

A Delicate Balance: Service-Learning in Teacher Education

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Abstract: A consortium of teacher education professors worked together in a 3 year project to infuse service-learning into their courses. Although they had participated in the same preparatory workshops, they largely integrated it in ways that appeared to eclipse S-L orthodoxy. To understand their variances we examined the choices and contexts that shaped their “hybrid” projects. Our findings suggest a schema for emergent service-learning in teacher education. KEYWORDS: Service-learning pedagogy, experiential education, infusing service-learning in teacher education curriculum, instructional strategies, community partnerships, contextual diversity, inter-institutional collaboration, curriculum transformation.

I. Introduction.

Service-learning (S-L) requires a delicate balance not unlike a Chinese circus act where tiers of sublime acrobats cross an aerial span on a miniscule but sturdy fiber. In S-L the tightrope is the connection between course content and a need in the community. Crossing this span requires planned collaboration, yet it is reasonable to expect that each performer may have a slightly different view of what, how, and why they are attempting this daring feat.

The literature is replete with discussions about illegitimate interpretations of S-L as well as about the pitfalls associated with assessing and evaluating its impact.

Service-learning programs are *distinguished*...by their intention to equally benefit the provider and the recipient of the service....[Furco (1996)]. Thus service-learning programs must integrate service into course(s) and *be tied to measurable objectives* that assess as well as enhance both the learning and the service. [Shastri, (1998), p. 5, italics added]

This article examines the unique ways a consortium of professors from three teacher education programs attempted the daunting feat of initiating S-L in their courses. We will discuss how they interpreted S-L pedagogy in ways that produced “hybrid” service-learning and, paradoxically, also produced a valid schema for emergent S-L in teacher education. Moreover we will make connections between the professors’ shortcuts and notions we had found in the extant literature on S-L in teacher education, including: (1) how contextual constraints as well as the diversity of settings affected professors’ interpretations of S-L [Shumer (1997)]; (2) how S-L competencies can be sequenced incrementally throughout a teacher education program [Wade (1998)]; and (3) how Shumer’s modified process, Plan-Act-Reflect-Evaluate (2000), might be a

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wiser model to use than the basic Plan-Act-Reflect loop. We will also discuss another irony that emerged from our S-L projects - one that we had not found in the literature - how unplanned outcomes provided unexpected enrichment for the teacher educators' pedagogies as well as striking incidental learning for their education students.

This discussion may provide much needed scaffolding for beginners who face the complex demands of doing S-L, especially for planning and measuring the impact of S-L conducted in teacher education courses.

This study evolved from a three-year project by the Teacher Education Consortium in Service-Learning (TECSL) that was funded by a grant from the Learn and Serve America program of the Corporation for National and Community Service. As authors of this present study we were not only the grant evaluator and its director respectively, but also involved in most of the consortium activities. This article contains our interpretations of what happened during the project, and is based on our participant observations as well as on qualitative data analysis, particularly of the participants' final narrative reports contained in our project monograph [TECSL (2003)].

II. Project Background

A. Purpose

The impetus for this collaboration stemmed from a state mandate for service-learning as a high school graduation requirement: students must complete 75 hours of service before graduating. Typically such mandates do not allow for adequate faculty development. The purpose of this project was to develop a cadre of teacher educators who would become proficient enough with S-L pedagogy so they could prepare teachers with the skills needed to conduct S-L in their future classrooms.

B. Participants

The consortium project involved three very diverse institutions with varied missions, histories, and settings, but all from the same university system located in a mid-Atlantic state. The first, a historically black institution serving an inner city community with a high crime rate, the second (the lead institution), a historically white campus located in a semi-rural area with a high dropout rate, and the third a predominantly white institution, located in a suburban area noted for its affluence. The faculty participants, five from each university (n=15), also represented diverse backgrounds and they infused S-L into a variety of courses, primarily teacher education courses but including several general education courses that supported teacher education. Each university was allowed to create its own procedure for participant selection based on how they envisioned integrating S-L into their programs. [NB: As we began the project one university education department was bearing the inordinate pressures of national accreditation and therefore decided it best to select several adult education and sociology instructors for their team.] During years 2 and 3, approximately 360 students, mostly undergraduate education majors, participated in the courses where S-L projects were implemented during two and up to four semesters. Table 1 lists each course and provides a brief description of its concomitant S-L project.

