UPS, the Foundation is the world’s largest philanthropy dedicated to improving the lives of disadvantaged children” (Annie E. Casey Foundation, n.d.).

According to the *Annie E. Casey Foundations’ Kids Count Data Book 2000*, in 1989 4.3 million children in the U.S. were living in families defined as “working poor” [“working poor families” were defined as “families in which at least one parent worked 50 or more weeks a year, but family income was below the poverty level”], and in 1998 5.8 million children were living in working poor families. This represents a significant increase.

In 2002 the official poverty rate was calculated at 12.1%, and 34.6 million people fell below the official poverty thresholds. The number of children in poverty increased to 12.1 million up from 11.7 million in 2001. The poverty rate in the Midwest increased to 10.3 percent in 2002, up from 9.4% in 2001, while the poverty rates in the South, West and Northeast did not change between 2001 and 2002. (U.S. Census, 2002).

The Children’s Defense Fund reported the following in its August 2004 document, *Key facts about American children*:

- 1 in 6 children is poor now
- 1 in 3 children will be poor at some point in their childhood
- 1 in 8 children has no health insurance
- 1 in 8 lives in a family receiving food stamps

The School Lunch and Breakfast Programs

The federal lunch and breakfast programs divide children in need into three categories:

1. Free meals are provided to children if their family income is about \$23,900 for a four person family in the 2003-2004 school year.
2. Reduced-price meals (not to exceed \$.40 per lunch and \$.30 per breakfast) are provided to children if the family income is between \$23,900 and \$34,000 for a four person family in the 2003 – 2004 school year.
3. A small subsidy (per meal) for full price meals is provided to children whose families do not qualify for free or reduced price meals.

Furthermore, if children are already being served by the Temporary Assistance for Needy Families (TANF) and/or food stamp programs, they automatically qualify for free meals without further application. These breakfast and lunch programs often make children in poverty very visible within a school community.

The Relationship Between Poverty and Education

Research has found that concentrated poverty in schools is associated with lower achievement for both poor and non-poor students who attend such schools. Teachers in high-poverty secondary schools, whether urban or rural, tend to be the least prepared and the most likely to lack even a minor in the subjects they teach. Such schools also tend to have a larger share of new, inexperienced teachers. (*Education Week*, 2000).

Efforts to close the achievement gap between students might be better realized if we pay attention to the preparation gap in teachers with regard to a deeper understanding and knowledge of issues concerning poverty.

While statistical data, such as that presented in the previous section, are important to help set the stage, it does little to help us understand the “situations, procedures, attitudes and beliefs about poverty” held by teacher education students and what impact that understanding will have on their teaching.

Causes of poverty

Most explanations and theories about the causes of poverty fall into one of three categories – structural, individual, and cultural – and are reflective of differing world views and political positions. Shannon (1998), for example, categorizes the different explanations of the causes of poverty into conservative, neo-conservative, liberal, and radical democrat positions.

Structural

Structural theories understand poverty in terms of groups. For example, Marxism and other functionalist sociological theories focus on the exploitation of the poor by capitalists. These theories make these claims:

[P]overty serves some specific functions for the benefit of the affluent class, such as the performance of necessary menial and undesirable jobs . . . Welfare programs, according to this theory, are used by the affluent class to reduce the resistance of the poor class and insure continuation of such services at very low pay. (Chamberlin & Chamberlin, 2000, p. 24)

According to Shannon (1998) structural inequalities as a cause of poverty receive support from the liberals, but not from conservatives. Liberal explanations of structure also point out that the way to solve the problem of poverty would be to alter policies and change the way the system distributes income, a point that is stoutly denied by conservatives. Conservatives maintain that far from solving the problem of poverty, viewing poverty as caused by structural inequality perpetuates the problem and transfers responsibility for poverty from individuals to the system. Policies designed on the belief that middle and upper class society is responsible for sustaining poverty among the poor will lead to disincentives for individuals to work, marry, or become responsible citizens. Murray (1996), for example, argues that governmental aid increases social problems and hurts individuals. In his view, without aid, the poor will have the incentive to work hard and “pull themselves up by the bootstraps.” Sowell (1993) not only criticizes government aid but additionally blames intellectuals who, in his view, theorize about the causes of poverty while not contributing to the creation of wealth themselves.

Conservatives and neo-conservatives offer up theories of poverty that focus on individuals.

Individual

The neo-conservative position on causes of poverty dovetails with individual theories of poverty that claim that the poor lack sufficient motivation to work hard enough to move out of poverty. Hence, the poor are entirely responsible for their own status. A second individual explanation that, according to Shannon (1998), falls under the neo-liberal umbrella is supported by recent US experience, which shows that there has been a significant shift in demand from manufacturing jobs, which generally do not require a high degree of

skill and education, to service jobs, such as financial and computer services, for which college education is almost a prerequisite. This view looks at education and job training as the more important remedies of poverty.

Cultural

Cultural theories of poverty make the following claims:

[P]eople growing up among long-established poor communities learn a set of beliefs and styles of life, a so-called *culture of poverty*, which develop among poor communities. Such a culture . . . attaches no value to hard work and self improvement.” (Chamberlin & Chamberlin, 2000, p.24).

Cultural theories of poverty support the stance that poverty is the result of poor life choices and an inability to be responsible. The cause of poverty is, therefore, lack of moral character, and the way out of poverty would be education that is aimed at improving moral character. Supporters of this view include William Bennett, who advocates moral literacy and moral education to correct the flawed character of the poor. This position also assumes that since character is learned, social intervention policies will help eliminate poverty. Wilson’s words give us a succinct picture of the goals of eliminating poverty through cultural re-education, “We are trying to produce right behavior. We don’t simply want to reduce poverty” (Wilson, 1996, p. 371).

Educators’ Responses to the Theories

Ruby Payne has approached this issue of poverty and education from a teacher’s point of view. An educator since 1972, she has worked as a consultant, an elementary principal, a high school teacher, a department chairperson, a central office administrator, and as a committee member on state-level committees. Her workshops and presentations on issues related to poverty and education are popular with school district staff development teams (*Understanding and Working with Students and Adults from Poverty*, n.d.). Payne believes that educators ought to be able to assist students in recognizing and using the “hidden rules” of the middle class. Payne delineates the following “key points” in her article, “Understanding and Working with Students and Adults from Poverty”:

1. Poverty is relative. If everyone around you has similar circumstances, the notion of poverty and wealth is vague. Poverty or wealth only

exists in relationship to known quantities or expectation.

2. Poverty occurs in all races and in all countries. The notion of a middle class as a large segment of society is a phenomenon of this century. The percentage of the population that is poor is subject to definition and circumstance. In the 1990 census data, 11.5 million of America’s children (individuals under the age of 18) lived in poverty. Of that number, the largest group was white. However, by percentage of ethnic groups, the highest percentages are minority.
3. Economic class is a continuous line, not a clear-cut distinction. In 1994, the poverty line was considered \$14,340 for a family of four. In 1994, seven percent of the population made more than \$100,000 per year as indicated on U.S. tax returns. Individuals move and are stationed all along the continuum of income.
4. Generational poverty and situational poverty are different. Generational poverty is defined as being in poverty for two generations or longer. Situational poverty involves a shorter time and is caused by circumstance, i.e. death, illness, divorce.
5. These points are based on patterns. All patterns have exceptions.
6. An individual brings with him or her the hidden rules of the class in which he or she was raised. Even though the income of the individual may rise significantly, many of the patterns of thought, social interaction, cognitive strategies, remain with the individual.
7. Schools and businesses operate from middle-class norms and use the hidden rules of the middle class. These norms and hidden rules are never directly taught in schools or in businesses.
8. For our students to be successful, we must understand their hidden rules and teach them the rules that will make them successful at school and at work. We can neither excuse them nor scold them for not knowing; as educators, we must teach them and provide support, assistance, and high expectations.
9. To move from poverty to middle class or middle class to wealth, an individual must give up relationships for achievement. (Payne, p.1-2)

Payne’s solutions are based on several assumptions. She holds that middle class students’ success is in large part due to their understanding and

practice of middle class values and norms that are learned at home. Poor students, however, lack the cultural capital of middle class norms and are consequently more likely to fail at school. In Payne's view, it is the duty of schools and teachers to teach middle class norms to poor students to help them become successful and break the cycle of the culture of poverty. In Payne's conceptualization of poverty, poverty is not characterized by a mere lack of income, but it is caused by a distinct set of behaviors, attitudes, personality traits, and habits. Payne's views have been articulated before by Myrdal (1944), Harrington (1962), and Lewis (1966). It was Lewis (1966) who coined the phrase "culture of poverty" that according to him moved from generation to generation. Lewis argued that because children absorbed the cultural values of poverty, they failed to recognize or take advantage of opportunities when they presented themselves in life. According to Payne's logic, the culture of poverty can be interrupted by teaching poor children to learn their way into the middle class. These assumptions absolve the middle and upper classes of responsibility for poverty and instead place the burden of moving and recovering from poverty squarely on the shoulders of the poor. In addition, Payne's suggestions have the effect of pitting the poor against their communities by constructing the values of the community from which students emerge as deficient.

Earl Shorris studies generational poverty by building case studies of families who broke the poverty cycle. He discovered two constants: these families learned new negotiation skills and engaged in higher order critical thinking that allowed them to successfully navigate the "politics of poverty." Shorris conceptualizes poverty as a consequence of not having the skills to navigate the political landscape. If poverty is primarily a political act then, as Shorris (1997) suggests, the corrective is skill acquisition. According to Shorris (2000), the study of the humanities provides a platform for critical thinking skills and reflection: a platform abandoned by radical thinkers of the left, as a result of which conservatives have appropriated the humanities. In Shorris' words, "In fact, the humanities should belong to the left, for the study of the humanities by large numbers of people, especially the poor, is in itself a redistribution of wealth" (Shorris, 2000, p. 105). Shorris and Payne agree on skill acquisition as necessary for eradicating poverty, although they interpret the meaning of skills and acquisition differently, and each has developed curricula to address the problem. Shorris's Clemente Course in the Humanities was designed to expose students in poverty to the humanities in an attempt to make them more fully functioning citizens by virtue of an expanded way to understand the complexities of life within a "political" system. (Shorris, 2000) The main difference between

Payne and Shorris lies in their concept of the community. While Payne's solution is to move away from the existing community that she constructs within a deficit model, Shorris aims to reclaim the humanities to change society, not by abandoning "relationships for achievement" as Payne would advocate, but by using skills to situate learning and achievement within communities to create improved living conditions for the poor. For example, Shorris cites a case where students and staff at the Clemente Center on the Lower East Side conducted a needs assessment within their surrounding community. Based on what they learned, they bought a plot of land next to the Clemente Center and turned it into a community garden. In this way, the students gave back to the community the lessons they took from the Clemente Course (Shorris, 2000).

Martin Haberman, a Distinguished Professor of Education from the University of Wisconsin-Milwaukee, has authored a book entitled, *Star Teachers of Children in Poverty* (1995). His work characterizes teachers working with children most affected by poverty. He flatly states in his introduction:

For the children and youth in poverty from diverse cultural backgrounds who attend urban schools, having effective teachers is a matter of life and death. These children have no life options for achieving decent lives other than by experiencing success in school. (Haberman, 1995, p.1).

He addresses the next generation of teachers by asking them if they have what it takes to be among the star teachers, the 5 to 8 per cent of the teachers in the country who have been successful with children in poverty. Haberman (1995) claims that "completing a traditional program of teacher education as preparation for working in this emotional cauldron is like preparing to swim the English Channel by doing laps in the university pool" (p. 2). He continues this analogy by telling his readers:

Swimming is not swimming. Have a warm shower, a clean towel, a private locker, your own lane, and a heated, guarded, chlorinated pool has nothing whatever to do with the grueling realities of eight-foot swells of freezing water for 22 miles without being certain of your direction, and persisting alone knowing that most "reasonable" people would never submit themselves to such a challenge. (Haberman, 1995, p. 2).

Haberman claims that the reason the "process of labeling children in poverty [e.g. "at risk"] never

ceases is that there are only two alternatives: either there is something wrong with the child and his or her background, or there is something wrong with the teachers' methods and school curricula" (Haberman, 1995, p. 51).

Shorris conceptualizes poverty as a consequence of not having the skills to navigate the political landscape. Shorris, Payne, and Haberman agree on this interpretation, and each has developed a particular curriculum to address skill-building. All three propose that the solution to eradicating or reducing poverty is in finding the right curricula and teaching methods within schools or even within classrooms. In this sense, the solutions proposed are individual solutions that place the responsibility for achievement on the shoulders of individual teachers and students. Acquiring the right skills and dispositions will help teachers teach better and students learn better, which leads to success. Other educators locate the political site not within the individual but rather within the larger societal system. These educators approach the subject not from the idea that skill acquisition alone will provide the corrective, but rather systemic change is needed. For example, Jonathan Kozol shocked the general public (and some educators and policy makers) when he described the U.S. public schools' collective neglect of the children affected by poverty in *Savage Inequalities* (1991) and in *Amazing Grace* (1995). These works detailed the harsh realities of abandoned urban areas.

Gordon and Mary Chamberlin would argue that Shorris, Payne, Haberman and other educators who focus on skill acquisition alone have missed the central point about the systemic nature of poverty that pits "student success" against "teacher success" and keeps invisible the greater contributing factors. The Chamberlins would no doubt also criticize educators' neglect of poverty issues outside of urban schools. According to a group of educators and religious leaders led by the Chamberlins, called the Poverty Coalition and headquartered in North Carolina, a renewed and more accurate description of poverty needed to be generated. They determined that poverty refers to a set of the following interrelated social conditions:

[M]any businesses and other organizations pay low wages; low-paid work contributes to the benefit of other portions of the populace; people receiving low wages can afford to live only where there are concentrations of poor housing and where other dependent people are forced to live; those caught in these conditions must cope with the consequences of more health problems, legal problems, and social disruption; governmental and private agencies set up to serve the needy require extensive permanent bureaucratic structures to

administer welfare programs; those providers of basic needs (food, education, medical care, etc.) determine what poor children can have; the needy young are exposed to a narrow range of opportunities for physical, intellectual and vocational development; social institutions established in poverty areas have limited resources; needy areas receive minimal general community services; and this portion of the population, with little influence or power, is looked down upon with disdain and blame. (Chamberlin & Chamberlin, 2000, p. 26).

The Poverty Coalition claims that the "perpetuation of poverty is structural, and is maintained by . . . institutions of the community and the state . . . the poor live with deprivation of many kinds; theirs is a communal (rather than a familial) cycle of poverty" (Chamberlin & Chamberlin, 2000, p. 26). "Systematic poverty is reinforced when cultural values of freedom, equality, individualism, charity, and competition are interpreted by the non-poor to justify the resulting limitations of opportunities and benefits to the working poor and their children." (Chamberlin & Chamberlin, 2000, p. 26).

It is clear that multiple definitions and readings of poverty reveal different ideological positions. They teach middle class populations and teachers how to think about poverty and the poor and offer solutions. Such solutions either invite the poor to be like the middle class or teach one to understand poverty issues in greater depth and move away from deficit positions to developing more complex pictures of poverty and the poor. Learning to read poverty from multiple stances in teacher education is crucial in that such readings challenge social constructions of poverty that seek to isolate the poor and diminish possibilities for democracy. By understanding and analyzing constructions of poverty, teachers begin to move toward a curriculum for social justice. In this article we take a step in this direction by contributing to the research that examines teacher attitudes towards the poor and their perspectives on poverty.

Methods

Construction of Instrument

We started with the instrument developed by the Poverty Coalition entitled, *Examining One's Own Exposure to Poverty*, and determined that we would construct our own instrument borrowing some of the questions, modifying others, and adding completely new questions. Gordon Chamberlin provided the necessary permissions, and we created the instrument found in Appendix A. This study obtained the required

Institutional Review Board (IRB) permission and agreed to not publish the research findings until at least four years following collection to provide further protections to the students agreeing to complete the survey.

Findings

The findings of the study are presented in two sections. In the first section we present a profile of the respondents and a summary of the places where they encountered the poor as well as the duration of their encounters. In the second section, we analyze the discourses students used to describe their perceptions of poverty and the poor, and finally, we analyze the implications for teacher education.

The Population

The survey was distributed to undergraduate students enrolled in teacher education courses spread across 7 sections in 2000. The decision was made to hold the results until the majority of students completed their baccalaureate program in 2005.

Survey Results

Demographics

The first run of the survey produced a 100% return rate ($n = 182$). The authors conducted a gender and age analysis for all results and did not find any significant differences in responses based on gender or age.

From Table 1 we see that, for the most part, respondents had little or no teaching experience, most of them did not have responsibility for dependents, and most saw themselves as belonging to the “middle class” or as being “comfortable.”

Poverty Perceptions

From Tables 2 and 3 we learn that school represents the most likely place where students’ perceptions of the poor were formed, followed by work and other places in the community. Additionally, for the most part, students perceived their encounters with the poor to be occasional and brief.

Tables 4 and 5 give us a picture of the words used by students to describe the poor and the words that they attributed to “others.” We see that, while they described the poor in terms of personal traits, ethnicity and class and circumstances or living conditions, they attributed far more negative judgments in all categories to “others” descriptions of the poor, thereby holding “others” rather than themselves responsible for the more negative images.

TABLE 1
Participant Demographics

Gender	
Female	64
Male	36
Age	
18-20	31
21-22	27
23 & older	42
Income	
Upper	3.2
Upper middle	50.0
Lower middle	41.0
Low	4.3
Dependents	
None	78.0
1	9.3
2	5.5
3	4.4
4	2.2
5+	0.5
Teaching experiences	
Student teaching	5.4
Substitute teaching	9.8
Public school teaching	6.0
Private school teaching	0.0
Fieldwork observations	
Some observations	33.5
No observations	9.8

Note. All values are percentages.