C. Project Activities

Preparatory S-L workshops. Several objectives focused the consortium's efforts, which would enable professors to transform their curriculum with S-L pedagogy. During the first year faculty participated in a variety of collective activities that combined training and resources with opportunities to network and dialogue as they revised their syllabi. The main objective for the first year was to introduce faculty to S-L theory and strategies for implementing and assessing service-learning outcomes. Essentially participants were taught these five S-L competencies:

1. Identify Community Need
2. Establish partnership and collaboration with community to develop S-L project
3. Plan - Action – Reflection (S-L Process)
4. Identify relationship between S-L project & course content
5. Sharing results: assess the impact of S-L on all involved:
a) Community partners or K-12 students, b) Self

The outcome for year one was for each faculty member to develop a syllabus that integrated S-L pedagogy. The main objectives for years two and three were for faculty to implement these S-L projects in their courses and to write summative reports about their experiences for our project monograph [TECSL (2003)].

II. Discussion of the Relevant Literature

A. Complexity of S-L in Teacher Education

“Service-learning is a complex process that requires careful planning, implementation, and evaluation to be successful” [Driscoll et al (1998), p.8]. The complexity of S-L in teacher education emanates from a swarm of variables, which demand equal attention and include, (1) multiple layers of decision making; (2) multiple components of S-L planning, implementation and assessment; (3) multiple participants; and (4) multiple objectives that emerge from the interaction between community needs and course content. The multi-component S-L process is magnified in teacher education courses, especially taking into consideration both long and short-term objectives.

....to ensure that pre-service teachers own S-L experiences, [teacher educators] model the same effective practices they will apply in their future teaching, teacher educators should apply these same standards in planning, implementing, and evaluating their pre-service teacher education programs. [Paris & Winograd (1998), p.28]

However scant models exist for assessing the effects of S-L on students in teacher education courses [cf. Furco & Billig (2002)]. According to Eyler (2000) there have been no systematic attempts to test alternative, theoretically-anchored models of instruction, reflection, or S-L project planning. She has posited concerns about designing assessments (including reflection!) that adequately capture the precise nature of learning in a complex context:

....we accumulated a lot of evidence about the impact of service-learning on college students, but this research has relied on surveys and other simple measures which do not capture the most important intellectual outcomes of the experience. We know that S-L has a small but consistent impact on attitudes and perceptions of self, but we have less evidence for its impact on learning and cognitive development and no evidence of its effect on lifelong learning and problem-solving in the community. [Eyler (2000), p.6]

TABLE 1 Courses and S-L Projects

| Course | S-L Project |
|---|--|
| EDUC 408 Measurement & Evaluation | Students <i>created workbook packets</i> to assist children and their caregivers to prepare for standardized state tests. |
| WLIT 205 Honors World Literature | <i>Freshman students wrote a play</i> for local elementary schoolchildren after onsite observations and discussing ways to encourage them to read. |
| ADLT 513 Sociology of Community | Grad students in Adult ed. course researched historical, demographic, and political aspects of local government. Each student <i>developed a community action_project</i> and made presentations to community group. |
| ADLT 533 The Aging Process | Grad. students in Adult education designed and conducted <i>projects focusing on needs of the elderly</i> . |
| EDUC 408 Children's Literature | <i>Students created strategies</i> to make literature accessible to ELL students; <i>read to children in migrant worker</i> program and then <i>evaluated their strategies</i> . |
| EDUC210 School in a Diverse Society | Students created literacy learning “kits” based on their field-based interactions with high-risk students from diverse backgrounds. |
| EDUC 210 School in a Diverse Society | Students in their first teacher education course <i>conducted WEB research on S-L definition</i> , students had to demonstrate in reflective writings that they could distinguish between volunteering and S-L and then <i>connect it to their field experiences</i> (classroom observations and assisting). |
| EDUC 306 Principles of Instruction | Students <i>learned how to and created S-L units</i> coordinated with their concurrent methods classes, which involved classroom observations and implementation of lessons. Site visits to local organizations were required. |
| ELED 313 Social Studies Methods | Students <i>conducted a donation drive</i> to collect school supplies for children in Afghanistan. |
| ELED 312 Science Instruction | Students <i>improved existing learning “kits” and presented them in program</i> at local zoo for staff, children, & parents |
| ECED 201 Intervention & the Young Child | Students identified community need, <i>volunteered time in a number of local institutions</i> , which ranged from hospitals for children with disabilities to nursing homes. |
| ELED 363 Multicultural Education | Students interviewed principals & teachers and engaged in <i>small group tutoring</i> as well as a community walk. |
| EDUC 470 Literacy Tutoring | <i>Reading clinic</i> as university-based S-L Project |
| SCED 319 Survey of Educational Programs | <i>Students were assigned to do four hours of S-L</i> and chose their own projects based on their interests and schedules |
| ECED 342 Primary Curriculum | Students <i>created S-L projects with careful adherence to the S-L process</i> including: a recycling project with multiple cross-curricular components; a project that address an organizational need at a Muscular Dystrophy Camp, and a Save the Bay project with 2 nd graders. |

This begs the question: how can teacher educators infuse S-L with *all* its components and then measure its effects on the students' ability to conduct S-L in the future? Given the time constraints within a typical teacher education courses (15 weeks) combined with the pressures of standards driven curriculum (i.e., state testing standards, accreditation standards, and federal mandates) infusing S-L in a teacher preparation course and evaluating its effects on all participants becomes a seemingly unwieldy and indeed complex task. The following comment, then, is not hyperbolic by any means: "Our general conclusion is that S-L is such a complex process that it requires a complex and comprehensive assessment model" [Driscoll et al. (1998)].

B. Planning Questions

Fortunately the literature on S-L in teacher education *does* offer ample guidance to help beginners "smoke out" planning, implementation, and assessment issues. "Service-Learning and evaluation...are intimately linked through the questions and learning activities that drive the program" [Shumer (2002), p.183]. Table 2 contains a list of 25 questions that we had culled from the literature [Eyler & Giles (2002); Shumer (2000); Swick et al (1998); Darling-Hammond & Synder (1998)] and that were presented to our faculty participants during the workshop on S-L assessment [Ball (2002)].

How did the consortium teacher educators heed these considerations and moreover to what extent did they model the "complete S-L package" for their education students?

III. Method

A. The Struggle over Assessment

Participants struggled to decide which of two outcomes would be the focus of their assessment: (1) changes in students' attitudes and beliefs about service or (2) students' learning of the five S-L competencies. On the eve of actual implementation of their S-L projects, the only discernable assessment plan was in fact a Q-sort that one participant had designed to measure the former. But since the purpose of the consortium project was to infuse S-L in education courses so students could learn the skills to do it, we had to devise a measure that would document *that* learning, i.e., their acquisition of S-L competencies.