TABLE 2
Places Respondents Encountered the Poor and Their Sources of Information about the Poor

Places encountering poor		Sources of information	
School	77.5	Teachers	67.5
Work	65.4	TV & Movies	67.0
Grocery stores	50.0	Newspapers	65.9
Public transport	45.0	Parents & friends	65.3
Religious settings	42.8	The poor	56.5
Colleges/Universities	34.0	Books	48.4
Recreational activity	33.0	Classmates	42.8
Doctors' offices	24.7	Co-workers	56.5
Libraries	20.3	Magazines	40.0
Community meetings	20.3	Religious leaders	39.0
Concerts	11.5	Music	24.4
No personal encounters	1.0	Other	6.0

Note. All values are percentages.

TABLE 3
Duration of Encounters with the Poor

Brief episode	23.0
Occasional	45.0
Frequently	12.6
Repeated over extended periods	17.0

Note. All values are percentages.

TABLE 4
Students' Descriptions of the Poor

Personal traits	Circumstances	Ethnicity/Class	Living conditions
Unstable	Less fortunate	Diverse	No food or shelter
Struggling	Broke	Homeless	Don't have good jobs
Hurting	Don't have enough	Low socioeconomic	Don't have possessions or money
Unclean	Unable to make enough money		Barely scraping by
Sad			Living in the bad side of town
Needy			
Lazy			
Give up easily			

TABLE 5
Students' Perceptions of Words Used by Others to Describe the Poor

Personal traits	Living conditions	Circumstances	Judgments
Dirty	Living in boxes	Impoverished	Worthless
Diseased	No food or shelter	Unemployed	Scum
Lazy	Homeless	No family	White trash
Alcoholics		Victims	Low-life
Vagrant			Drain on society
Bums			Expect taxpayers to give them
Helpless			things

TABLE 6
Students' Perceptions of People Receiving Community Support and Public Assistance

Perceptions of parents receiving community support as 'bad' parents		Perceptions of people accepting public assistance	
Depends of circumstances	79.7	System provides for less fortunate	36.0
Doing their best	16.4	Neutral	32.9
They should work	0.0	The government should not be responsible for those who can earn their living	3.3
No response	3.9	Other (e.g. people should not abuse the system)	24.0

Note. All values are percentages.

TABLE 7
Students' Perceptions of the Causes of Poverty

Personal traits / Character	Cultural / Family/ Genetic	Structural causes / Circumstances
Poor planning	Don't have IQ permitting them to hold jobs	Lack of well paying jobs resulting from lack of training
Irresponsibility	Family disasters	Bad luck
Lack of control	Generational curse	
Spend money on things not necessary		
Not working hard enough		
Unmotivated & lazy		
Poor choices		
Don't manage money properly		

Table 6 tells us that students saw community support as different from public assistance and looked upon community support favorably but were less likely to look upon those receiving public assistance with sympathy. Table 7 gives us a picture of the causes of poverty as perceived by the students. Students attributed poverty to poor choices made by individuals

or to weakness in character and an inability to work hard. At times, they suggested that genetic or cultural causes could produce poverty, and only rarely did they suggest that structural causes of a lack of training or lack of jobs could be the cause of poverty.

As indicated in Tables 8 and 9, students indicated that some courses in their program discussed poverty,

and it became clear that the course content was limited to general information and to promoting a helping model or a deficit model, but did little to challenge their stereotypes.

Tables 10 and 11 tell us what students feel will be the impact of poverty issues on their teaching practice. Although students have good intentions, they fall back on strategies of helping or feeling compassion or pity for students they consider “poor” in their classrooms. The limited range of responses and strategies students bring into their teaching may be a result of the lack of direct attention and addressing of poverty issues in teacher education.

Discussion

Teacher Education Students’ Perceptions of the Poor

According to the results of the survey, the majority of the information students gathered about the poor came from their schools and teachers, followed by the media. Survey results showed that students’ thought of the poor in terms of economic deprivation or in terms of a deficit disposition. Descriptions of character and

circumstances overlapped to weave together a pattern of the poor as most often choosing to remain poor rather than as victims of circumstances or structural inequality.

In describing the poor, students’ definitions of poverty were held up against invisible or personal standards of what they perceived as “enough money.” Their definitions were oftentimes extended to include the family living conditions and at times the neighborhoods where they lived. Some neighborhoods were cast as “bad”; for example, the term “bad side of town” suggests that in students’ minds poverty was associated not only with a lack of good housing, but also with all the associative negative images that are encompassed by the term “bad.”

Students’ descriptors pointed to the cultural conception of poverty associated with a struggle to subsist. Students did not distinguish between subsistence and deprivation, a distinction that Vandana Shiva (2005) explains is the difference between a cultural conception of poverty where self-provisioning may get interpreted as poverty, and the material experience of poverty in the sense of being deprived or dispossessed.

TABLE 8
Number of University Courses Concerning Poverty Taken by Students

0	15.9
1	30.2
2	22.5
3+	30.2

Note. All values are percentages.

TABLE 9
Variety and Range of Course Content Regarding Poverty

General information	Teaching information
1. Statistics on poverty and the poor	1. Keep in mind that some students may not be able to buy materials
2. How to help families who are struggling	2. How to help in the classroom
3. Environmental differences in different economic areas	3. Teaching at-risk children
4. Poverty occurs in every community	4. Poverty is part of multiculturalism
5. Characteristics	5. How to deal with a child of a lower class

TABLE 10
Impact of Acknowledging Poverty Issues on Teaching

Perspectives and planning	Teaching practice
1. I will address every disadvantage students have	1. I will be lenient with hungry children
2. I will look at things from different sides before I teach so that it will help everyone	2. I will not require projects without ensuring there is money to buy materials
3. Poverty issues help me to understand different points of view	3. I will push the poor children more to motivate them
4. I will not be judged against any socioeconomic class	4. I will model respect in my classroom
	5. I will be sad but not treat anyone differently

TABLE 11
Students' Projected Responses to Reactions of Non-Poor Students to Poor Students

Responses promoting equality	Responses that challenge students
1. I will expect and demand compassion and understanding	1. I will ask how and why they have their opinions
2. One rule will be RESPECT	2. I will ask how many poor people they know personally
3. All students will be equal in my classroom	3. I will tell them I was poor and see what they have to say
4. Everyone has something that makes them different	4. I will expect them to treat everyone with respect if they wish to be treated with respect
5. We will discuss issues	

In addition, poverty is associated with pain or with ill health as students described the poor as “hurting” or as “sick.” In terms of individual character traits, “dirty and unclean” were both mentioned, and they point to habits of personal hygiene that students associate with the poor. Additionally, and perhaps the most compelling construction of the poor comes from descriptors that include “lazy” or “giving up too easily.” Although some students acknowledged the element of luck by referring to the poor as less fortunate than others, overall, students appeared to understand poverty in terms of deficit or a lack of possessions or self-sufficiency coupled with a lack of right attitude to generate income. From the results of the survey we can surmise that students' understanding of poverty, its causes, and the degree to which different groups are held responsible is affected not only by their knowledge of poverty but the ways in which they assimilate such images. Lessons learned about poverty from school, teachers, and the media can either reinforce each other or present differential views.

Students' Discourses of Poverty and Thoughts about Teaching

Teacher education students revealed that the discourses that they employed in thinking about poverty issues influenced their thoughts about teaching. It was clear that students wanted to teach without prejudice against those experiencing poverty in their classrooms. The data reveals that they employed traditional discourses in their understanding of poverty issues, leading them to make decisions about classroom teaching in limited ways. They saw poverty as a culture, as a problem of the lazy or as material deprivation. Accordingly, they saw themselves as either pushing students who might need to be motivated out of poverty, or as being empathetic or feeling sorry for their inability to buy material goods. Their responses favored a “helping” model or one that “pushed” students. In both cases the views were a result of viewing students who were poor in their classrooms as deficient. Although the students intended to be respectful and responsive to their students, the range of responses were limited to feeling sad or sorry for them.

Additionally, these responses reveal an understanding of poverty as a problem of individuals and not the result of social injustice.

Students' Perceptions about Their Own Readiness to Address Poverty Issues in Education

From the results of the survey it appears that students would not be adequately prepared to encounter poverty issues in relation to their teaching if deliberate attempts were not made to introduce such issues in teacher education curricula that dispel existing notions of poverty and the poor. While students wanted to create a respectful environment in the classroom, their responses indicated that they had little idea as to how to tackle issues of poverty in the classroom. They equated poverty with difference rather than seeing it as an issue resulting from social injustice. Students thought that having knowledge of issues of poverty would create an awareness in them, leading to a wider range of responses in the classroom. Students' answers that projected what they might do differently as a result of learning about poverty issues were telling. With regard to change, most students did not think in terms of how to address change nor how to empower students to become change agents; instead, they discussed these issues in terms of classroom management or in terms of getting students to accept the differences between people living with poverty and others. Students' survey responses tell us that they are relatively unprepared to meet questions of poverty, and most important, they are unprepared to explain causes of poverty so that this impacts teaching for social justice.

We began this research in order to examine the perceptions teacher education students held about poverty. We found that the results of the survey reinforced Chamberlin's claim that the dominant understanding is that poverty is caused by the personal inadequacies of the poor, with little to no indication that students understand poverty as an aspect of a socio-economic system which requires that some people remain poor. Students see poverty as deprivation, or as a product of a culture that inculcates poor spending habits or produces social pathologies such as delinquency or substance abuse. All these explanations

of poverty lead one away from examining structural causes of poverty and from seeing poverty through the lens of social justice. Instead, individual causes lead one to think in terms of individual responses and not social responsibility. Such views lead one to solutions of hard work or, at best, leave the solutions of poverty in the hands of a few capable NGOs or on charitable responses taking poverty out of the political and electoral agendas. Perceptions of poverty determine and even create its future. Reading poverty as an inevitable result of individuals' bad luck, laziness, or even God's will leaves the status quo of social inequalities intact. As Michael Harrington (1962) in "The Other America" says, "the millions who are poor . . . tend to become increasingly invisible. Is a great mass of people, yet it takes an effort of the intellect and will even to see them." It is therefore crucial for teacher education curricula to focus on explicit teaching of poverty issues in a way that will nurture teacher education students' ability to be empathetic and to develop a broader range of pedagogical approaches so that they will be able to address not only their own perceptions about poverty, but will also engage their students' notions of poverty. We argue that introducing poverty issues in teacher education from a social justice lens will lead teachers to develop empathetic responses while building diverse pedagogies that meet these issues in new and challenging ways.

The hope is that knowledge and understanding of the perceptions held by teacher education students will influence teacher educators' decisions about curriculum design and delivery. Future educators must be guided through a "demystification process" regarding poverty and be given opportunities within the teacher education curriculum to apply normative, critical, and interpretive perspectives in their analysis, as described by the Council of Learned Societies in Education (CLSE). This approach is the hallmark of social foundations of education. Our actions as educators are only as good as the quality of the information we consult when building professional practice. The quality of information most teacher education students possess about poverty is low. There are many forms of evidence that substantiate this claim, including the results of the small-scale survey study presented here and the available literature.

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APPENDIX A
Poverty Issues and Teacher Education Instrument

Directions: Please answer each question listed below by circling the correct response or by providing an answer in the space provided. Thank you for your participation.

Sex:

- i. Male
- ii. Female

Age:

- I. 18-20 years of age
- II. 21-22 years of age
- III. 23 years of age or older

Teaching Experience:

- i. pre-service (NO teaching experience/NO fieldwork observations)
 - IV. pre-service (NO teaching experience/SOME fieldwork observations)
 - V. student teaching experience
 - VI. substitute teaching experience
 - VII. public school teaching experience
 - A. number of years _____
 - VIII. private school teaching experience
 - A. number of years _____
 - IX. volunteer work _____
 - X. other _____

Number of dependents you are currently responsible for:

- 1. 0
- 2. 1
- 3. 2
- 4. 3
- 5. 4
- 6. 5
- 7. 6+

1. What term best describes the family you grew up with?

- a. low income
- b. lower middle income
- c. upper middle income
- d. upper income

2. What term best describes the family you grew up with?

- i. impoverished
- ii. comfortable
- iii. wealthy

3. My personal encounters with the poor have been through (circle all that apply):

- I. work
- I. religious settings
- II. community meetings
- III. concerts
- IV. schools
- V. colleges/universities
- VI. grocery stores

- VII. doctor offices
- VIII. public transportation
- IX. libraries
- X. recreational activities
- XI. I have had no personal encounter with the poor

4. The duration of those encounters with the poor have tended to be

- I. A brief episode
- II. Occasionally
- III. Frequently
- IV. Repeatedly, over extended periods of time

5. My sources of information about the poor have been (circle all that apply):

- I. Parents
- II. Friends
- III. Teachers
- IV. Religious leaders
- V. Co-workers
- VI. The poor
- VII. Magazines
- VIII. TV and Movies
- IX. Music
- X. Newspapers
- XI. Books
- XII. Classmates
- XIII. Other _____

6. What words do YOU use to describe people who are poor?

7. What words do OTHERS use to describe the poor?

8. How many university courses have you had that have discussed poverty?

- I. 0
- II. 1
- III. 2
- IV. 3 or more

Please describe how poverty was discussed:

9. Are parents who receive community support for their children bad parents?

- I. Yes, they should be working to support their children
- II. No, they are doing the best they can
- III. It depends on the individuals and the circumstances
- IV. Don't Know

Comments:

10. What do you think about people who accept public assistance?

- i. It is not the responsibility of the government to provide for people who should earn their own living.
- ii. Neutral
- iii. I believe this is a good system to provide for those less fortunate.
- iv. Other

11. Do you feel the poor are at a disadvantage from the rest of society?

If no, why not? If so, in what way?

12. Do you feel it is the responsibility of educators to help the poor or is it their own problem and they should find a

way to fix it? Why?

13. Do you feel prepared to teach in a classroom where issues of poverty are present on a regular basis?

14. How will acknowledging poverty issues impact your teaching?

15. How do you imagine you will respond to the reactions of “non-poor” students to “poor” students?

16. What are the reasons you feel some people are poor?

17. Do you feel prepared to teach what you know about poverty to others? Why or Why not?

18. What would you like to know about poverty and education issues that would assist you with your teaching?

19. Other Comments:

Challenging Accepted Wisdom about the Place of Conceptions of Teaching in University Teaching Improvement

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In recent years, conceptions of teaching held by academic staff have achieved an increased focus in the scholarly and practical work of teaching developers. Views on the impact of conceptions of teaching on improving university teaching, as well as their significance in doing so, vary from those that advocate changing conceptions as a necessary first step in the process of improvement to more recent views that characterize conceptions of teaching as merely artifacts of reflection on teaching. This paper explores this range of views, raises a number of questions about the current accepted views on the importance of conceptions of teaching development work, and challenges the current accepted wisdom in this important area.

Teaching development can play a critical role in ensuring the quality of teaching and learning in universities. However, a proportion of teaching development currently carried out and discussed in the literature is underpinned by a set of assumptions that may not be accurate. These assumptions are related to the part that university teachers' beliefs about or conceptions of teaching (COTs) may play in improving teaching.

This paper explores the assumed place of COTs in an attempt to help university teachers improve their teaching. Three assumptions underpinning the use of COTs in teaching development work are examined in detail and questions about each are raised. Through this examination, the central question about the place of COTs in teaching development is explored and deliberately questioned and challenged. The paper takes on the position of "devil's advocate" and, in seeking to challenge accepted wisdom in this area, presents arguments that are contrary to current widely accepted views about the place of COTs in teaching development and improvement.

The paper does not seek to argue that COTs are unimportant but to argue that it is timely to examine and challenge their often assumed primary position in efforts to improve teaching. In order that there is clarity about how COTs should be used to improve teaching and student learning, their precise impact and role in such improvement should be understood clearly. By taking a questioning and critical stance, this paper is a deliberate re-examination of our collective wisdom in the area of COTs.

Defining Conceptions of Teaching in Higher Education

In the context of the conceptions of teaching (COTs) held by school teachers, Pajares (1992) argues that the lack of a clear, agreed upon definition and terminology has impeded research in this area. The impediment stretches to educational research and practice in the higher education arena. Terms used here include conceptions, beliefs,

orientations, approaches and intentions but these terms are sometimes used interchangeably and, as Kember (1997) notes, definitions are often absent from the literature.

Pratt (1992) defines conceptions thus:

Conceptions are specific meanings attached to phenomena which then mediate our response to situations involving those phenomena. We form conceptions of virtually every aspect of our perceived world, and in so doing, use those abstract representations to delimit something from, and relate it to, other aspects of our world. In effect, we view the world through the lenses of our conceptions, interpreting and acting in accordance with our understanding of the world. (p. 204)

For the sake of clarity, in this paper conceptions of university teaching are defined as specific meanings attached to university teaching and learning phenomena, which are claimed to then mediate a teacher's view of, and responses to, their teaching context. If this claim of causal mediation is accurate, then there are potential implications for the practice of academic staff development. This paper explores this and other related claims.

Categories of COTs in Higher Education

On the basis his review of literature on COTs of university academics, Kember (1997) concluded that there was a high level of agreement between researchers about conception of teaching category schemes. He suggests that a synthesis of the research in the articles reviewed essentially puts conceptions into two categories:

1. teacher-centered/content-oriented
2. student-centered/learning-oriented

He further suggests that each of these two categories has two sub-categories or associated conceptions.

The teacher-centered/content-oriented category can be further divided into

- 1.1 imparting information
- 1.2 transmitting structured knowledge.

The student-centered/learning-oriented category can be further categorized as

- 2.1 facilitating understanding
- 2.2 conceptual change/intellectual development.

A fifth category/conception that links or bridges the two major orientations can be labeled “student-teacher interaction” (Kember, 1997; Kember and Kwan, 2000).

Broadly speaking, a teacher/content-centered conception of teaching is one where the teacher’s job is conceived of as knowing her subject and then accurately and clearly imparting that knowledge to her students. From this conception, says Watkins (1998), it is the students’ fault if the learning outcomes are unsatisfactory and specifically, students’ lack of motivation or ability is to blame.