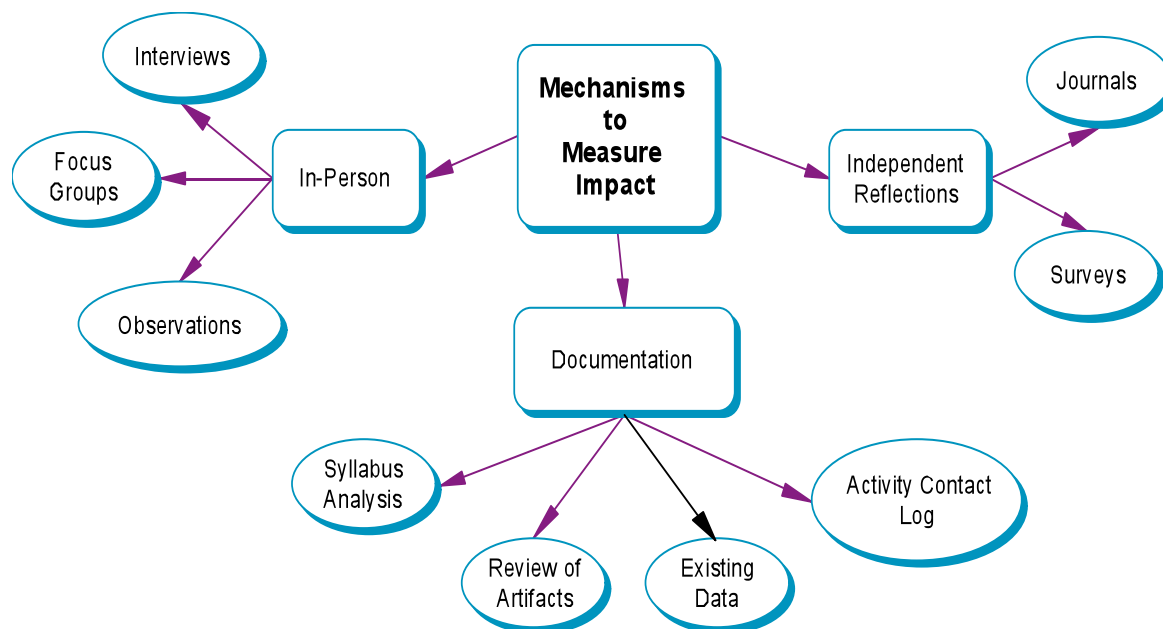
TABLE 2 Twenty five Planning Questions

| |
|---|
| 1. What outcomes in my teacher education course are related to S-L outcomes? |
| 2. In my teacher education course to what extent will I be able to implement a S-L project? |
| 3. Do I understand the purpose(s) of assessing and evaluating S-L activities in my course? |
| 4. Can candidates differentiate between S-L and volunteerism, community service, or clinical experiences? |
| 5. Can candidates identify S-L practices, including how context affects the process and form of the project? Do they understand how to adapt given constraints? |
| 6. How has S-L experiences helped them to develop reflective practices? To problem solve in complex settings, to work collaboratively? |
| 7. Has the S-L experience revealed to my students their assumptions, preconceptions, or misconceptions about the community and its people? |

| |
|---|
| 8. How might this S-L project create negative effects for those involved? |
| 9. What have they learned about their community? |
| 10. Do my students understand how to measure the impact of S-L on both their future students' and the community need? Can they set goals and outcomes? |
| 11. Did I provide adequate opportunities for them to reflect in structured ways? |
| 12. Were goals and outcomes clear so that candidates understood the purpose(s) of the S-L project as well connect to the course content? |
| 13. How did I model for my students the S-L competencies? |
| 14. What impact has the S-L project had on my pedagogy? My course? |
| 15. Did I use authentic assessments and multiple sources of reflections: journals, discussions, writing assignments, displays, Web Searches, and presentations in combination with traditional measurements: teacher designed questionnaires, tests, and portfolios, to evaluate specifically desired outcomes of the S-L activities? |
| 16. Did I enable students to connect S-L with significant school reform efforts such as multicultural education, problem-based learning, democratic education, cooperative learning, and last but not least standards-based learning? |
| 17. Have I with my colleagues discussed how S-L competencies could be distributed across our teacher education. curriculum? |
| 18. Are students applying skills they have developed in their courses and practica to their S-L activities? |
| 19. Are the students encouraged to connect their S-L experiences with their future profession? |
| 20. Are students developing caring and compassion as a result of serving others? Are there other effects on my students, such as increased understanding of and commitment to social justice, civic responsibility, etc.? |
| 21. How will I gauge to what extent pre-service teachers will be able to implement S-L in their future classrooms? |
| 22. Should I provide them with a clear set of guidelines to help them when they implement S-L in their future classrooms? |
| 23. To what extent were my students co-creators in the process of developing and planning the S-L project? |
| 24. Do my students understand the need for S-L in our global society? |
| 25. What are my students' assumptions about serving people in their community? |

Assessment tool. Our assessment method would need to accommodate a variety of needs and constraints, such as contrasting course content, instructional styles, research agendas, department priorities, etc. Therefore it was necessary to provide an assessment tool that was somehow flexible, basic, reliable, and credible. For parsimony and efficacy, we proposed a framework that we had adapted from an assessment model created at Portland State University [Driscoll et al. (1998)], particularly their matrix entitled, "Mechanisms to Measure Impact" (Figure 1). This adapted model [Ball (2003)] provided consortium professors with a framework for measuring essential S-L outcomes – particularly how the teacher candidates had learned the five S-L competencies. It represented a convenient menu so professors could select the techniques that best suited their needs, beliefs, and situational constraints.