Watkins (1998) argues that a student/learning-centered COT is one where high quality learning is viewed as “requiring active construction of meaning and the possibility of conceptual change on the part of the learners” (p. 20). From this student/learner-centered conception, it is the teacher’s role to facilitate and encourage such construction and development (Watkins, 1998).

Why Consider COTs in Teaching Development?

There are at least three implied or argued assumptions that have led to the current pre-eminence of COTs in teaching development and improvement work in universities. Each of these three assumptions is discussed below.

1. *The assumed clear, causal relationships between teaching conceptions, teaching practice and student learning.* Pajares (1992) notes there is an assumption that the conceptions teachers hold influence their judgements, which in turn, affect their classroom teaching behavior. Kane, Sandretto, and Heath (2002) suggest that research into university teachers’ COTs is grounded in the understanding that these conceptions drive teachers’ practices.

Many researchers argue further that the teaching practices that lecturers adopt based on their conceptions, in turn, affect the way in which students go about their study. For example, Gow and Kember (1993) claim to have found empirical evidence that adopting a predominantly transmission conception in teaching (as defined by Kember (1997) above) discourages students from adopting deep approaches to learning. A “deep approach” can be crudely summarized as attempting to make sense of content

while the less desirable “surface approach” can be similarly summarized as attempting to remember content (Gibbs and Coffey, 2004).

However, as Kane et al. (2002) note, Gow and Kember (1993) did not actually examine teaching practice and like many similar studies, assumed teaching practice from *espoused theories of action*, that is, from teacher responses to questions about their behavior in a teaching situation. As Kane et al. (2002) argue, an analysis of a teacher’s professed views should be supplemented by an examination of their actual teaching or *theories in use*, and of the relationship between what teachers say they do and what they actually do in teaching settings. Without such examination, the validity of teachers’ descriptions of their practice; of the assumed link between their conceptions and practice and of the assumed link between their practices and their students approaches to learning, are untested.

In another example, Ho, Watkins and Kelly (2001) argue that empirical research by Trigwell and Prosser (1996a, 1996b) has demonstrated that teachers’ COTs affect their teaching practices and their students’ learning. Specifically, Ho et al. (2001) claim that a lecturer who conceives of teaching as the transmission of information is likely to employ teacher centered strategies in order to operationalize that conception. She is likely to believe that she, as the teacher, holds all the knowledge and information and that it will need to be conveyed from them, as experts, to her students. On the other hand, claim Ho et al. (2001), a lecturer who conceives of teaching as helping students to develop their own understanding of material is likely to employ student centered strategies so that she can assist her students to come to this understanding.

However, the validity of the empirical research by Trigwell and Prosser (1996b) on which Ho et al. (2001) base their assertions has been questioned by a number of other researchers. Trigwell & Prosser (1996b) reported six conceptions describing teaching. However, as Kane et al. (2002) note, the methodology and the categorization of conceptions is inadequately described by Trigwell and Prosser (1996b) in their paper. Kember and Kwan (2000) have also raised concerns about Trigwell and Prosser’s (1996b) study, advising that caution should be exercised as the authors do not define their constructs and use labels to identify COTs that are very close to the *intention* component of the *approaches to teaching* that they also describe. Kember and Kwan (2000) go as far as suggesting that Trigwell and Prosser’s (1996b) claim to have established a relationship between teaching conceptions and teaching approach should be treated with skepticism.

On the basis of an academic staff development program using a conceptual change approach, Ho et al., (2001) found that six teachers who showed positive changes in their COTs also demonstrated

“significant improvement in their teaching practices as perceived by their students” (p. 163), and three of these teachers were able to “induc[e] a positive change in their students’ studying habits” (p. 163). On the basis of these findings, Ho et al. concluded that their study “provid[es] evidence that a development in teaching conceptions can *lead to* improvements in teaching practices and in student learning” (p. 165, emphasis added).

Ho et al. (2001) go further, claiming there has been a “recognition that genuine improvement in teachers has to *begin with* a change in their thinking about teaching and learning” (p. 145, emphasis added). They state that the modification of “teacher’s prior COTs...to one of facilitating student learning is required *before* student-centered strategies could be eventually adopted” (p. 145, emphasis added). However, these claims appear to be at odds with the empirical evidence available, including the studies and literature mentioned earlier (Gow and Kember, 1993; Trigwell and Prosser, 1996a, 1996b) which, in addition to having the methodological limitations outlined above that cloud the results, show no indication of a unidirectional relationship between conceptions and strategies with the former coming first.

In addition, the small sample size in Ho et al.’s (2001) study gives cause to exercise caution in drawing definitive conclusions. Further, Eley (2006) suggests that the conclusion of a directional influence from conceptions to practices is perhaps too strong a conclusion to draw given the methodology taken by Ho et al. (2001) in their study. As he points out, Ho et al. (2001) determine their study participants’ COTs by asking them general, open questions that lead participants to reflect broadly on past experiences. As Eley (2006) says, the responses derived from such reflections cannot enable conclusions about whether or not any COTs evident in the responses will be evident in later teaching.

Ho et al. (2001), like many other researchers in the area, did not actually examine teaching practice. Espoused theories of action are not necessarily the same as theories in action and since the latter are unknown in the Ho et al. (2001) study, it seems far-fetched to claim that they are driven by conceptions and then, in turn, drive student learning in particular ways.

As Kane et al. (2002) conclude on the basis of their review of the relevant literature, there is insufficient empirical support for the claim that there is a relationship between teaching academics’ espoused beliefs about teaching and their specific teaching practices. It is therefore not possible to confidently claim, as many researchers currently do, a directional influence from teaching conceptions to teaching practice to student learning.

2. *The assumption that teaching improvement depends on the existence of a student-centered conception of teaching.* Despite the doubts about the

validity of the methodology and conclusions outlined earlier, empirical evidence such as that provided by Gow and Kember (1993) and Trigwell and Prosser (1996b) has led to the assumption that improvements in university teaching must be underpinned by a particular conception of teaching that is likely to lead to high quality student learning outcomes. Literature in the area indicates an assumption that university teachers’ thinking must move away from a teacher/content-centered conception and toward a student/learning-centered conception in order that they would be able to improve teaching practices and student learning outcomes (see for example, Weston and McAlpine, 1999; Saroyan and Amunsden, 2001). Literature on school teaching development also indicates a common assumption that some form of change in teaching beliefs, attitudes and/or perceptions must first be initiated. It has been further assumed that this change will lead to changes in teaching practices which will in turn lead to improved student learning (Guskey, 1986). However, these assumptions are untested in higher education.

Kember (1997) suggests, “There is...an implication, which is often made explicit, that the conceptions [of teaching] towards the student-centered end of the continuum are superior” (p. 261). In terms of assisting teachers to improve their teaching, as Gibbs and Coffey (2004) intimate, if the ultimate aim of academic teaching development is to improve student learning, rather than to improve teaching *per se*, teaching development activities and approaches need to be oriented toward directing or encouraging teachers to be focused on student learning rather than on teaching performance.

Without doubt, it is preferable for university teachers to be focused on high quality student learning outcomes than not. But does such a *focus* necessarily mean they must hold a student-centered *conception* of teaching, and do so from the very beginning? In terms of teaching and learning outcomes, is it possible that being aware of and/or focused on students and their learning could be equivalent to holding such a conception? As outlined earlier, a conception is a set of specific meanings attached to university teaching and learning phenomena, which are claimed to then mediate a teacher’s view of, and responses to, their teaching context. Is it necessary for a teacher to hold a student/learning centered conception of teaching in order to be an excellent teacher? Is it possible that focusing on students and their learning while undertaking excellent teaching practice could be as effective in this regard?

It may be that a concern for personal teaching practices and focusing on student learning might be better seen as independent dimensions rather than as endpoints of a single dimension. Gibbs and Coffey (2004) provide empirical evidence that would point to supporting this idea. In relation to their research using the Approaches to Teaching Inventory to

measure COTs, Gibbs and Coffey (2004) suggest that “Teacher Focus and Student Focus are independent scales...not opposite ends of a single scale...and it is possible for a teacher to score highly on both scales at the same time” (p. 91). If they are seen as independent dimensions, this would suggest that teaching development work should aim to foster both, rather than assuming that one must necessarily precede the other.

3. *The assumed limitations of a skill-based approach to teaching development.* A third assumption behind considering teaching conceptions in teaching development work is the one that focusing on teaching skills has limited potential in terms of improving teaching and learning.

Ho et al. (2001) claim that a number of educationalists view as erroneous the assumption underlying many staff development programs that “providing tertiary teachers with prescribed skills and teaching recipes will change their teaching practices and thus improve their students’ learning outcomes” (p. 144). Summarizing the observations and research of Gibbs (1995) and Trigwell (1995), Ho et al. (2001) claim that the experience of many staff developers suggest otherwise: often, according to these authors, teaching development participants will “query the feasibility of the methods presented [and/or] defend the methods they are currently using” (p. 144). Ho et al.’s (2001) argument is that, given the lack of unquestioning acceptance of new skills and techniques by program participants, teaching development work must therefore go beyond skills and address COTs and *thereby* “bring about fundamental changes toward teaching excellence in tertiary teachers” (p.144).

It is not the facilitation of the development of teaching methods, skills and strategies that is in dispute – all teachers must have a repertoire of these in order to function as effective teachers. However, in order to develop an appropriate teaching repertoire, must teachers necessarily have an “acceptable” conception of teaching? Must such a conception come first? Is debating this essentially a case of debating “the chicken or the egg?”

If we assume for a moment that we can liken teaching conceptions to attitudes and teaching practice to behavior, the chicken/egg question may be usefully examined in light of a glance at the extensive psychological literature on attitudes and behaviors. In the lay world, it is widely assumed that attitudes drive behavior – for example, advertising companies spend extensive budgets based on the assumption that if they change people’s attitudes toward products, that will change their consumptive behavior. However, the enormous and growing body of psychological research indicates that human behavior is not that simple and that the relationship between attitudes and behavior is a complex one.

Research in the field of psychology suggests that if either behavior or attitudes change, the other will

follow (Myer, 1996). It is possible that if we change teaching behaviors (practices) to become increasingly student and learning oriented, the teaching attitudes (conceptions) may follow. There is as yet no proof that this will occur, but neither is there yet clear evidence that changing conceptions will necessarily lead to improved practice and/or and improved student learning.

Based on his study of teacher planning of specific teaching episodes, Eley (2006) argues that rather than evoking COTs, teacher thinking seemed to be more about contextually localized models of what students are likely to do. His study intended to look for evidence of a functional role for COTs in specific and individual teaching activities. He hypothesised that if there is a functional influence that comes from a conception of teaching, it might reasonably be expected to manifest in teacher planning and decision making about how to teach a specific concept in class. His findings did not support the notion that COTs are consciously evoked in planning for specific teaching episodes and he concludes that such conceptions do not necessarily play a functional role in such planning.

Eley (2006) concludes that “focusing on developing a conception of teaching, albeit a desirable one, and hoping for some sort of broad ripple effect provides no guarantee that such conceptions would in any sense be evoked, and thus have influence, during detailed teaching activities” (p. 21).

Further, extensive work with Graduate Teaching Assistants in the U.S. college system has led to the proposal that new higher education teachers tend to pass through a series of stages in their development as university teachers. Nyquist and Wulff (1996) argue that there are three broad stages of development for a university teacher. Beginning teachers, they argue, are concerned with issues related to themselves – what they should wear, whether the students will like them, how well they will fit into the role of teacher. This has been termed the “*self/survival*” stage. In the next stage, novice teachers begin to wonder about teaching methods – how to lecture effectively, assess learning and so on – the “*skills*” stage. The last stage is where they turn their attention from themselves and to their students and begin to wonder whether their students are learning – the “*outcomes*” stage. At least for new teachers, who are often those looking for teaching development, it seems that the development of COTs is generally less likely to occur in the earlier stages of their teaching career when they are focused on survival and skill development and more likely to happen in the later third stage when their focus shifts to students and their learning. Yet, arguably, despite the probable absence of a “desirable” conception beforehand, the teaching of many of these new teachers is likely to improve through the first to second stages.

It appears, then, that neglecting the skill-based approach to teaching development may be akin to disposing of the metaphorical baby *and* bathwater. Research and investigation that helps build and refine theory are crucial and empirical evidence derived from experiment or systematic observation and evaluation is a central part of testing such theory. There is, as yet, however, no clear empirical evidence that shows that changes to COTs must precede changes to teaching practice. Despite this, some researchers are claiming that changes to conceptions are a necessary first step to “genuine” (Ho et al., 2001) and “subsequent” (Saroyan & Amundsen, 2001) teaching improvement. Is this to say that aiming to improving teaching skills is not a valuable objective for teaching developers? There is a view that those new to university teaching (as well as those, arguably, new to focusing attention on their teaching even if they have been teaching for some time) pass through stages of development that necessitate a focus on themselves and their teaching and the acquisition of skills before they can begin to conceptualize what they are doing and why. However, developing teachers’ COTs is currently viewed by some, including Ho et al., (2001), Saroyan and Amundsen, (2001) and Weston and McAlpine (1999) among others, as a higher priority to providing teachers with classroom and related skills to carry out their teaching practice. Yet how can conceptions be enacted without teaching skills and practices? And how can changed teaching conceptions be evident in the absence of high quality teaching skills and practices?

The Current Dominance of the Constructivism Paradigm Underpinning Teaching Development

One argument for considering teachers’ conceptions in teaching development work is that the constructivist paradigm suggests that such consideration is essential and this paradigm is currently prominent in teaching development thinking. Constructivist epistemology is a philosophical position where learning is viewed as an active process in which learners construct new concepts or ideas for themselves (Blais, 1988). Teachers (of teaching development programs) try to encourage “students” in these programs to discover principles and ideas for themselves through active dialogue, negotiation and other similar methods. From this theoretical base, in order to change and improve teaching, teachers of development programs would need to engage their “students” in constructing and adapting new practices that are relevant to their context. Specifically, from a constructivist position, teachers, as students of teaching development programs, should be treated as active participants in the learning process who construct their own unique understandings of what is taught, based on what they already *know and believe*.

At its best, constructivism highlights the interaction between knowledge and beliefs. The argument that teachers’ beliefs about or conceptions of teaching are paramount in development work is currently justified by the constructivist position. However, what seems not to be equally emphasised currently in teaching development work is teachers’ knowledge – their repertoire of teaching skills, strategies and practices. A focus on beliefs without a corresponding focus on knowledge may represent a misunderstanding or simplification of the constructivist position. As Devlin (2002) has argued, from a constructivist view of teaching development, students of teaching should be encouraged to discover principles and ideas for themselves through teaching *practices* that are relevant to their teaching and learning context. That is, the development of teaching practices and reflecting on and thinking about those practices should occur together rather than in strict sequence with either wholly preceding the other. Beliefs about teaching cannot be used in development work without some method of operationalizing them into teaching practice.

While the constructivist paradigm currently underpinning teaching development work may offer some appropriate guidance and direction for this work, it cannot justify promoting teaching beliefs over knowledge or teaching conceptions over practice. Both are important, as the constructivist theory itself argues.

How Central Should COTs be in Teaching Development Work?

On the basis of his detailed study, Eley (2006) concludes that if there is no necessary functional role for COTs in detailed teaching planning, the implication for teacher development is a focus on developing particular practices within specific teaching contexts. As Eley (2006) puts it, “If we want a teacher to behave in specific, more ‘student oriented’ ways in a particular context, then we need to arrange for that teacher to practice those specific ways in that particular context” (p. 21).

There may be some limited empirical evidence that supports the validity of this suggestion. For example, Hativa (2000) and Devlin (2003) both developed and implemented customised interventions for individual staff exhibiting poor teaching effectiveness. The focus in Hativa’s (2000) study was specifically on problem teaching behaviors identified through a range of feedback and data collecting mechanisms. These behaviors were then targeted with specific modifications practiced by the teachers under close supervision from an educational developer. However, it should be noted that the sample size was small (two), which therefore limits the generalizability of the findings to those other than the teachers in the study, and that the educational developer also discussed with each participant their

beliefs and their potential negative impact on teaching and learning. The focus in Devlin's (2003) study was the way in which a single teacher's teaching behavior affected student learning underpinned by a broad intention to shift the lecturer's conception to a more student-centered one. This shift was undertaken through encouraging changes in teacher behavior and through a discussion with the teacher about shifting his focus from his teaching to his students' learning. In Devlin's (2003) study, the new behaviors were chosen, trialed, amended and continually monitored with the support of an educational developer so as to maximise the quality of the students' learning.

In both studies, the results showed improvement in the teaching behaviors targeted, as was expected given the strong emphasis on this aspect of teaching. Interestingly, the results of both studies also indicated subtle shifts in attitudes and beliefs about teaching toward more student-centered views. Two relevant questions here may be:

1. Did the teachers in Devlin's (2003) and Hativa's (2000) studies change their conceptions *per se*, or did they simply increase their focus on/orientation to students in their teaching practice?
2. If they did change their conceptions, did this necessarily occur before they changed their practices?

Neither study can provide answers to these questions.

Eley (2006) argues that the directionality of the relationship between teaching conceptions and teaching practices might be the reverse of what is currently widely accepted. That is, COTs may be the outcomes of teachers' reflective thinking about their teaching practice. McAlpine and Weston's (2000) work with exemplary university teachers similarly conceives of reflection on teaching as a "mechanism for improving teaching" (p. 382). Eley (2006) argues more specifically that "teaching expertise should be seen as based on the existence of a rich repertoire of highly context-specific teaching practices, which enable proficient, rapid and adaptive responses to a wide variety of teaching situations" (p. 22) and further that if teaching developers concentrate on developing such repertoires, conceptions may follow, serving as indicators of the existence of the repertoires. Eley is not the first to suggest such a model of teacher change. As early as 1986, Guskey posed a model in which changes in classroom practice precede changes in student learning outcomes and the evidence of the latter change brings about changes in teaching beliefs and attitudes.

However, Eley's (2006) suggestion that teaching developers should focus on developing repertoires of context-based practices as a *preferred* method of teaching development is speculative and further

empirical evidence to test it is needed before firm conclusions can be drawn. It may be that the development of context-based teaching practices that focus on their ultimate impact on student learning, and the development of COTs that focus on students and learning are two sides of the same teaching development coin and cannot sensibly be completely separated or prioritized.

Conclusion

Arguably, many teaching developers would agree that conceptions of or beliefs about teaching that focus on student learning outcomes are more desirable than conceptions or beliefs that focus on the teaching and/or content *per se*. Teaching development work that led to changing conceptions to more student/learning oriented conceptions would, therefore, probably be almost universally acceptable.

Two issues related to this overall objective in teaching development remain in dispute. These are the order of change and the best means for achieving change. In terms of the order of change, we really do not know from the available research evidence whether changes in conceptions must come before changes in practices; vice versa or whether changes in both conceptions and practice might occur together over a period of development and beyond in no fixed order. Because of the lack of clarity on this first issue, the second issue of the most effective and efficient methods for bringing about a greater focus on students/learning in teachers therefore cannot yet be determined with confidence.

The confusion in these related areas is highlighted by the current range of views on how to achieve teaching development. For example, Ho (2000) and Ho et al. (2001) advocate encouraging teachers to examine, confront and challenge their conceptions and argue this is a necessary first step to better teaching practice. Martin and Ramsden (1993) advocate gently building on the conceptions that teachers bring with them to development processes, suggesting that "the knowledge, skills, and the concepts must be integrated and reintegrated by each teacher during a slow process of gaining understanding" (p. 155). Devlin (2003) and Hativa (2000) provide some evidence that COTs may shift through coaching the application of teacher practices in student or learner focused ways in particular contexts. And Eley (2006) suggests focusing on developing skills/repertoires within specific contexts and noting whether changes to conceptions follow.

Perhaps one of the more promising models may be the non-linear model offered by Clarke and Hollingsworth (2002) where different paths are available to incorporate the "idiosyncratic and individual nature" (p. 947) of teaching development. These researchers advocate a model that builds on Guskey's (1986) model where change in teaching practice precedes change in student learning

outcomes, which leads to change in teaching beliefs. More specifically, Clarke and Hollingsworth (2002) argue that change occurs through mediating processes in the four domains of sources of external information and support, teaching knowledge and beliefs, professional experimentation and outcomes. As they put it, "This model recognizes the complexity of professional growth through the identification of multiple growth pathways between the [four] domains" (p. 950).

In their work on reflections on teaching, McAlpine and Weston (2000) acknowledge the importance of seeking evidence of a link between teacher reflection and student learning. The present paper has acknowledged a similar need for evidence in relation to the links between COTs, teacher practice and student learning in higher education. The need to explore further and more precisely whether, and if so in what ways, COTs affect teacher behaviors and how these behaviors affect student learning has been highlighted. Understanding in this area has been limited by empirical work of questionable validity as well as by underlying assumptions about the place and effects of COTs that may not be accurate and that this paper has challenged. Specifically, as this paper has argued, the pivotal and primary role of COTs in university teaching development that has often been assumed is open to question.

The challenge now for research around university teaching development is to determine more precisely the part that COTs play in the process of teaching improvement and, ultimately, in ensuring the quality of student learning.

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An Investigation into the Changes in Perceptions of and Attitudes Towards Learning English in a Malaysian College

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This paper reports on an investigation into the changes in students' attitudes towards learning English in a Malaysian college. The main focus of the study is to investigate the changes in attitudes towards learning English during the critical transition period from secondary school, where the medium of instruction is Malay, to college, where the medium of instruction is in English. Other factors like classroom and school environment, teaching methodologies, and the influence of home background were also considered. A sample of 100 students enrolled in a first level English course during their first semester in a Malaysian college was used for the study. Data were collected using students' weekly journals and interviews of students. Analysis of the data was done qualitatively using an interpretive approach. The findings revealed that there were differences in students' perceptions of and attitudes towards learning English in secondary school and college. Students' attitudes seemed more positive in college and they perceived the college social and classroom environment to be more conducive for learning English. The implications from the study suggest that the school social environment and the family background influence students' attitudes towards learning English.

In 2000, a special committee was established by the ministry of education in Malaysia to determine the reasons behind the steadily declining standards of English among students. The findings of this committee revealed many weaknesses in the education system most of them well known to educators and school administrators in Malaysia. Many Malaysian students enrolling in college for higher level courses after their Sijil Pelajaran Malaysia (SPM), the Malaysian equivalent of the British 'O'-levels examinations, experience difficulties coping with English as a medium of instruction. This decline in the standard of English in Malaysia was highlighted in media reports (Chok, 2001). This problem had been evident ever since the government decided to change the medium of instruction in schools from English to Malay in 1983. However, this problem only became critical in the early 1990's (Abdul Kahrim, 1991). Apart from the limited exposure to English in school, there are several other key issues like the growing disparity in competence in English among students and a lack of English competence among teachers that have also played a role in the decline of the language.

Currently, English is taught as a second language in Malaysia but it is more perceived by students as a foreign language. In fact, English does not play a part in their lives outside of school. Therefore, this study is interested in exploring how the school and social environments of Malaysian students could influence their perceptions of and attitudes towards English because such perceptions could influence their ability to learn this language. This study could provide useful information for others outside Malaysia who face similar situations.

Research by MacIntyre and Charos (1996); Williams and Burden (1997); and Williams, Burden, and Lanvers (2002) have concentrated on students' attitudes towards and motivation to learn a second or foreign language. However these studies used Western populations learning a second European language and the applicability of the results obtained to Malaysian students is questionable. There is little research on Malaysian learners' attitudes and perceptions of learning English. Prior to this, much research on Malaysian students has focused on factors like the influence of socio-economic backgrounds (Pillay, 1998) and reluctance to read (Pandian, 2000). According to Pandian, Malaysian students read only materials necessary to get their work done rather than reading for leisure. A recent study by Littlewood (2000) seemed to provide interesting findings on the attitudes of Malaysian students, but the study lacked much depth because it did not explain how the attitudes of these students influenced their learning of English. The study focused on students' attitudes in an English language classroom rather than student attitudes towards learning English.

The Nature of Learning Language

The perceptions of individuals about language learning, their motives for learning the language, the feelings they have of themselves, and their attitudes may influence how well they will eventually learn the language. These are all socially formed. In addition, learning takes place in a social context. Such learning involves a dynamic interplay among teachers, learners, and tasks involved (Williams and Burden, 1997). The

social nature of learning is also emphasized by Lave and Wenger (1991) who proposed the term *situated learning*. They argue that learning takes place within a social situation and depends on the situation even when there is no intended learning taking place. This study is informed by the tenets of sociocultural theory, which is concerned with how cognition and learning are shaped by the social and cultural contexts that surround the individual (Lantolf, 2000). In this theory, meaning is socially constructed as people engage in their world and interpret it. Exploring these notions in education, some researchers have focused on the social context in analyzing educational practice (Maybin 1994; Mercer 1995). In English language teaching, a number of studies adopted a sociocultural framework to look into various aspects of second and foreign language learning (Kramsch 2000; Lantolf and Pavlenko 2001). At the level of discourse, Gumpertz (1982) shows how social cultural conventions affect all levels of speech production and introduction. Fundamental to sociocultural theory is the view that learning is a collaborative achievement situated in the discursive interactions that take place in communities of practice (Lave and Wenger, 1991). The human mind is mediated, and language is a mediation tool in the learning process.

Williams and Burden's (1997) social constructivist model identified four key factors which influence the learning process – *teachers, learners, tasks, and context*. They note that these factors do not exist in isolation but are in a dynamic interaction. A teacher's perception about teaching and learning will often be reflected in the tasks they select. Learners will then interpret these tasks in the manner which will be most meaningful to them. When teachers and learners interact, their values, perceptions and attitudes will be reflected. The manner in which teachers behave in classrooms will reflect their perceptions and values. The way in which learners react to these behaviors will reflect their individual character and the feelings that the teacher conveys to them. Besides the influence of teachers on learners, the nature of the tasks will determine how this learning will be shaped. This context of learning includes the emotional environment like trust and belonging, the physical environment, the school environment, the cultural environment, and the social environment.

The influence of individual perceptions and attitudes on a learning situation is emphasized by Lave and Wenger (1991) in their social learning process called *legitimate peripheral learning*. Here the student is perceived as actively taking part in the learning process with constant guidance from the "master," which suggests that student attitudes and perceptions towards the learning process could be important in

determining how well they learn. They note that all learning is based on situations to which learners are exposed. In such situations, learners are not passive receivers of knowledge, but are involved in a process called *legitimate peripheral participation* where they initially learn from others more skilled than them.

Ajzen and Fishbein (1980) noted that attitudes exert a directive influence on behavior. An individual's attitudes towards something will influence his or her overall patterns of responses to it. According to Ajzen and Fishbein, the chief determinant to perform a particular behavior is an individual's intention. This intention is a function of two basic factors, the "attitude towards the behavior" and the "subjective norm." The subjective norm refers to an individual's perception of the social pressures put on him or her to perform the behavior in question. If there is a conflict between the two determinants, then the attitudes of the individual will determine the behavior to be exhibited. Gardner (1985) further supported the sociocultural influence in his *socio-educational model* of language learning, noting that "students' attitudes towards the specific language group are bound to influence how successful they will be in incorporating aspects of that language" (p. 6).

Gardner researched a number of factors influencing attitudes and motivation which were thought to influence second language learning. The results of his studies showed three major findings. First, the attitudes and motivation of an individual toward other cultures and learning the second language correlated with proficiency in the language; that is, positive attitudes and better overall motivation generally results in better proficiency. However, the greater predictor of success in learning language is the individual's attitude towards the language. Second, these attitudes will also determine the extent to which individuals will actively involve themselves in learning the language. They may use the language in their everyday conversations or when speaking with proficient speakers of the language to improve their command of the language. Third, the reasons behind individuals' learning the language may also influence success in it because they reflect differences in motivation. That is, if individuals learn a language for integration into the culture, are highly motivated, and have positive attitudes toward the learning situation, they may experience better achievement in the language (Masgoret & Gardner, 1999). More recently Dornyei (2001) stresses the complexity of researching constructs such as motivation because of the multitude of factors that are intertwined with it. For example, he talks of social versus personal motivation, and he stresses the challenge of constructing a definition that can encompass the various theories and manifold meanings carried by the concept "motivation."

The Present Study

Drawing upon the concept that language learning is social in nature and the importance of giving voice to students' perceptions of and attitudes towards learning a second language (Nunan, 2003), the current investigation was conducted using a qualitative approach.

The main research questions underpinning this study were:

1. What were the attitudes of students in college toward learning English when they were in secondary school?
2. What are the attitudes of these students in college?

The investigation was carried out in one of the branches of a college in the North of Malaysia with a student population of 2000 coming from all the states in Malaysia. The sample for this study consists of 100 students from the May 2001 intake who were enrolled in their first level English course during their first semester in college. These students were First-year Certificate and Diploma students enrolled for 2-year courses in business studies and computer science. All the courses offered are conducted in English, with the exception of certain subjects that are required to be in Malay. The first level English course focuses on helping students improve their grammar, comprehension, and writing skills. Each student has 4 contact hours per week spread over an 18-week period.

Methods

The research questions led us to the interpretive approach. Attitudes are often formed as a result of an individual's unique perceptions of things (Lefton, 1997), implying a need for an in depth and insightful analysis of the data obtained. The aim of this approach is to view reality as being socially constructed where the behaviors of individuals are being continuously interpreted and reinterpreted to give a meaningful explanation to behaviors usually within a particular context (Holliday, 2002; Radnor, 2002). The meanings obtained in this manner are actually conceptualized, temporary knowledge (Greene, 2000).

Design and Procedure

Two sources of data were used: student weekly journals and student interviews. The 100 students were asked to write on guided topics over a ten-week

period for their journals and a total of six students were selected from this sample to be interviewed.

The topics for the student journals were developed based on a review of relevant literature and discussion with the five English language lecturers at the college campus. An initial list of fifteen questions was adjusted until there was finally a list of ten questions. The ten topics on the weekly journals were piloted on 20 students participating in the study to check the consistency of responses. The purpose and significance of the study was explained to the students and their assistance was requested. Writing of the weekly journals was done over a ten-week period as part of their English course requirement. (See Table 1 for a list of the weekly journal questions). The students were asked to use a pseudonym when writing the journals. Any student not wishing to participate was given a chance to opt out of the sample group into another group. None elected to do so. There was a high rate of returns for the journals every week; the range of rates of return was from 95% to 100% each week.

The semi-structured interviews with the six students took place at the end of the semester to give more depth to the information found in the journals. The data from these interviews were incorporated into those obtained from the journals.

Analysis of the journals and interviews was done using the process of topic ordering, a term used by Radnor (2002) to describe the process of preparing qualitative data for analysis. Using this process the transcripts were analyzed inductively. The main categories were allowed to emerge from the data through repeated reading of the data. The transcripts and journals were read a number of times in order for the categories to become more evident. The final categorization of the data was checked by another researcher for consistency in the categorization of the data.

Participants

The sample taken for this study is only from one college in the northern region of Malaysia. Because the study was grounded in the interpretive approach, total objectivity and neutrality in the data analysis process cannot be claimed. We approached students' value-laden responses from our own understanding and definition of learning. We acknowledge our own subjectivity, which we managed by respecting the worlds and sensitivities of the participants in the research context (Denzin and Lincoln, 1994; Holliday, 2002). Even though the results may only be relevant directly to a Malaysian population, they could provide information relevant to other populations in similar situations.

TABLE 1
Weekly Topics for Student Journals

Week	Journal Question
1	When you were in secondary school, how were you taught the English Language? Explain some of the methods that your teachers used to teach you.
2	How did you like the manner in which English was taught to you when you were in secondary school? What did you like? What did you not like?
3	How much do you like using English? How much do you like English?
4	Explain how you feel about using English in your everyday conversation.
5	How do you feel about English now that this language is used to teach you? How did you feel about the English language during secondary school?
6	In what way do you feel that the English course you are attending is helping you improve in learning the language? Explain.
7	In what way could your English language classes be improved?
8	You have been in this course eight weeks. What sort of relationship do you have with your course mates and your English lecturer?
9	Describe a lesson you have enjoyed. Describe a lesson you have not enjoyed.
10	You are now toward the end of your English course. What do you feel about the course as a whole?

Results

It was found on initial analysis of the data that students' attitudes toward learning English seem to have changed since they left secondary school to study in college. In order to differentiate between students' attitudes during secondary school and in college, sentences in their journals with keywords and phrases like "before," "secondary school," "previous school," and "my school last time" were interpreted as referring to their secondary schools. While sentences with keywords and phrases like "here," "studying now," "in this place," and "in college" were interpreted as referring to college.

Students' Attitudes Towards Learning English During Secondary School

The analysis resulted in seven thematic categories that summarize student attitudes and experiences of learning English in secondary schools (see Table 2). Those categories are discussed in more detail next.

Dependence on teachers

Ninety-eight percent of the respondents wrote that they were dependent on their teachers to provide

them with all the necessary directions and strategies to learn English and they would seldom attempt to learn the language on their own. They seemed to perceive their teachers as authorities in the English language. For instance, one of them wrote:

When I learn English I usually wait for my teachers, who are the expert and authority in English, to teach me and help me learn the language.

Other statements by the respondents suggest that they also looked upon these teachers as giving them information about the language. The following excerpt illustrates this point:

I depend on my teachers to give me model essays to memorize so that I can use these to help me write my own essays. They should know what is good for me; they are the authorities in English. If I have a problem with my English I will go to my teacher for help.

This dependency on teachers probably arose from the structured approach that is used to teach these students English in secondary school where they were expected to follow closely directions and instructions from their teachers.

TABLE 2
Students' Attitudes Towards Learning English During Secondary School

Categories	Definitions	Percentage ¹
Dependence on teachers	Dependence on their teachers as authorities to give directions, information and strategies for learning English	98
Difficulty	View that English is a difficult language to learn	89
International language	Language is popular and widely used internationally	85
Dislike of speaking	Being unwilling to speak English	80
Lack of choice	Having no choice but learn English	75
Language anxiety	Experiences fear and/or anxiety when using or having to use English	65
Language being unimportant	English is not perceived as an important medium for communication	62

¹Percentage of students mentioning each category in their journals or interviews.

Difficulty

Eighty-nine percent of these respondents wrote that it was difficult to learn English, and they tended to link this to a dislike when learning it during secondary school. Some of them explained they had difficulty remembering vocabulary and understanding the grammar. For example Student BB said during his interview:

I have difficulty understanding English in school, I do not understand my lessons and I do not like the language because it is very difficult to become good in it.

A few respondents felt that the grammar and vocabulary was difficult to master as illustrated by:

The grammar and vocabulary is so difficult for me to remember and I find it is so difficult to learn the language in secondary school.

Others just felt that English was difficult to learn without further elaboration:

I feel that English is a very difficult language to learn.

These students seem to perceive their difficulties in understanding and learning English as something beyond their control; they seem to have an external locus of control. They could put less effort into learning English because of their perception that difficulty of the language was beyond their control

and extra effort would not help them improve. As suggested by Williams and Burden (1997), it would seem that students' perceptions of the content of what they are to learn could influence how much they will learn.

International language

A majority of the respondents (85%) wrote they had positive attitudes towards English and learning it because it is an international language. Many also wrote that they have to use English to communicate with people from other countries; therefore, they felt it was important to learn it. Two examples from students' responses are shown:

I like to learn English because it is an international language and I can use it to communicate with people from other countries.

I will have to use English if I visit other countries therefore I like to learn English because it is an international language.

In Malaysia, English is considered by the government to be an important second language to learn in order for the country to become developed and recognized internationally (Abdul Kahrim, 1991). Therefore, the attitude of these students towards English as an international language seem to be reflective of the role the government wants it to play in helping Malaysia become more globally recognized as a nation ready to meet the challenges of this century.