FIGURE 1: Assessment Model: “Mechanisms to Measure Impact”



Adapted from the State University of Portland's "Assessing the Impact of Service-Learning: A Workbook of Strategies and Methods"

B. Data Collection

Multiple sources of formative and summative data were collected during the three year consortium project. Annually we gathered qualitative data to evaluate our progress toward grant goals. From our first, we collected assessment data that included participants' evaluations of the preparatory workshops and their pre- and post reflections about their grasp of S-L pedagogy; and from years 2 and 3, we gathered their revised course syllabi, their documentation of their students' learning, and their summative reports. The final reports, which comprised a large part of the TECSL monograph (2003), were each professor's narrative and reflections about their S-L experiences and it's effects on both their own pedagogy and on their students' growth.

Eventually we had analyzed these data sources to determine how participants infused S-L projects in their courses, specifically for evidence that they had incorporated the five S-L competencies and for evidence showing to what degree their education students could demonstrate what they had learned about the S-L process. From our data analyses we wrote annual project evaluations reports [TECSL (2002, 2003)], and we have since conducted content analysis of both our annual evaluations and the professors' summative reports for the basis of this current discussion.

Participant observation. As grant evaluator and director respectively, we both had adopted the role of participant observer in order to closely follow the S-L learning and application process and to obtain firsthand a perspective on the consortium activities. In addition during the first year both of us made presentations at the preparatory workshops, but only one of us had infused S-L in an education course during this project.

Table 3: Assessment Methods & S-L Competencies Assessed

| Method of measuring outcome | Year 1: # of courses where assessment was used (n = 36) | Year 2: # of courses where assessment was used. (n = 42) | S-L Competency measured* (#1-5) |
|---|---|--|---------------------------------|
| Student Reflections; journals, essays | 15 | 15 | #3, #4, #5 |
| Class Discussions | 7 | 7 | #3, #4, #5 |
| Tests | 2 | 2 | #3, #4, #5 |
| Surveys | 1 | 6 | #5 |
| Logs/ Project plans | 1 | 1 | #2, #3, #4 |
| Presentations | 10 | 10 | #5 |
| Artifacts: Portfolios, Video, field notes | 0 | 0 | 0 |
| Interviews | 0 | 0 | 0 |
| Observations | 0 | 0 | 0 |
| Focus Groups | 0 | 0 | 0 |
| Other student Projects | 0 | 1 | S-L defined |

*Five S-L Competencies: 1= Identify Community Need

2= Establish partnership and collaboration with community to develop S-L project

3= Prepare-Act-Reflect (P-A-R)

4= Identify relationship between S-L project & course content

5= Sharing results: evaluate/assess the impact of S-L on: a) Community or K-12 students, b) Self

IV. Results

Table 3 shows the results from the semesters during which professors implemented their S-L projects and indicates both the measurements that they selected and which S-L competencies they assessed. This data clearly shows that participants relied most heavily on student reflections to gauge the impact of the S-L projects on students outcomes. It also reveals that certain competencies were neglected. A further analysis of how S-L competencies were incorporated is shown in Table 4.

Table 4 shows that professors placed the greatest emphasis on Competency #3 (P-A-R) and on one aspect of #5, (Sharing results: assessing impact on self). Only 58% of the teacher educators reported that they themselves had identified the community need for their students and that establishing the community partnership had not been an outcome for their students, but that 38% of professors had assumed this responsibility. Moreover only 13% indicated that they had addressed competency #5b (Assessing impact on community partners or K-12 students).

TABLE 4: Five S-L Competencies Addressed in Project Courses

| S-L Competency | % Courses (n=15) where competency was addressed |
|----------------------------|---|
| 1. Identify Community Need | 58% |

| | |
|---|------|
| 2. Establish partnership and collaboration with community to develop S-L project. | 33% |
| 3. S-L Process: Preparation-Action-Reflection (P-A-R) | 100% |
| 4. Identify relationship between S-L project & course content | 17% |
| 5. Sharing results: how to evaluate/assess the impact of S-L on all involved: | |
| 1) Community or K-12 students | 13% |
| 2) Self | 100% |

V. Discussion

A. Shortcuts to S-L?

At first glance these results were confounding; it seemed that professors had taken shortcuts to S-L. Obviously something had eclipsed the S-L model for best practices as had been represented in the preparatory workshops. According to Shumer, adaptation of S-L is not an altogether uncommon heresy:

In implementing service-learning, teachers [tend] not [to] emphasize the importance of determining service needs. Neither do they emphasize the ongoing assessment of the impact of the service delivery to determine its value and its effectiveness. Yet these two program necessities are perhaps the most essential elements of any experiential or service-learning initiative. [(2002), p.183-84].