Dislike of speaking

Eighty percent of the students wrote that they were reluctant speakers of English. They perceived that they could learn the language better by listening to others speak rather than speaking the language themselves. Others wrote that they felt tongue tied whenever they had to speak English, and they perceived that they were able to express themselves better in Mandarin or Malay. For instance Student L during her interview explained:

I feel very tongue tied when I speak English. I cannot find the words to express myself so I would speak to my teachers and classmates in Malay or Mandarin.

On a similar note some of the respondents wrote:

I would be able to express myself better in Mandarin because I am more used to it in my daily life. When I use the language I do not need to think about what I want to say, it just comes automatically. But with English I cannot express myself well.

These students during secondary school may not have had language learning environments where they could feel safe learning from their mistakes in English.

Lack of choice

A majority of the respondents (75%) wrote they could not choose whether they wanted to learn the language because it was a compulsory subject in school. One of them wrote:

English was one of the many lessons I had to learn in school. I had no choice but to learn it. The teacher said it was compulsory for us to learn English.

Other respondents felt they were compelled to learn English:

I do not like English but I have to learn it because it is a compulsory subject in school.

A number of them wrote that they did not speak English in school but they had to learn it anyway:

I did not use the language in secondary school but I had to learn the language anyway.

They tended to have an external locus of causality (Rotter, 1966) over learning the language. Students may see learning English as beyond their control because

they are forced to learn the subject in school. Their success or failure may not be the result of the effort they put in but rather on the difficulty of the examination paper. Passing examinations would be one of the indicators that they have learned English in Malaysian schools. This finding also supports Williams and Burden's (1997) suggestion that the nature of tasks will determine how learning will be shaped.

Language anxiety

Sixty-five percent of the respondents wrote that they were afraid of making mistakes when speaking English. Many of them were also very anxious about being correct when they spoke English. MacIntyre and Gardner (1994) used the term *language anxiety* to describe the feeling of tension and apprehension when speaking a SFL. For example, one of the respondents wrote:

I am afraid of using the wrong words when speaking English, I may get the pronunciation wrong and use the wrong words. I am afraid to answer because I am not sure of what was said. I am afraid of making mistakes. I often repeat to myself or write down on a piece of paper what I want to say to avoid mistakes.

Another respondent wrote that she translated from another language before she spoke:

I do not like to speak English because I am afraid of making mistakes. I want to make sure that my sentence is correct before I speak in English. So I translate from Mandarin before I speak so that I do not make so many mistakes.

Similarly Tsui's (1996) and Liu's (1989) studies on anxious second language learners found that Chinese second language learners tend to be nervous when called upon by their teachers to speak in class. These students may rehearse what they want to say before actually speaking it as a strategy to avoid making mistakes, which could limit their ability to conduct a conversation in English. The language anxiety experienced by these students could be one of the reasons why they dislike speaking English.

Some of the respondents wrote that they had no confidence using or speaking English in secondary school. They did not feel they could speak the language well even though they had been studying English as a subject for eleven years in primary and secondary school. For example, one of them wrote:

I cannot speak English well and I feel I have no confidence when I speak the language. I try to

avoid having to use the language especially with people who speak it well. I also do not answer questions in class unless I have to.

Schunk (1991) and Bandura (1997) indicate that individuals with low self-efficacy tend to avoid a given task. In this case students wanted to avoid speaking and using English in their interactions because they lacked feelings of self-efficacy when using the language. This finding also suggests that legitimate peripheral learning (Lave and Wenger, 1991) takes place in the classroom, but the learning may not be what is targeted for students. In the Malaysian classroom students may have learned to be afraid of English from their observation of what happened to their classmates.

Language being unimportant

Sixty-two percent of the respondents wrote that they felt that the language was not important in secondary school, as they were not required to use it then. For instance Student LL during his interview said:

I actually did not feel that English was important in secondary schools. In secondary school I gave up on the language, as all my lessons were in BM (Malay). I felt that English was not an important subject and did not take it seriously.

Other respondents wrote that they were told English was important but did not feel its importance in secondary school:

Although my teacher in secondary school said it was important to learn English, I did not feel it was very important until College.

Some of the respondents felt that English was not important because their families did not speak the language:

I do not use it at home and I do not speak to my family in English and the language is so hard to learn. I felt it was not that important to learn the language.

This finding suggests that the context in which learning takes place is important, as this would make it meaningful for students. As suggested by Williams and Burden (1997) the influence of the external environment on students' perception of learning a language would be important in determining their success in learning it.

In sum, during secondary school, the students liked English because it is a popular international language. They felt that learning English would enable them to

make more friends and perhaps expand their social circle. They also appeared to be extrinsically motivated to learn English.

These students perceived the language to be difficult to learn which could explain their dislike of speaking and their language anxiety. Their perceptions that they had no choice about learning English and having to pass examinations further explain this anxiety.

The findings seem to reflect a mixture of both positive and negative attitudes. The reason for this could be the conflicting ideas about English these students are exposed to in Malaysia. There is evidence from the media that English plays an important part in the culture and society of Malaysia. For example, there are advertisements in English displayed on billboards along major roads. In contrast, support for English is absent in Malaysian schools where the medium of instruction is Malay. The difficulties these students have when learning the language and negative experiences when speaking it could result in developing negative attitudes. In other words the students could like the idea of learning English and becoming proficient in it but at the same time have difficulty with the process of learning it. However, the attitudes of these students towards English seem to change after they had been in college a few months.

Students' Attitudes Towards Learning English in College

The analysis resulted in five thematic categories, discussed next, that summarize student attitudes and experiences of learning English in college (see Table 3).

Liking English

Many of the respondents wrote that since they had been in college a few months they had grown to like the language. For example one of them wrote:

I can speak English better now and I think I like the language. I feel that I want to learn more English because I have to use it in my other classes as well.

The students had to use English in other classes as well. They felt more interest in learning the language as shown by the statement:

I can speak English better now and I think I like the language. I do not only use English during my English classes but also Maths and computer science as well. I feel that I want to learn more English.

TABLE 3
Students' Attitudes towards Learning English in College

Categories	Definitions	Percentage ¹
Liking	Liking the language and wanting to learn it	80
Confidence	Being more self-assured when using English	60
Proactive facilitation	Wanting to take a proactive approach in strategies used to learn English	58
Respect	Increases potential of being admired, respected or envied by others	54
Difficulty	View that English is a difficult language to learn	40

¹ Percentage of students mentioning each category in their journals or interviews.

Other respondents wrote they liked English better as they had had to use it more in College:

I like English more now that I have the use more of the language in College.

In college, students are able to experience a wider usage of English in their learning environment. Instead of only experiencing the use of this language during English language lessons, they are using it in other subjects and interactions with their peers and lecturers as well. This would enable them to get more exposure to English and obtain a better understanding of how the language is used.

Some of them felt that it was not as difficult to learn the language as they had thought during secondary school and they appeared to express more interest in the language compared to when they were in secondary school. The reason for this change in attitude could be the influence of the learning environment around them, which encourages the use of English. This could be because they have to use more of the language to learn and to communicate. Some excerpts from the respondents are as follows:

I have more friends that I can speak to in English. I am getting better at it. I am also getting more interested in the language now.

I am more interested in learning English now since I have been in College for some time. I think it is not as difficult as I once thought it was.

Confidence

More than half of the respondents (60%) wrote they have become more confident speaking English since they had been in college. They felt better about

speaking to their friends and lecturers in English. Although many of them wrote that they still had problems with English, in general they felt more confident speaking the language. Some of excerpts from the respondents are as follows

I feel more confident about using English now that I have been using and learning the language for some time.

I think I can speak better in English and I feel more confident about the language.

Some of the respondents wrote that they had positive attitudes towards English and learning it in college because they felt that ability to speak English well would earn them the respect and admiration of their peers. With this ability, they could project themselves as legitimate speakers of English (Higgins, 2003; Norton, 1997). Some of the excerpts illustrating this are as follows:

Using English improves my social status. I think others will look up to me if I speak in English. I know I look up to people who speak English well.

I learn English for the sake of my career and it will also enable me to have a better social standing with me knowing the language. Someone who speaks English seems to be more educated.

An environment that is supportive and accepting of students' efforts to speak English and encourages speaking of the language helps their self-confidence. Ruble, Eisenberg and Higgins (1994) argue that individuals will use social comparisons to learn social norms and the appropriateness of action. In college, it

is an accepted norm for students to speak English to their lecturers and peers compared to secondary school where it was more acceptable to speak in Malay or Mandarin. This social acceptance of English as a medium of communication and instruction in college probably leads to enhanced self-concepts and belief in their ability to speak the language.

Proactive facilitation

Fifty-eight percent of the respondents wrote that they used proactive facilitation techniques, a term for describing techniques used to increase the ability to learn a second language by using and practicing it (Slavin, 1986). Respondents wrote that they practiced speaking the language with friends and others who were proficient in the language in order to become fluent in English. Further, they wrote that they had taken the initiative to speak more English to friends and the responsibility on themselves to learn the language. Using such strategies seems to reflect the characteristics of good language learners proposed by Wenden (1987). The following excerpt illustrates this point:

I want to practise English more and I am not afraid to try speaking the language now. I will speak the language until I become proficient in it.

Respect

Fifty-four percent of the respondents wrote that they wanted to learn English because they felt that others would respect them. They felt that it improved their social status. Excerpts of what they wrote are as follows:

I am respected by my peer when I use English. I feel better about myself when I speak English now.

Now that I am in College I like to use English because I seem to be more respected by others.

It must be noted that this category was not found among the students' attitudes towards learning English during secondary school. They do not appear to perceive the use of English as a means of improving their social status during secondary school, possibly because English was seldom used outside the language classroom unlike the situation in college.

It was interesting to note that some of these students wrote that they learned English to improve their own social status rather than to bring pride to their families, which may be expected for someone from the Chinese culture. For instance Student KK explained during her interview:

I learn English for my own benefit and not for the sake of my family. I think that people who speak English well appear more educated and have better social status.

This finding further suggests that these students are not socially motivated to succeed in English because it will bring prestige and benefits to their families or social groups as suggested by Kurman (2001) and Markus and Kitayama (1998). In contrast, they seemed more interested in succeeding in English for their personal achievements and prestige, which supports research by Littlewood (2000) on the attitudes of Asian students towards the English language. His research indicates that Asian students may enjoy learning collectively, but they had individual ideas of how the groups should be organized to bring about the most learning for their own success.

Difficulty

Forty percent of the respondents wrote that learning and using English was still difficult for them in college compared to 89% in secondary school. They explained the difficulties they still had with the grammar and vocabulary of English. For example one of them wrote:

The grammar and vocabulary is so difficult for me to remember and I find it is so difficult to learn the language although I have been studying using the language in College.

The percentage of respondents finding English difficult to learn had decreased considerably in college when compared to the figures in secondary school. This was probably due to the influence of the learning environments in college, which encourage and require the use of the language. This could be explained by Lave and Wenger's (1991) legitimate peripheral participation. Students' perceptions of English were influenced by teachers who spoke and taught in the language. More exposure to the language could have lessened the apprehensions of these students. Students who still had difficulty with English could be experiencing problems adapting to the learning and social environments of college. These students may be unwilling or unable to adapt to an environment that required them to use English because of certain prejudices against the English language and its culture, low self-concepts, or low self-confidence. This supports Williams' (1994) and Williams and Burden's (1997) suggestion that learning a second language not only involves the learning of a set of grammar or system of rules but also involves an alteration of the self-image,

cultural, and social behaviors as well. Essentially learning English for these students would involve an alteration of the makeup of the whole person.

Conclusion

The results show a change in the attitudes of these students from when they were in secondary school to when they were in college. Attitudes towards learning English seemed to be more positive when they were in college most probably due to environments that encouraged and required the use of English for communication and learning. The results support the finding of Ajzen and Fishbein (1980) that attitudes exert a directive influence on the behavior of individuals. In general, the students appeared to have increased their self-confidence and gained more confidence when speaking the language in college. There also seemed to be more social acceptance of English among these students. This seemed to reflect the findings of Gardner (1985) that positive attitudes and overall better motivation resulted in better proficiency. There were still a number of them who found the language difficult. It is expected there would be some individuals with such attitudes as learning a second language depends on an individual's aptitude towards the language. However, it is beyond the scope of this paper.

The findings of this study suggest that Malaysian students on the whole do not have enough exposure to English. Many may have poor attitudes towards the language because they do not understand the culture or the nuances of the language. The language is perceived as a necessity for survival in the Malaysian society. Students learn the language because they have to, not because of a love and interest for it. The cause of this attitude could be the result of poor fundamentals in school and lack of a supportive sociocultural environment. It should be noted that students lose interest in studying, especially English even in primary school because of low self-esteem, poor self-confidence, and a lack of motivation to learn from teachers. The pedagogical implications would be to work toward a change of perceptions of Malaysian students. They need to see learning English as fun and interesting, and this can be achieved by creating a positive learning environment. These findings were similar to those found by Zamani (2002). A change of the manner in which English is taught to students could go a long way here. A de-emphasis on examinations and tailoring classes to meet students' needs would be necessary if there is going to be a change in the way English is perceived by Malaysian students. In all, a revamping of the method of delivery is needed. Students need to be encouraged to speak English both in and out of class.

At the same time they need to be exposed to the English culture to help them understand the language better.

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The Benefits of Service Learning in a Down-Turned Economy

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With businesses struggling for resources during economic downturns, traditional business student internships were becoming more difficult to develop. One business school extended its experiential learning opportunities with specific management projects in community small business, healthcare, education, and non-profit organizations. The on-campus service learning center provided project development, logistical support, and assessment for forty-five business students to participate in thirty-eight on-site, Human Resource Management projects. Means and standard deviations for self-report, end-of-semester surveys were determined for six Likert-scale items that measured the students' satisfaction with the project experience, and percentages were calculated of students who indicated specific personal and intellectual benefits derived from the projects. Most students reported favorable experiences with these non-traditional learning sites. Student projects developed management career choice information through the on-site application of their practitioner skills. They also benefited from their classroom reflections and interactions in sharing their problems, insights, and outcomes among their classmates. Students indicated they felt increased self-confidence, more comfortable about entering the working world, and more awareness of the linkages between the business and community service worlds. Through service learning, students gained experience in leadership, scholarship, and citizenship to become better members of their communities despite an economic downturn.

With the declining economy of the early twenty-first century, the US economy was losing jobs "across a variety of sectors, including manufacturing, business, professional services, and technology" (Gavin, 2003, p. C1). After experiencing difficulties in developing business internships and co-op positions during this recent down-turned economy, one northeastern college sought to incorporate service-learning projects and reflections into a human resource management (HRM) course to offer practical experience for students to be more competitive and employable upon graduation. Contrary to other community service/campus partnership programs, which can close during an economic downturn (Kezar, 2002), the college's service-learning center has helped students gain résumé-rich experiences at non-profit organizations that suffer from funding and other resource shortages. These management-focused service projects helped student develop and apply their analytical skills while contributing to and reflecting on their service to the College and the non-profit organization.

Unlike the more traditional HRM internship experience, which often involves a more formal commitment of organizational resources through a broad, management development, supervised program, service learning in HRM can be designed to focus on individual projects within the context of serving the mission of the organization. Therefore, service learning can involve fewer financial resources for the organization yet still allow short-term organizational interaction and learning for students and the organizations.

Service Learning

Bringle and Hatcher (1995) defined service learning as a

credit-bearing educational experience in which students (a) participate in an organized service activity in such a way that meets identified community needs, and (b) reflect on the service activity in such a way to gain further understanding of course content, a broader appreciation of the discipline, and an enhanced sense of civic responsibility. (p. 112)

Thus, as defined, service learning involves the purposeful integration of thought and practice, of theory and real life. These "non-traditional educational experiences connect students' cognitive learning inside the classroom with their affective learning in the lab, on the job, or at the service learning site. The instructors and mentors involved begin to shape or enhance young adults' sense of professionalism in their fields well before they leave the campus" (Steffes, 2004, p. 46). It is active experiential learning that allows students to develop academically by learning to think critically about their experiences in order to make connections to their class work. As such, this method offers opportunities to students to learn within, not simply about, real work environments, which can address the need of business students to gain additional breadth and engagement as articulated by Porter and McKibben (1988). Furthermore, this external to the classroom

learning incorporates Kolb's Experiential Learning Model (Kolb, 1984) identifying four components related to learning: concrete experience, reflective observation, abstract conceptualization, and active experimentation (p. 38). Students can spend at least 20 hours per semester on-site to benefit from on-site supervision and training, to connect classroom content to the work site, and then to reflect and discuss their on-site experiences back in the academic setting (Gray, Ondaattje, Fricker, & Geschwind, 2000; Rama, Ravenscroft, Wolcott, & Zlotkowski, 2000). This model "provides a powerful framework...to help a student explain and describe, both cognitively and affectively, his[her] lived experience working in a soup kitchen versus reading about a soup kitchen in class" (Steffes, 2004, p. 46).

Incorporating service learning as an integral element of a course has been recommended (Howard, 1998; Eyler & Giles, 1999; Weigert, 1998) and appeared to offer better student outcomes (Astin, Vogelgesang, Ikeda, & Yee, 2000). Others have supported expanding curricula to integrate technical, personal, and broad-business skills, for example, a SWOT Analysis (Rama et al., 2000). Moreover, student motivation has been increased, leading to increased learning, by involving students in real world-types of activities (Bryant & Hunton, 2000).