Most of the teacher educators had not fully incorporated all five S-L components, although some managed to include more than others. To give credit where it is merited, one education department excelled at integrating course content with genuine community need through service-learning [e.g., Brooks (2003); Gilliam (2003); Santor (2003)]. As we had examined the different projects in the three university departments, there was strong evidence that the projects from the inner city setting were the most sensitive to the needs of the people in their community. This resulted in unique components in their S-L projects, especially with regards to identifying community needs, establishing partnerships, providing relevant service, *and* even obtaining feedback from recipients. How and why the S-L projects in this setting were so exemplary is worth further investigation, particularly to grasp how the sensitivity of this campus and the uniqueness of its community's needs inspired a heightened quality of service-learning.

B. Legitimate S-L?

In hindsight it may have been unrealistic to expect that each course would produce evidence for all five S-L competencies; however, this realization did not emerge until after the

first semester when professors submitted data that revealed how they had documented their students' learning. Clearly the data in Tables 4 and 5 above as well as the contents of professors' final reports [TECSL (2003)] suggest considerable variance from S-L orthodoxies for preparation, implementation, and assessment.

Since most of the projects had not included all five competencies, at first glance some projects seemed barely discernible from field-based practica or typical volunteer service. How could pre-service teachers learn to implement S-L by looking up its definition on the Internet and then by observing in randomly assigned classrooms for three to four hours per semester? How can clinical practica be called S-L if teacher candidates never leave the confines of their university classroom? And how on earth could pre-service teachers establish a community partnership when the recipients were schoolchildren in Afghanistan? Furthermore was having teacher candidates reflect on these experiences at semester's end a sufficiently robust assessment?

C. Resolution.

As it turns out these concerns were neither new nor unique. "It is not possible to include all S-L best practices," [Shumer (2000) p.2]. Moreover as we unraveled our skepticism over the legitimacy of these S-L projects, implications for S-L in teacher education began to emerge. Each project was designed and implemented in a different way. Our hybrid S-L projects may confirm that there is not a universal S-L design or model - one size does not fit all - and perhaps this will be particularly evident in doing S-L in teacher education.

....ultimately it is not easy to create high quality S-L experiences in pre-service teacher education coordinating the logistics of involving students in the community, structuring effective reflection activities and assignments consistent with course goals, and finding the time to plan and coordinate projects with various community agencies are just a few of the challenges that face ambitious professors.... [Wade et al. (1998), p. 127].

Translated into the vernacular, an educator's concern will naturally be: "What do I take out of my course so that I can put S-L in?" [cf. Shumer (1997)]. So how and why did the professors arrive at their decisions that bypassed S-L best practices and produced these hybrid S-L projects?

D. Understanding S-L Variance

We needed to develop a perspective for understanding how the participants had distilled S-L theory and best practices, and thus we began to consider the emergent nature of their work. Upon initial reflection their variances seemed due to the range of their individual needs and the contextual constraints they had faced. S-L looked different in different contexts. A closer look at their work revealed further explanations for the paths they took and also provided valuable implications for doing S-L in teacher education.

E. Sequential Program Infusion.

Patterns emerged from our analyses of the S-L project data that suggested a developmentally appropriate schema for S-L infusion across education department courses. Some professors had gone further with S-L than others because their courses allowed them to

make larger connections or broader transformations. The research literature also supports this emergent schema. According to Shumer (1997):

As we begin to prepare teachers for S-L, we must acknowledge the diversity of settings and focus, preparing them for all possibilities. There is no single S-L program, teachers must know how to conduct programs across the continuum and adapt models to fit local settings. (p.2)