Service experiences can give students a context within which to place course content, which increases the quantity and depth of their understanding. In particular, the complexity of real-world projects can help students become more open to uncertainty, recognize greater complexity in the problems they analyze, think strategically, and use learned material in new ways....[D]uring S-L experiences students may encounter people from diverse backgrounds who hold different points of view. Interfacing with such people can challenge students to reconsider or reaffirm their own perspectives, increase their understanding of other viewpoints, and contemplate a wider range of possibilities. (Rama et al., 2000, p. 660, 665)

Other service-learning outcomes have indicated students have improved their higher order thinking skills, including greater understanding, better communication, awareness of other perspectives, problem solving and decision making, and linking course material to outside work settings (Eyler & Giles, 1999; Hamner, 2002). A variety of these outcomes are relevant for business students who can develop greater personal insights and knowledge concerning the various managerial skills that will be important for their subsequent success in the business world. Condensing the primary research of Eyler and Giles (1999), Steffes

(2004) presented the major outcomes of service learning as:

- Increased sense of citizenship (values, skills, efficacy, and commitment to social responsibility);
- Development of stronger analytical and problem-solving skills;
- Enhanced personal development (self-knowledge, spiritual growth, finding reward in helping others);
- Increased leadership skills;
- Greater cultural awareness and tolerance;
- Enhanced social development skills;
- Improved interpersonal development (working with others, communication skills). (p. 49)

Other studies have supported service learning contributing to improvements in self-confidence and self-esteem, ethical development, skills, professionalism, motivation and purpose, moral sensitivity and reasoning abilities (Conrad & Hedin, 1982; Jacoby, 1996; Kezar & Rhodes, 2001; Madsen, 2004). Furthermore, these student opportunities can lead to increased self-efficacy, the confidence "in their own ability to act and make a difference, which in turn can increase their leadership skills (e.g., willingness to be socially proactive, to believe they can influence change, to exercise effort to achieve change, and to anticipate the consequences of their actions)" (Rama et al. 2000, p. 673).

Campus Service Learning Center

Service learning also fit well with the educational mission of the college curriculum, with its "three principal aims: (1) to develop in students a coherent understanding of the world, (2) to engage students in active learning, and (3) to develop students' academic skills in analysis, synthesis, and judgment" (Merrimack College Catalog, 2004, p. 12). Furthermore, the business school recently adopted general learning outcomes that included critical thinking skills (problem identification and decision making), communications and technology, cultural diversity understanding and flexibility, and ethical reasoning, all of which can be supported by these service-learning projects and sites.

In response, the director of the service-learning center created discussion opportunities to educate faculty and students about the advantages and disadvantages associated with conducting service-learning projects in conjunction with classroom learning activities. Their anecdotal list (see Table 1), while unscientific, nevertheless was derived from and supported by comments from prior students and faculty who participated in service learning. The list offers

face validity to service learning, but more importantly, it strikes a responsive chord as a starting point for inviting new service-learning participants, faculty and students alike. The campus service learning center further assists faculty members in identifying placement sites, coordinating projects, transporting students to sites, tracking student hours and other administrative functions, and conducting the evaluation process and compiling the evaluation results. Evaluative processes have included reflective journals, service portfolios, debates, presentations, and/or research papers.

Human Resource Management.

Human resource management is a staff service function, providing service (a) to all organization employees for employee benefits, training, performance appraisal, recruiting and selection, labor relations, and more; (b) to executive management through strategic input regarding staffing assessments and planning, legal compliance issues, Quality Management programs, employee wellness programs, and more, and (c) to the organization's respective communities, promoting organizational culture within as well as promoting a variety of citizenship and social responsibility actions across geographic, sociopolitical, industry and other constituent communities. With this service orientation, HRM inherently presents a variety of developmental opportunities for students interested in combining the tenets of service with the skills of business.

Furthermore, like other areas of business (e.g., sales and marketing, finance and accounting), HRM skills are equally necessary and applied across different organizational sectors. While the context for application may vary among for-profit, non-profit, government, education, healthcare, and other sectors and industries, the general skills to be employed are remarkably similar across these different organizational contexts. For example, regardless of context, organizational training should involve the same systematic development through needs assessment, instructional format, instructional delivery, and evaluation. Similarly, performance appraisal for all organizations should (a) be able to validly and reliably distinguish among employee behaviors and productivity, and (b) differentially reward such employee behaviors and organizationally-related outcomes. Thus, business skills are easily transferred to and among other sectors, and therefore, skill development and application are similarly transferable across sectors. The focus, then, is more to bring applicable skills to a broad host of application sites, rather than limiting the application to a few specific hosts in one sector.

TABLE 1
Advantages and Disadvantages of Service Learning
(Anecdotal)

Advantages	Disadvantages
1. Students able to incorporate their practical, on-site learning with their academic study	1. Requires extensive coordination by the Service Learning Center
2. Some students may find practical experience more educational than their classroom study	2. Expands obligations of faculty who must take into consideration an extra layer of communication between the students & sites
3. Provides a sense of achievement for the student	3. Semester-length projects leave little time to adjust project should unforeseen events delay or eliminate a project and/or service learning site
4. Provides knowledge and confidence to enter the "real world"	4. Students often resent mandated service projects
5. Increases student's ability to work and learn independently	5. Difficult to balance students time commitments and needs of placement sites
6. Develops functional skills – communication, assertiveness, problem solving	6. Communication failures between sites and students
7. Creates better relationships with faculty	7. Students and faculty must leave their "comfort zone" to address unpredictable circumstances
8. Allows insight into personal strengths and weaknesses	
9. Creates a positive attitude toward academics—enriched classroom learning, application of classroom knowledge	
10. Creates a positive attitude toward the College	
11. Meaningful projects that connect to themes in class; teaches reflection skills	
12. Exposure to new experiences – urban centers, diversity, and other challenges	
13. Assists students in their career search – eliminating choices and changing ideas	
14. Provides students with résumé building experiences	
15. Students learn about the business world – proper dress, office behavior, responsibility	
16. Civic Engagement – students become more likely to volunteer in the future by being more sensitive to others	

Service Learning Capstone Course

Seeking these expanded student learning opportunities and outcomes, a traditional senior-level, strategic management capstone course was developed to integrate service learning and human resource management content into applied, community settings. Individual and pairs of students addressed contemporary human resource management topics affecting organizations, industry, government, and/or society in general. These HRM-focused projects and on-site experiences were then augmented by critical reflection and analyses of these experiences through classroom discussions and presentations. The course incorporated student and instructor-led classroom, seminar-type discussions and exercises, as well as on-site organization activities and information gathering, and student presentations to faculty and organizational leaders. Students attended ninety-minute class sessions twice weekly, and they spent approximately three hours per week at the organizational site for twelve weeks during the semester.

In addition to the general learning outcomes described earlier, specific outcomes intended for this course included helping students (a) interact with human resource professionals in organizational settings, (b) increase their awareness and understanding of the dynamics involved in working effectively in groups and individually in organizational settings, (c) develop a comprehensive understanding of current human resource issues, focusing on a specific HRM topic within an organization, and (d) integrate tools and information from across the curriculum towards identifying, analyzing, and solving human resource issues and problems.

The course began with the campus service-learning center presenting the concepts of service learning and how these specific human resource management projects would be conducted at a variety of non-profit, for-profit, and government organizations. Student orientation to their service-learning projects included a discussion about the service mission of the organization, and the need, the challenges, and the value of these organizations.

Students then completed an interest sheet (see Figure 1) in which students ranked their top three areas of interest in human resource management. In addition, students completed an expectations sheet (see Figure 2) with open-ended questions so students could more fully address specific interests, issues, and concerns about types of organizations, types of projects, and any special considerations needed. As much as possible, students were then assigned organizations and HRM project areas that matched their stated interests.

Thus, the learning in service learning occurred in multiple, reinforcing components. Students first

learned the mission and the roles of the service provided by the organization, and then they experienced these mission and roles. Next, students learned the content for their HRM-context project, including how this project would serve the organization in meeting their service mission. Finally, student learning occurred as they returned to the classroom to share their experiences and perspectives through both informal discussions and formal presentation. These classroom sessions allowed students to learn from each other and to reify their experiences into a framework for retention and application.

Student Assignments

Graded assignments and weights for each assignment included:

- 1) a mid-term presentation and report (25%),
- 2) an end-of-semester presentation and report (40%),
- 3) a take-home final examination (25%), and
- 4) classroom participation and on-site, organizational professionalism (10%).

The mid-term presentation was designed for students to educate each other about their service-learning organizations and human resource projects. Students discussed their service-learning organization, addressing its mission, the type of service they provide, their population being served, the organizational structure, and organizational history. They also discussed their experiences in providing service to the target population, as well as their experiences in touring and working at the organization. Lastly, they gave a brief description of the HRM project they were developing.

In contrast to the more general organizational information presented in the mid-term presentation, the students' end-of-semester presentation focused specifically on their human resource project. Students were given an optional format and the content to be addressed in the presentation (see Figure 3). This focus included an introduction that briefly restated the service learning organization's mission, products and/or services provided, its history (e.g., when and why developed), and organizational form, geographic area, target market, customer needs and profile, and organizational culture, as well as general information about their human resource management function and environment.

The main elements of this final presentation, however, addressed their service-learning project. Students discussed the goals and expectations of their project, and how they identified their progress and learning objectives achieved, their individual and the

FIGURE 1
Service Learning Project
OS 413A
Service Learning Project

NAME _____

Due: 9/5/03

Please rank your five highest choices, with 1 being most highly desired, 2 being next most highly desired, etc. These results will be tabulated to determine group composition. Every attempt will be made to place students in one of their three most desired areas.

<u>TOPIC</u>	<u>Chapter*</u>	<u>RANK</u>
EEOC/Legal	2	_____
Planning	4	_____
Selection	5	_____
Training	6	_____
Career Development	7	_____
Performance Appraisal	8	_____
Compensation/Incentives	9-10	_____
Benefits	11	_____
Safety and Health	12	_____
Labor Relations/ Collective Bargaining	14/15	_____
International HRM	16	_____
Work Systems	17	_____

* Used as a reference: Bohlander, G., Snell, S., & Sherman, A. (2001) *Managing human resources* (12th ed.). Cincinnati: South-Western College Publishing.

organization's satisfaction with the project, and then, specifically, their relationship to HRM in terms of their functions and specific activities. Did their outcomes meet their expectations? What, specifically, did they learn? What worked? What did not work? In their conclusion, students offered any recommendations to improve the project, the student's role in the course, or the course in general. Finally, at the conclusion of the course, the campus service-learning center conducted a written exit survey with all service learning students to further assess student's overall performance including participation, communications skills and commitment.

Service Learning Projects

Whereas most traditional internship programs have involved businesses in the for-profit sector, service-learning projects can encompass organizations from a variety of non-profit, government, healthcare, and education settings, as well as for international corporations and local businesses in the for-profit sector. As presented in Appendix A, human resource management students in the Girard School of Business and International Commerce at Merrimack College conducted service-learning projects with non-profit

FIGURE 2
Expectations for Service Learning

Discuss the type of organization and/or industry you are most interested in, and why:

Discuss other types of organizations and/or industries that would be appealing to you:

Having listed on the prior page the five areas of HRM in which you would choose involvement, discuss the reason(s) these areas are of interest:

Any special considerations that should be included in determining your Service Learning Placement?

FIGURE 3
Service Learning Paper/Presentation
SENIOR SEMINAR, HUMAN RESOURCE MANAGEMENT
MG 413, SPRING 2004
SERVICE LEARNING PAPER/PRESENTATION

The final deliverables for this course are a paper 7-10 pages in length and a presentation of 10-15 minutes. The presentations will be conducted during the last three class meetings, and the papers will be due on or before April 26, 2004, at 5PM.

The presentation should mirror the paper, although likely in less detail, and could use the following outline as a possible format, although students are encouraged to develop alternative formats to best fit their organizational setting:

- A. Introduction
 - Organizational Mission
 - History – why developed, when, etc.
 - Type of organization: sector, geographic area, customers served
 - Product(s)/service(s)
- B. Organizational Analysis:
 - Market
 - Customers
 - Culture
 - Human Resource Management
- C. Service Learning Project
 - Goals, expectations, measure?
 - Relationship to Human Resource Management
 - Activities, functions
 - Outcomes: meet expectations?
- D. Learning
 - What you learned, what worked, what didn't
 - Recommendations

Sections A and B should be very brief, as they would mirror your mid-term presentation, and are included here only as an element of continuity. Section C should be your primary focus, telling us about your HR project: why it was developed, what you did in the project, what were the outcomes, how it changed/helped the service learning site, etc. Finally, Section D is your own reflection: what you accomplished for yourself, what you learned, how you feel you grew, what you would do differently, etc.

organizations (e.g., American Red Cross) healthcare (e.g., Caritas Christi Health Care), governmental entities (e.g., Massachusetts Consumer Protection Agency), education organizations (e.g., Council on International Education Exchange), and small, local businesses, as well as other larger, multi-site, regional and international corporations (e.g., Gillette, Phillips Medical Systems).

In addition to crossing a variety of settings, the HRM projects also focused on a cross-section of human resource topics (Appendix A). For example, projects involved compensation surveys, orientation and other organizational training programs, employee handbooks related to organizational missions, and the strategic management of a merger and possible resultant layoffs in a business setting. Thus, regardless of the students' service-learning setting in big or small business,

government, education, or healthcare, the topics of their service learning projects were remarkably consistent, thereby indicating the broad applicability of their human resource skills across a broad spectrum of organizational settings.

Student Outcomes

These service learning projects and organizational settings created the context for the end-of-semester, service-learning, center-administered, self-report student satisfaction survey results related to their experiences. Although the sample size remained somewhat small, approximately 45, due to the newness of the recently instituted service-learning format in the human resource management seminar, the results were nonetheless instructive, directive, and highly

encouraging regarding students' value and satisfaction related to their experiences.

Two principal indicators involved the students' perceptions about the educational value of the experience, and how well they were able to incorporate their practical, on-site learning with their academic study. The first measure used a three point Likert scale (1 = not as educational, 2 = as educational, 3 = more educational) to assess the perceived educational value of the on-site service-learning projects relative to the classroom work. Students' overall mean assessment of the educational value was 2.27 (SD = 0.69, $n = 44$), as 86% felt their on-site experience had been *as educational* or *more educational* than their classroom work.

The second item measured the students' perceived abilities to incorporate their practical, on-site learning with their academic study. Using a five-point Likert scale (1 = inadequately to 5 = very adequately), students' overall assessment of their ability to incorporate their on-site learning with their classroom learning was 3.63 (SD = 1.18, $n = 43$), with 56% perceiving they were *very adequately* or *more than adequately* able to incorporate their learning across educational settings and 42% perceiving they were *somewhat adequately* or *adequately* able to incorporate their learning across educational settings.

In addition, students felt their investment of intellect, effort, and time had been valued and productive. Using a four-point Likert scale (1 = poor to 4 = excellent), students' overall assessment of their service learning experience was 3.38 (SD = 0.89, $n = 45$), with 87% rating their experience as *excellent* or *good*. Beyond rating their experiences positively, students also rated their experiences, on the same 4-point Likert scale, as being meaningful ($M = 3.32$, SD = 0.83, $n = 44$), as gaining acceptance ($M = 3.42$, SD = 0.76, $n = 43$), and providing recognition ($M = 3.48$, SD = 0.74, $n = 42$). Thus, regardless of the student's organizational setting, the overwhelming majority of students felt their service-learning project experience had been valuable.

Intellectual Outcomes

Students also identified other possible benefits from a list provided in the evaluation form (see Table 2). Using the typology of Rama et al. (2002), that categorized service learning outcomes as either intellectual or personal, students simply check-marked those benefits they perceived applied to them. Students were also provided the opportunity to add anecdotal comments. These individual responses encompassed a broad range of both intellectual and personal outcomes that included both anticipated and surprising outcomes.

Intellectual outcomes were defined as "cognitive

competencies, including knowledge of textbook content, relationship of [business] knowledge to the business world, and critical thinking skills" (Rama et al., 2002, p. 660). Among these perceived intellectual benefits (see Table 2), over 70% of students felt their service learning experience had led to improved "development of functional skills - communication, assertiveness, problem solving." Also, approximately 40% of students indicated they had benefited intellectually from the "development of occupational skills", the "acquisition of specific academic skills and knowledge", the "enriched classroom learning", and the "application of classroom knowledge".

Personal Outcomes

In addition, personal outcomes were defined by Rama et al. (2000) as "personal demeanor, leadership, and communication [and] values-related competencies...including honesty and ethical conduct, ability to analyze the impact of potential actions, and ability to promote constructive change" (pp. 672-673). These competencies increased students' awareness of issues as well as their self-confidence and self-efficacy in using their skills effectively (Rama et al., 2000). Students liked the experiential program (76%), followed by other positive, personal outcomes related to their academics (faculty, 53%; college 44%) and their community (44%). Students also indicated they had increased personal insights, including working independently (64%) and feelings of achievement (60%) (see Table 2). These perceived positive benefits clearly suggested the service learning experiential laboratory was helping the students' intellectual and personal growth in their understanding of themselves, their skills and abilities, and their interactions with other professionals and environments.

Furthermore, evidence of these positive benefits was reinforced by the open-ended comments provided by students when asked what their service learning experience meant to them (see Table 3). Again following the Rama et al. (2002) typology, student comments were categorized as Intellectual Outcomes or Personal Outcomes, with Intellectual Outcomes further delineated by two subcategories, Skills and Exposure, and Personal Outcomes similarly delineated by two subcategories, Accomplishment and Growth. The subcategories were loosely defined and groupings may overlap slightly. Within Intellectual Outcomes, Skills comments related to specific or general work skills developed and/or used on the project, and included organization, communication, time management, and working independently. Exposure comments related to external culture, settings, and networks afforded the students that were distinctly different from any classroom experience. These comments addressed real-

TABLE 2
Perceived Benefits of Service Learning Projects

Item	%	Outcome
Positive attitude toward experimental program	76	P
Development of functional skills – communication, assertiveness, problem solving	71	I
Ability to work and learn independently	64	P
Sense of personal achievement	60	P
Better relationships with Faculty	53	P
Insight into personal strengths and weaknesses	49	P
Positive attitude toward academics	47	P
Positive attitude towards community involvement/citizenship	44	P
Positive attitude towards [the] College	44	P
Improved self-confidence	44	P
Development of occupational skills	44	I
Acquisition of specific academic skills and knowledge	42	I
Sense of social responsibility	42	P
Enriched classroom learning	42	I
Application of classroom knowledge	40	I

Note. N = 45. I = Intellectual, P = Personal.

life experiences, different job/careers, hand-on training, and community awareness.

Within Personal Outcomes, Accomplishment reflected the student's internalized sense of achievement or action, and included broadening horizons, self-satisfaction, and making a difference in the community. Growth related to the student's reflection and maturation towards being prepared for their impending transition to the working world. Growth comments included having done new, interesting, and insightful experiences, increased confidence, and reflections on learning.

Discussion

Concurrent with the recent economic downturn, service-learning concepts and projects were integrated into an undergraduate capstone course in human resource management as an alternative for the more difficult to obtain business internships. The service-learning environment demonstrated benefits of service learning for student experiential learning, benefits that are comparable to business internships at larger, private sector organizations. By promoting long-term relationships with local area small business, healthcare, education, and other non-profit organizations, these organizations were receptive to modifying their more routine volunteer service functions to develop management-based projects that would provide learning laboratories for the students while simultaneously serving the organization with value-added management skills. Thus, the placement

sites gained needed services, the faculty developed different and effective experiential learning laboratories, and students learned and applied analytical, communication, and organization skills in real-world settings.

Academically, the students themselves benefited directly in having real-world experience to present on their résumé and in future job interviews. Students developed management content and experience, including problem identification and organization as well as behavioral insights and directions, in their work settings that they would likely not have developed in a classroom. Students also noted increased self-confidence in their ability to function in these work settings, which further enhanced their comfort in interviewing and beginning their business careers following graduation. Furthermore, and more indirectly, students benefited by the opportunity to address management problems holistically, whereby they integrated management content and application across their curricular experiences, much as would be expected of them in their upcoming job settings. Students made formal and informal presentations in class so that all students could learn from their shared and individual experiences.

Student self-report exit surveys were especially positive about these service learning experiences, as students indicated they had been able to incorporate their practical, on-site learning with their academic study, and most felt the practical experience was more educational than their classroom study. Similarly, nearly all respondents stated they had an

TABLE 3
Student Outcomes (Anecdotal)
A. Intellectual Outcomes

1. Skills
“chance to learn and apply skills”
“planning”
“reinforced ability to work well under pressure, meet strict deadlines”
“research, policies”
“showed my strengths in communicating with others”
“strategy, organization, time management”
“very, very good organizational skills”
“work independently”
2. Exposure
“allowed me to see a different aspect of the community”
“apply to real-life experience, broadens real-life work”
“brought classroom issue to real life”
“excellent to see classroom experiences applied to the real world”
“experience different jobs”
“exposure to different careers”
“hands on training”
“learn more through hands-on experience”
“learned purpose of HR office, apply to real world”
“provided knowledge to enter real world”
“seeing the world of healthcare”
B. Personal Outcomes
1. Accomplishment
“able to experience first hand what I want to do after college for a career”
“broadens horizons, contacts and relationships”
“establish relationships at my company for future employment opportunities”
“give back to the community, make a difference, friendships, enjoyed it”
“great opportunity to position myself, interact with executives”
“help organization while getting meaningful experience”
“overall achievement [while being] self-satisfying”
2. Growth
“allows to reflect on what learned”
“do something I might never have done”
“enriches the college experience”
“gives me more confidence as far as interacting with others”
“increased professional confidence”
“interesting and insightful experience”
“learned not to be afraid of new job”
“made me feel better about helping others”
“made me feel my teachers trust me; [I] like the feeling of independence and self-empowerment”
“provided confidence to enter real world”

excellent overall experience that improved their functional skills (communication, assertiveness, problem solving) and enriched their classroom learning through their reflections. Such experiential reflection is the hallmark of critical thinking, learning, retention, application, assessing, revising, and relearning (Kezar & Rhodes, 2001).

The organizations also benefited by having the students as new, external resources who brought fresh perspectives to the organization's problems, projects, and the organization itself. The students functioned as self-starters who required minimal supervision.

Operating under faculty direction, they were committed to the projects, and most importantly for these organizations, the students required few organizational resources.

In conclusion, by expanding service learning into the business curriculum, in lieu of less available for-profit internships, the students, faculty, and organizations all contributed to and benefited from these meaningful and successful learning experiences that might otherwise have been lost. Service learning can also help distinguish the college from other similar colleges and its students can become

better citizens in society (Kezar & Rhodes, 2001). Even without economic stagnation, service learning can continue to provide valuable work experience and career opportunities for management students. Thus, service-learning projects and experiences have the potential to become a highly beneficial alternative to business internships.

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Appendix A
Service Learning in Human Resource Management Projects
(Sorted by Project Type)

Organization	Project	Type
Northeast Independent Living	Americans with Disabilities and funding review	Non-Profit
Gillette Corp.	Americans with Disabilities investigations	Profit
Caritas Good Samaritan Medical Center	Analyst/Generalist	Healthcare
Stevens Center for Service Learning	Business Enterprise 102 Service Learning Project	College
Town of Westford, MA	Compensation Survey	Government
Heritage Healthcare	Compensation Survey	Healthcare
Merrimack Athletic Department	Computer training for employees	College
Adelante	Consumer Handbook	Non-Profit
Massachusetts Consumer Protection Agency	Consumer Service	Government
Greater Lawrence Habitat for Humanity	Database management	Non-Profit
Lowell Fire Department	Education and Training	Government
Asian Center	Employee Database	Non-Profit
Reproductive Science Center	Employee Handbook	Profit
Emmaus House	Employee Handbook	Non-Profit
Holy Family Hospital	HR Recruiting	Healthcare
Stevens Center for Service Learning	HRIS database/Service Development	College
Lahey Clinic	Human Resource Information System	Healthcare
Greater Merrimack Valley Human Resource Association	Membership database	Non-Profit
American Training	Orientation/Culture	Non-Profit
American Red Cross	Outreach	Non-Profit
Moynihan Lumber	Personnel Management System/Handbook	Profit
Perfect Parties	Personnel Management System/Handbook	Profit
Council on International Education Exchange	Personnel Management System/Handbook	Non-Profit
Big Brothers/Big Sisters of Greater Lawrence	Personnel records/Reference Checks	Non-Profit
Federal Court	Policy Handbook/Manual	Government
Sakowich Student Center	Program Development and Evaluation	College
Christmas Tree Shops	Selection	Profit
Merrimack College Human Resources Dept	Sexual Harassment Training	College
Phillips Medical System	Strategic HRM – Layoff/merger	Profit
Stevens Center for Service Learning	Student (Employee) Project Development	College
Merrimack College Student Life	Student Event Planning	College
Bellisini Academy	Training	Non-Profit

Using the Case Method to Teach Online Classes: Promoting Socratic Dialogue and Critical Thinking Skills

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With increasing interest in online education, instructors must have a repertoire of tools available to promote the critical thinking skills of their students. This paper will present the case method as one pedagogical approach for teaching online courses. Example cases are provided. Pedagogical approaches to working with new and seasoned online students are addressed. Further, the benefits of using the case method to promote learning in the virtual classroom are explained. The case studies presented for online classes present concrete situations that can be used to stimulate analysis, requiring students to project how they might respond to a set of circumstances. Case studies promote Socratic dialogue and higher order thinking skills. Further, the case method can be a good vehicle for stimulating students' thought about step-by-step planning.

The use of the case method to teach is not particularly novel. It has been used for some time in face-to-face classes. Conant (1949) of Harvard University was the first professor to center his entire course on the use of the case method. As colleges and universities go through technological innovations, such as offering classes online, the case method can be adapted to the virtual classroom to promote critical thinking skills. For the most part, case studies have rarely been used to teach online, undergraduate courses. One critical challenge is to engage the online learner in the material presented and to foster higher order thinking. The case method is an active learning strategy that engages students and fosters higher order thinking. Also, the case method also facilitates problem solving skills (Levine, 1994).

Problem-based learning (PBL) is an instructional method that challenges students to actively learn by working cooperatively in groups to seek solutions to real world problems.

The ideas embodied in problem-based learning have a long history, ranging back at least to the use of cases in Harvard Medical School in the nineteenth century and extending through John Dewey's philosophy, Jerry Bruner's discovery learning, and the development of simulations in the 1960s. (McKeachie, 1999, p. 175)

The case method, like other problem based learning strategies, "are intended to develop student ability to solve problems using knowledge, concepts, and skills relevant to a course. Cases provide contextualized learning, as contrasted with learning disassociated from meaningful context" (McKeachie, 1999, p. 177). These problems are used to engage students' curiosity and initiate learning the subject matter. PBL prepares students to think critically and analytically, and to find and use appropriate learning resources. Problem based

learning can be set up in a variety of formats. The next section will describe such formats as well as defining the case method approach.

Case Method Defined

What is meant by the term, case method? "Cases are often actual descriptions of problem situations in the field in which the case is being used; sometimes, they are syntheses constructed to represent a particular principle or type of problem" (McKeachie, 1999, p. 177). The case method is an inductive process by which students learn through their joint, cooperative effort as opposed to the professor conveying views to students (Herreid, 1994). This is in direct opposition to what Friere (1971) termed, the banking method of education. With the banking method of education, students are repositories for the instructor's information. The students then spit back the facts that the instructor as provided – there is no critical thinking involved in this practice. With the case method, students and the professor engage in a Socratic dialogue which fosters critical thinking skills; thereby, eradicating the banking method of education in the virtual classroom. The case method is designed to enhance student understanding of core concepts of the course as well as to encourage critical thinking.

In using cases, students become active, similar to the Bau Hause method, which is 'learning by doing': It is an active learning strategy. The case method follows this line of philosophy. Cases provide students with the opportunity to exercise decision making, whether individually or in a team format. For the disciplined student, cases help increase motivation (Washull, 2005). Further, it provides them with real life examples (Brooke, 2005). Some students have difficulty connecting the theory to real life, practical examples. The case approach ameliorates this problem.

The method is easy to implement. As you will see in the following sections, I created short case scenarios and integrate them in the presentation of the course material. The difference between face to face classes and online classes is in the length of the case study. Shorter, abbreviated problem based cases are used to effectively teach online classes. The following section looks at types of cases that instructors can utilize in the online classroom to motivate students to learn.

Types of Cases

There are a variety of venues for presenting cases such as discussion, debates, and trials, and public hearings. I regularly use discussion, debates, and trials. The public hearings can be quite complex for a face to face classes and may be very difficult to implement in an online environment; therefore, public hearings will not be discussed here.

The discussion approach is perhaps the best known for presenting cases (Herreid, 1998) and is one that I utilize often in the online classroom. Instructors can present a case that requires students to make an evaluation. In my abnormal psychology online course, I present cases where a person may or may not be suffering from a mental disorder. Students try to diagnose the case according to Diagnostic Systems Manual (DSM) criteria. Here is an example:

How would you diagnose the following case and what treatment approach would you use? Use theory to support your response: This is a case of a woman who is quiet, reclusive, and withdrawn. She has no close friends and resents it when people try to intrude on her solitude. She works in a library in the stacks and prefers not to deal with the public. Her co-workers find her to be unresponsive, unemotional, and she does not seem to be interested in interacting with them. She reads at night and rarely goes out. She is often described as a loner.

This brief version has worked well for online cases that utilize discussion questions, such as the University of Phoenix, where classes meet for only five weeks. For online classes which meet for 14 weeks, so I can use more extensive cases, such as the one I co-authored with a colleague: The case of Maria (Brooke & Martin, 2004). To view the case, please go to: http://www.sciencecases.org/therapeutic_relationship/therapeutic_relationship.asp. To see the teaching notes, go to: http://www.sciencecases.org/therapeutic_relationship/therapeutic_relationship_notes.asp. The discussion approach can be used with online classes that have 25 students or less. For this approach, the instructor must make sure that students stay on track

with the discussion.

Debates are an interesting way to deal with subjects that have two extremes or opposing views. For instance, when I teach child development online, I split the class into two teams, those who support co-sleeping with infants and those who do not support co-sleeping with infants. This is a good way to bring up cultural variations in the way children are raised. Students have the opportunity to see evidence on both sides of the debate. Additionally, some students who have had one point of view at the beginning of the class have changed to the other point of view after the presentation of evidence in the debates.

For online teaching, instructors can also use the trial method. The trial should be focused on the material in the lecture. I have both teams write an introductory statement. They write it collaboratively in their teams, using references to support their work. I create a work area in the course management system for each team; only the team members have access. In addition, I assign the members. After the posting of the introductory statement, each team creates a rebuttal in direct response to the opposing team's introductory statement. Next, they pose one question to the opposing team. Time permitting, there can be more questions. Each team ends with the closing argument or statement. The debate format works well with a smaller group of students, 15 or less. The following case study is an example of one the scenarios that I have used in introductory psychology courses:

A woman's twelve-year-old daughter had been approached sexually by her grandfather, the woman's father. The grandfather, as is often the case, was a responsible member of the community, a proverbial "pillar" of family rectitude. The child's experience had triggered a memory that the mother had long repressed: when she was the same age as her daughter, her father had sexually molested her. As a young teenager, she had dealt with it fairly well, told no one, and repressed the incident altogether. Though she had managed reasonably well to overcome her feelings of fear and guilt, in retrospect she realized that it had inhibited her sexual responsiveness and healthy adjustment to adulthood. When she confronted her father with the truth, he denied it absolutely and acted as if she had imagined the whole thing. Her own mother accused her of hating her father and plotting to destroy the family. Now she wants to bring her father to trial for sexually abusing her as a child.

Students can be quite dramatic with this approach and find it a beneficial learning experience. I assign the roles of lawyers, grandfather, grandmother, mother and daughter. The lawyers ask a question of their witnesses

and the witnesses respond. The trial ends with the lawyers making their closing statements. “Whatever the case, it typically involves the possibility of several alternative approaches or actions and some evaluation of values and costs of different solutions to the problem posed” (McKeachie, 1999, p. 177).

Beginning Online Students

The pedagogy of teaching beginning online students differs greatly from that of seasoned online students. In some sense, there is a great deal more hand holding and direction from the instructor. Students are challenged to acclimate to the online environment in addition to learning the course content. Some online institutions require that students work in virtual teams so the instructor needs to facilitate their experience in working in groups online. In addition, many students are new to this format, so instruction in communicating online and netiquette is essential. Please see Appendix A for the Communicating Online Tips sheet that I use to teach online classes.

New students will need assistance with tone. When we meet people face-to-face, we usually have a clear sense of what is appropriate in the way we act and communicate. Meeting people over the Internet similarly requires a certain level of awareness. On the Internet, we cannot read body language such as smiles, nods of the head, or looks of disapproval. We cannot hear the tone of another person's voice. Tone is conveyed through word choice in the virtual classroom. Sarcasm in particular comes across poorly in Internet communication. For example: Think of a simple question such as, “Are you serious?” In a friendly situation, this could be sincere. In a loud and aggressive tone, it could mean something quite different, perhaps “Have you lost your mind?” When using electronic communications, it may be difficult for others to know what you really intended to convey. Students must be guided into communicating carefully and effectively, particularly at the start of a course.

Conflict between students, most often in the team areas, is an issue with beginning online students. It is important for the facilitator to guide the groups from destructive conflict to constructive conflict. For instance, destructive conflict involves disagreements centered on personality, whereas constructive conflict involves substantive conflict or disagreement with ideas and group issues (Tannen, 1998). I have found that the case method ameliorates destructive group conflicts by building cohesion and promoting positive group interaction skills such as brainstorming and conflict management. For more information on promoting positive team decision making, see Porter's (2003) article.

Beginning students will need opportunities for proactive problem solving. Working in teams seems to be the most troublesome area for students. Through my experiences of teaching online for the past several years, I developed case vignettes that allow beginning students to resolve team issues before the even start working in their own learning teams. Here is an example:

Learning Team A is made up of Frank, Omar, Lisa, Jackie, and Shawn. Frank volunteers to be the team leader and takes control rather easily. He notices Lisa is the last person to make comments and suggestions. Also, she shows up in the main folder but not the group folder. The deadline for the first project is in two days and Lisa has not contributed much. If you were in Learning Team A, how would you first define the problem?

Not only does this give students an opportunity to deal with problems before they may arise in the team, it gives them the chance to exercise their critical thinking skills. In this case, I ask students to first think of the possible reasons why Lisa might be inactive prior to jumping in to problem solving. They are exposed to different points of view on the possible reasons for Lisa's behaviors. After this, I then ask them how to resolve the dilemma. Here is one beginning student's response to the cases I developed for beginning online students:

I thought that the case studies were interesting. I learned a lot from them because I had to perform more research to understand what the studies were about before I could reply on them. They opened my eyes up to topics that I would not ordinarily had been interested in, sought after on my own, or been aware of. They also made me aware of how much I do and do not agree with certain aspects of a topic. Also, they corrected my perception on certain aspects of subjects. All in all, the cases are very informative, prompt an awareness, and was good practice for enhancing my research skills.

Teaching students how to create substantial discussion responses to the cases is the critical task of the instructor. This holds true for beginning as well as seasoned online students. Writing, “I agree with you” or “Good point”, is not enough and certainly not a substantial response. I require that students build on their peer's response and use references and theory to support their work. Please see Appendix B for my post to students on creating substantial responses.

Seasoned Online Students

The principles for teaching the case method for new students will occasionally have to be reinforced with seasoned students. With seasoned students, cases can be taken a bit farther by having students actively apply the course material to the case. The cases can be more complex, challenging students to spend more time analyzing the problems and issues of the case. This promotes a highly interactive discussion. For seasoned students, I try to find real life cases to which they can apply the theory from the course and exercise their critical thinking skills. Here is an example that I use for my online philosophy class:

Cities around the country are preventing Wal-Mart from opening new stores on the grounds that these stores would "threaten" other businesses and replace higher paying jobs with lower paying ones. Develop a logical argument which presents your support or lack of support of this idea.

Students have a variety of stances on this particular case, sometimes challenging one another because their views are diametrically opposed. In this case, I can also teach about the logical fallacies, such as ad homonym. It is important that they logically respond to the ideas of a post and not attack other students. The Manoa Writing Program (2005) provides some good suggestions for students when they respond to a peer's post.

The Wal-Mart case is quite controversial. I noticed that this case promotes a great deal more interaction between the students and the attendance in the online classroom increases. Here is what one student said about the Wal Mart case:

Case One regarding Wal-Mart was one of the most growing experiences I have had of the four cases posted. I think the controversy of that topic had the most passion of all the discussion questions we had. It really made me see how divided people can be over an issue and made me more aware of how references can really help drive your side of the argument home. It also opened my eyes more of how the other side feels on this issue. I still don't agree with them but I know in this class I was highly out numbered and I started wondering if the odds are the same outside of this class.

Benefits of Using the Case Method

According to Herreid (1994), traditional lectures have only 50-65% student attendance. On other hand, when using the case method, Herreid (1994) reports

95% student attendance. I noticed an increase in student participation with the cases. I use an evaluation form, see Appendix C, to gather student feedback on the case method, from which the student comments were derived for this article.

There are several benefits to using the case method to teach online classes. The goal of the case approach is to develop student's analytical and decision making skills (Erskine, Michiel, & Mauffette-Leenders, 1981; Gragg, 1953). In addition to analysis, other learning outcomes include application of theory, synthesizing material, and making evaluations. By providing opportunities for application, analysis, synthesis, and evaluation, the case method goes beyond the recall and recognition tasks that are associating with the banking method of education (Friere, 1971; Gross, 1999).

Problem based learning is one method that dedicated instructors use to help students learn. The case approach is one form of problem based learning that activates the student's prior knowledge base. According to Barrows and Kelson (2005), problem based learning (PBL) is:

both a curriculum and a process. The curriculum consists of carefully selected and designed problems that demand from the learner acquisition of critical knowledge, problem solving proficiency, self-directed learning strategies, and team participation skills. The process replicates the commonly used systemic approach to resolving problems or meeting challenges that are encountered in life and career. (para. 1)

Through the use of the case method and thought questions, the instructor can promote active engagement in the virtual classroom. Since many cases focus on real life problems and dilemmas, the students will be able to transfer this information to other settings, such as their work environment. Many online students already have careers so the practical applications of the case method approach are immediately applicable.

Students gain a great sense of meaning and can actively apply theory to support the solution to a problem presented in a case. In some ways, this is a proactive approach to problem solving, particularly with beginning students first learning how to work in virtual teams. Enhancing intrinsic learning, combating retroactive inhibition, increasing encoding specificity, and developing more diverse schemes are other benefits of using the case approach to teach online course (Brooke, 2005). In summary, the case approach promotes social change in that students reflectively and critically examine their own thoughts in relation to the course material and other student's responses.

Conclusion

Using the case method to teach online classes promotes a learning-centered cultural milieu (Brooke, 2004; Brooke 2005). By learning-centered, I am referring to students developing responsibility for their own learning. The instructor is the facilitator and further refines critical thinking skills and analysis. Using the case method allows for a balance of power between teachers and students. Additionally, cases are highly motivating as demonstrated by increased attendance (Herreid, 1998). Instructors have a wealth of information for creating cases. For my short, five week classes, case vignettes are appropriate. For beginning students, I use past student problems to help current students engage in proactive problem solving. For seasoned students, they can be challenged to view another side to a topic, thereby allowing further refinement of their thoughts on the matter. The case method is a didactic, pedagogical approach for promoting learning in the virtual classroom.

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Appendix A

Communicating Online Tips

Hello Everyone!

Remember that conveying meaning is extremely important since there are no facial, voice or body clues that are transmitted with your message. In class you may be able to say *No* in a sarcastic tone, and everyone will know that you don't really mean it. Online, you must make sure that the words that you use to communicate your message are accurate and appropriate. In no time at all, you'll feel *techno-savvy* and completely comfortable with online communication!

Netiquette:

Many members of the electronic community have contributed to these guidelines. A couple of URLs are included below that may be helpful as you learn to communicate in the online world.

Arlene Rinaldi, Florida Atlantic University wrote *The Net: User Guidelines and Netiquette*:
<http://www.fau.edu/netiquette/net/index.html>

Delaware Technical Community College posts this web page about Netiquette: <http://www.dtcc.edu/cs/rfc1855.html>

Albion.com (a San Francisco-based Internet reference publishing firm) publishes a web page labeled *The Core Rules Of Netiquette* excerpted from the book *Netiquette* by Virginia Shea:
<http://www.albion.com/netiquette/corerules.html>

An unknown author has posted a web page on GeoCities that provides the reader with etiquette for chat rooms:
<http://www.geocities.com/SouthBeach/Breakers/5257/Chatet.htm>

Emoticons:

It is often difficult to express emotion or humor when communicating online. Adding *Emoticons (Smileys)* to your e-mail or chat message may help you to convey more clearly the meaning of your message. Remember, though, you are in an academic setting – too much humor is probably not wise!

From MIT, this web page has been posted: <http://www.mit.edu:8001/people/cordelia/smileys.html>

A professor from Tokyo International University of America posted this web page with emoticons:
<http://www.mit.edu:8001/people/cordelia/smileys.html>

About.com provides this web page of smileys: http://netforbeginners.about.com/internet/netforbeginners/gi/dynamic/offsite.htm?site=http://rscwww.urz.tu-dresden.de/~jloeffle/smiley_dict.html

Appendix B

Creating Substantial Discussion Responses

Discussion Responses:

- A good response to the question should be one or two paragraphs, and address all of the issues that are raised.
- A good response to others is not something like "I agree." Please find something that you can analyze, add to, critique, explain, disagree with, or something. It should be a few cogent sentences. It should contain something that shows your knowledge of the book, as well as additional materials you might bring to class from the web and elsewhere.
- A good response to a written question should be one to two pages in length, and address all of the issues that are raised.
- You must use references to support your work. You *CANNOT* copy a website and paste it as your response. If you want to use a website, summarize it, outline the pertinent information, and then cite the webpage. If you copy a webpage as your response, you will earn 0 points for the module.
- Think of this as your opportunity to teach. Create substantial responses which expand on a point and present information on the topic. Your responses should demonstrate your critical thinking on the topic.

Appendix C

Case Evaluation Form

Name: (optional) _____

Class: _____

Date: _____

<i>Content and Organization</i>	<i>Points Earned</i>	<i>Comments:</i>
Please rate with a 1 (strongly disagree) to 4 (strongly agree) Scale in the Points Earned Column		
All key elements of the cases were covered in a substantive way.		
The cases were comprehensive, accurate, and /or persuasive.		
The cases developed a central theme or idea, directed toward the appropriate audience.		
The cases helped me link theory to relevant examples of current experience and industry practice and uses the vocabulary of the theory correctly.		
Cases were stated clearly; are supported by specific details, examples, or analysis; and are organized logically.		
I learned more about the course topic through the use of the cases.		
The cases allowed me to develop new perspectives with respect to the course content.		
Add your own criterion here:		
<i>This section will be tallied by me.</i>	<i>Points Earned</i>	<i>Comments:</i>

“Does your dog bite?” Creating Good Questions for Online Discussions

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One of the challenges of asynchronous online discussions is soliciting student responses that involve critical thinking. Too often students answer one another with “I agree” or “That’s what I think” and the discussion dead ends. By providing students with models of good questioning techniques instructors will see the class discussion take on new depth. This article provides online course facilitators with an approach to questioning that can deepen student interactions in asynchronous discussions.

One of my favorite movie scenes occurs in the *Pink Panther Strikes Again*. Peter Sellers, as Inspector Clouseau, is standing at the front desk of a hotel and sees a dog lying by the front door. In an exaggerated French accent, he asks the clerk, “Does your dog bite?” The man answers, “No.” Walking toward the door, Clouseau bends down to pet the dog; it growls and then bites him. Aghast, he exclaims, “I thought that you said your dog does not bite!” The man responds, “Oui, monsieur, but that is not my dog.”

Obviously, Inspector Clouseau did not ask the right question. Too many times this happens in our online courses. When ineffective questions are asked, the discussion goes nowhere. In order to utilize the full potential of asynchronous discussions to develop and exercise critical thinking skills, we must set up our students for success by providing sound guidelines for questions, and we ourselves must model good questioning. This article will provide suggestions for enhancing this questioning process.

I begin my online courses with an icebreaker discussion. Students must ask their classmates about their birthdates, their Internet connections, how far they live from campus, and their birth orders. In one particular class, students jumped in and kept the conversation going all week. This class of 15 had over 200 posts: the students were engaged in the discussion, had a great time, and bonded with their classmates. It was a rousing success.

The next week these same students were asked to interpret and apply information from the readings. The discussion opened on Monday, but by mid-week only a couple of posts showed up in the discussion area. Students are required to post their initial response to the question by Wednesday, but of the same 15 students, only 6 met this deadline. I could see that the discussion was going nowhere, so I decided to stop it and have them process what happened instead. The rich interaction and questioning seen in the first discussion once again emerged.

The pattern shown in these discussions caused me

look at the failed discussion question – it was a dead-end question that did not create an engaging environment. Paul and Elder (2000), in an excerpt from the *Critical Thinking Handbook: Basic Theory and Instructional Structures*, stated that instructors have the tendency to emphasize content coverage over engaged thinking. This approach assumes that answers and questions can be taught separately and disengages the student from the critical thinking process. By creating an environment where questions produce other questions, instead of dead-end answers, students and instructors are actively involved in the critical thinking process. The authors put it this way, “Thinking is driven by questions” (§ 3). When we focus our students on finding the answers, we stop them from thinking. However, if we can teach them to ask questions and give permission for their questioning, we set the stage for critical thinking to occur. The big challenge is letting go of the need to know all the answers; only in this process will our students embrace the questioning. Table 1, compiled from the Paul and Elder (2000) article, provides types of questions and where those questions lead us. This chart can be given to students to guide them through the questioning process.

Paul and Elder (2000) conclude by reminding us that a lack of questions results in a lack of understanding, and shallow questions produce shallow understanding. In fact, Stansberry, Haulmark, and Sheeran (2003) found that instructors were poorly prepared to write questions that would elicit higher order thinking responses from their students. Therefore, if we want our students engaged in the critical thinking process we must motivate them with well-written questions that guide them into asking more questions.

In the online environment, the instructor is the guide who provides feedback and direction rather than all the answers – the *guide on the side*, rather than the *sage on the stage*. Muilenburg and Berge (2000) state, “... when facilitating online discussion, *asking the*

TABLE 1
Question Types and Outcomes

Questions of:	Force us to:
Depth	drive our thought beneath the surface and to deal with complexity
Purpose	define our task
Information	look at our sources of information as well as at the quality of our information
Interpretation	examine how we organize or give meaning to information
Assumption	examine what we are taking for granted
Implication	pursue where our thinking is going
Point of view	examine our perspective and to consider other relevant positions
Relevance	discriminate between what does and does not relate to the question
Accuracy	evaluate and test for truth and correctness
Precision	give details and be specific
Consistency	examine our thinking for contradictions
Logic	consider how we are putting our thoughts together

Source. Muilenburg & Berge, 2000, "Feeding students endless content to remember" section.

right questions is almost always more important than giving the right answers" (Conclusions, ¶ 1). This learner-centered environment is ideal for the application of the Socratic approach in which questions are used to guide students through the desired learning route.

The question types and the direction in which they lead as illustrated by the discussion above produce the need for specific questions. Muilenburg and Berge (2000) compiled a list 50 questions from 24 responding instructors. The researchers found that the questions could be sorted into the following six categories: interest-getting and attention-getting, diagnosing and checking, recalling of specific facts or information, managing, structuring and redirecting learning, allowing expression of affect, and encouraging higher level thought processes. In discussing problem-based learning, Stepien (n.d.) adapted some of Richard Paul's critical thinking approaches to develop a set of five question types: clarification, assumptions, reasons and evidence, viewpoints or perspectives, and implications and consequences. He also provides specific questions for each of the categories – an extremely user-friendly compilation. Table 2 provides a selection of questions from each of the Stepien's five categories.

As you can see, this approach provides infinite opportunities for critical thinking and extends learning beyond content mastery. By carefully defining the desired outcomes for online discussions, instructors set the stage for effective discussions that utilize good questioning to build critical thinking skills. In fact, Meyer (2004) found that the questions

posed by the instructors influenced the level of critical thinking in the students' responses.

In my online courses, I provide my students with these lists of questions. They are required to respond to the initial question and then read and respond to at least two of their peers' postings. In one discussion, I asked the students, "What is your greatest concern regarding the use of computer technology in the classroom?" The following examples illustrate good questioning techniques modeled by the instructor. Tim was concerned with the irresponsibility of some teachers in their use of educational technology. To help him determine a sense of purpose as an educational technology user, I asked him, "How can you be an advocate for getting the 'be responsible' word out?" Hillary's response to the question was very specific and poorly developed. In order to guide her into thinking more deeply I asked, "How could you broaden your example to a more general problem?" Toni answered the same question by asking several probing questions of herself and how she could provide good technology integration for her students. Her classmates stepped in and provided many suggestions for her dilemma, and like many educators, they gave answers instead of asked questions. In order to assist Toni in processing just one issue, I asked, "It [feeling so much responsibility] can be very overwhelming. What is one goal that you have when you return to teach with computer technology in your country?" Sylvia expressed a concern that she would know less about technology than her students. To help her further

TABLE 2
Probing Questions

Questions that probe for:	Example Questions
Clarification	<p>Let me see if I understand you; do you mean ___ or ___?</p> <p>What do you think Mike means by his remark, Dee?</p> <p>How does this relate to our problem/discussion/issue?</p> <p>Jane, can you summarize in your own words what Richard said?</p> <p>Richard, is this what you meant?</p> <p>Would this be an example?</p> <p>Would you say more about that?</p> <p>How does ___ relate to ___?</p>
Assumptions	<p>What are you assuming?</p> <p>What is Jenny assuming?</p> <p>What could we assume instead?</p> <p>You seem to be assuming ___. Do I understand you correctly?</p> <p>All of your reasoning depends on the idea that ___. Could you have based your reasoning on ___ instead of ___?</p> <p>Is that always the case? Why do you think the assumption holds here?</p> <p>Why would someone make that assumption?</p>
Reasons and evidence	<p>What would be an example?</p> <p>Do you have any evidence for that?</p> <p>What other information do you need?</p> <p>What led you to that belief?</p> <p>How does that apply to this case?</p> <p>What would change your mind?</p> <p>Is there a reason to doubt that evidence?</p> <p>Who is in a position to know that is true?</p> <p>What would you say to someone who said that ___?</p> <p>What other evidence can support that view?</p>
Viewpoints or perspectives	<p>When you say ___, are you implying ___?</p> <p>But, if that happened, what else would happen as a result? Why?</p> <p>What effect would that have?</p> <p>Would that necessarily happen or only possibly/probably happen?</p> <p>What is an alternative?</p> <p>If ___ and ___ are the case, then what might also be true?</p>
Implications and consequences	<p>How can we find out?</p> <p>Can we break this question down at all?</p> <p>Is this question clear? Do we understand it?</p> <p>To answer this question, what other questions must we answer first?</p> <p>Why is this issue important?</p> <p>Is this the most important question, or is there an underlying question that is really the issue?</p>

Source. Stepien, n.d., ¶ 3.

identify her underlying assumptions I asked, “Why is it important to be on equal tech footing with your students?”

As student sees good questioning in action, they are more likely to attempt the same questioning responses. The following illustrates this. In reply to a classmates’ initial post, Bill began with, “To take your thoughts a step further ...” and then asked a question

that moved the discussion in an important direction. Laura needed clarification from Ann, so she asked “Would you mind telling me more about the value in learning face-to-face?” She then asked an implication question of Ann, “Do you think video conferencing has the same value as face-to-face discussion?”

While early semester discussions are filled with “I agree” responses, as students get into the habit of

asking questions in their responses, the depth of the discussion increases, as does the learning. By having a resource, such as this list of questions, the online conversations take on new depth and assist in avoiding the dead-end conversation.

In addition to the depth of interaction being created, questioning can lead to a shifting of the focus from the content to the processes of the discussions. Students and instructors can engage in discussions regarding the types of questions being asked in the discussion. Through this identification, it is possible to see the trend of the class and move students to a deeper level of critical thinking. Knowlton (2000) added an element to the need for deepening the quality of questions and responses in his statement, "... summarizing, paraphrasing, and regurgitating will not move students to the upper level of Bloom's taxonomy" (Questions that Promote Durable Knowledge Construction section, ¶ 1). For instance, in the example given at the beginning of this article, the original question was:

Choose one of the distance learning theories and list 2 specific characteristics that set it apart from the other theories.

As stated earlier, there were very few postings in response to this question. In order to move student thinking in this course on Distance Learning to the processing level, I posted the following and gave the students three days to interact:

Ok, everyone. Ignore the rest of this discussion and interact on the following questions:

1. What do you see as the differences in the responses to Discussion 1 and Discussion 2?
2. To what do you attribute those differences?
3. What would you do if one of your discussions was a dud like this one seems to be?

The responses were excellent: not only were the students engaged in the new topic, but they learned a valuable lesson about conducting asynchronous discussion. Beaudin (1999) found the same to be true in his study: "Good questions promote active participation of the learner by stimulating various levels of thinking" (Discussion and Implications for Practice section, ¶ 3). In addition, he found that students ranked the designing of good questions as the most important element of online discussions. This concept is echoed by Paul and Elder (2000) who

stated, "Thinking is driven by questions" (¶ 3).

The question categories developed by Paul and Elder (2000) and the probing questions presented by Stepien (n.d.) provide rich resources for assisting students in developing critical thinking skills through asynchronous discussions. As instructors model the questioning methodology, encourage students to practice good questioning techniques, and identify the processes occurring in the discussion, the stage is set for enriched online discussions that provide opportunities to develop and practice critical thinking skills.

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