This certainly provides valuable implications for initial stage S-L in teacher education programs. If carefully coordinated within the teacher education curriculum, students would experience S-L in increments that would increase demands over time and moreover increase compatibility between course content and S-L requirements. Wade et al. (2000) proposed this very scenario: a foundations course would begin with S-L basics (e.g., how service-learning is distinguishable from volunteerism) and include an appropriate but limited service field experience; then through the remaining course sequence the demands of practice would increase incrementally until the candidate's internship, when she would conduct a full-scale S-L project. Looking at the S-L projects infused in the courses at all three universities clearly suggests that a similar implementation (developmentally appropriate infusion throughout the course sequence) somehow occurred, but in an unplanned and apparently uncoordinated manner. Taken individually the S-L projects did appear illegitimate, but viewed in the context of its teacher education program, shortcomings were transformed into veritable developmental steps.

F. Integrating S-L: Our Scenario

To further illustrate how S-L found its niche in our teacher education programs, we present a scenario describing how it was infused by five professors in one university department.

Consider first a foundations course in which the professor assigned her students (taking their first education course) to discover the differences between S-L and volunteerism through their own self-guided process of inquiry. After researching background information about S-L on the Internet and being assigned field placements in local classrooms with high diversity, education students' wrote reflections in which they had to distinguish whether their experiences were S-L or volunteering. One student wrote in her reflection:

When I arrived at the school...[the teacher] informed me that I would only be observing...I was a little disappointed because I thought I would be able to interact with the children...I would consider my experience a service-learning experience rather than volunteerism because I benefited ...as well as the students.... Although I only sat at the back of the room, the students would greet me and I feel they looked forward to my being there. I have never been in an elementary school looking at things through the eyes of the teacher. I do not think I would of totally understand the pieces of this course had I not been able to go to the elementary school and see it with my own two eyes...[Bowden (2003), p.19]

In a different configuration of this foundations course, another professor [Geleta (2003)] assigned students to create literacy "kits" for local students with high-risk backgrounds. When teacher candidates attempted to assessed these students' literacy needs in order to create appropriate materials, they realized that they needed to know more about both literacy learning

and the students' home and community backgrounds. This set the stage for their university classroom discussions about issues of equity and power. The instructor learned from her education students that S-L pedagogy is,

....very complex and requires a high level of tolerance for ambiguity. Also it is more challenging to teach students this tolerance, who throughout their schooling were socialized otherwise. I had to deal with "what do you really want me to do?" questions. In all cases I directed my students back to the communities to find the answers...needless to say that was often a frustrating experience to some. However students learned that they were capable decision-makers, a skill that is crucial in the classroom. (p. 25)

At a higher level in the same department of education, students in two separate methods courses (science and social studies respectively) assumed even greater responsibilities for their S-L projects. In the social studies course the students themselves determined the community need and developed the plan of action. Although the S-L project they had selected involved recipients in faraway Afghanistan, the professor supported their decision because of the world-altering events that affected the Middle East during the fall of 2002. In the students' reflections this distance S-L project appeared to have produced uncertain learning.

Unfortunately, this project did not increase my awareness of Afghanistan. I must admit that the media was my informant about the whole situation....The project did spark my interest about the children of Afghanistan, but I did not learn anything other than about the children's disadvantages. [Jenne (2003), p.47]

These students rallied the local community through various means and conducted a successful drive to collect school supplies for Afghani schoolchildren, but only to experience the disappointment and frustration after stultifying bureaucratic red-tape and heightened national security precautions prevent ever shipping the donated materials overseas. We would opine that this is a decidedly appropriate and eye-opening example of learning in the context of stone cold reality. To paraphrase what the disillusioned but alert poet Rimbaud had learned by the age of 19, "Action spoils everything."

Students in the science methods course [Robeck (2003)] also experienced disequilibrium during their S-L project, but with guidance from their professor were able to transform their puzzlement into inchoate profundity. The instructor assigned students to work with the community partner, the local zoo, to create improved learning kits for local schoolchildren. The resulting project involved multiple participants including the elementary age students, their parents, their teachers, as well as staff from park zoo. Education students found that events during their on-site interactions with recipients produced dilemmas that approximated real-life teaching situations, and which provided rich metaphors that they had to decipher through reflection and classroom discussion. The science methods professor wrote the following in his final report:

The service-learning project...had the result of helping pre-service education students reconsider, and in some case, reconceptualize their understandings of the work of teaching. While...*this result was initially unintended*, it points to an important potential for service-learning in professional teacher education programs. (p.41, italics added)

Lastly, in the fifth course in the same department, encounters with “unintentional” learning illuminate a phenomenon that is oddly missing in the S-L theories that were presented during our preparatory workshops. Students in a Children’s Literature methods course [Bond (2003)] identified the needs of English Language Learners (ELL) in local classrooms *during* the S-L experience rather than *prior* to it. Although this appears to stray from S-L orthodoxy it seems appropriate in the context of teacher education, especially when the project involves recipients with diverse backgrounds. In such courses teacher candidates are learning about diversity from interactions with the unknown (but not the unknowable).

I feel I learned more than [the student] did. I learned about a different culture and the daily struggles an ELL student faces....the only thing I would change about this opportunity is to make it a longer time than two weeks....I feel like I was only scratching the surface. (p. 50-51)

G. Now What?

Similar sequential patterns of S-L implementation commensurate with a course’s position in the curriculum were also evident in professors’ reports from the other two universities in the consortium as were unique encounters with unintentional learning experiences. Imagine if these professor in each departments were now to confer -- look at what they and their students did and then adjust and coordinate their S-L course designs so that students learn theory and practice within a developmental sequence of S-L activities. S-L competencies would be infused throughout the curriculum, certainly not loaded all at once in each course. An efficient model for S-L implementation in teacher education would emerge from this coordinated approach, one that diminishes tendencies for fragmentation and vague outcomes.

H. Documentation of outcomes.

Though compelling the instructors’ final reports [TECSL (2003)] contained vagueness about how and what students actually learned about doing S-L. For example, one professor’s final report simply stated that, “Partnerships were established when students realized the need for classroom students to understand the need for [learning the skill].....” Without evidence to support how this exquisite outcome actually occurred, the connection between S-L competencies, course objectives, and what candidates actually learned was blurry. Such ambiguity could perhaps be prevented if S-L competencies were sequentially integrated across courses. When instructors can focus on fewer S-L objectives, would assessment become a more manageable prospect? This is another reason why teacher education departments need to consider during the planning stages where and how S-L fits into their curriculum and courses [cf. Swicke et al (1998)].

I. Impact on TE Pedagogy and Student Learning

On the other hand, there was convincing evidence in the professors’ reports [TECSL (2003)] indicating that they experienced a compatible merger between S-L and teacher education, especially when pre-service teacher learned to see students with diverse backgrounds from a new perspective *and* then saw themselves changed by the experience. As they had implemented their projects over two and up to four semesters, professors began to report how

surprised they were by the potential of S-L to affect students' personal and professional development. With each semester's S-L incarnation, professors tended to report how they had learned valuable and unexpected lessons about the nature of teacher preparation and some had adjusted their S-L projects to allow these effects to take on greater proportions. For example, Wiltz [TECSL (2003)] submitted a final reflection that captures the expansive and illuminating effects of S-L pedagogy in her teacher education courses:

This is actually my fourth semester to infuse service-learning into this course. Each semester, I seem to get more proficient at presenting the basic service-learning material in meaningful ways, and in ways that the whole concept makes sense to pre-service teachers. I am becoming much better at demonstrating how to incorporate the [State] Learning Outcomes or other content standards to validate the academic basis for this type of project in public primary grades....It is imperative that the students really do a project; it cannot be a hypothetical project....Next semester I am going to require a different type of reflective log, whereby each contact or action is dated and recorded as preparation, action, or reflection. I am also going to require reflection from a) student; b) the participants and c) those receiving service.

VI. Conclusion

Considering the nature and purpose of this unique consortium project – to integrate S-L in education courses – and considering the multiple components of S-L planning, implementation, and assessment combined with program constraints, department agendas, and the current climate of mandated standards of learning, it seems more than appropriate for beginners to consider efficient ways to manage the S-L process. Learn from our struggles and shortcomings as well as our substantial accomplishments. Had it been possible for the professors in each department to have coordinated S-L in incremental stages, perhaps they could have achieved a more manageable and complete model of infusion.

Because we struggled with a prominent learning curve in these initial attempts, we learned about the importance of preventing vagueness and fragmentation. "...[A] concern for quick and easy measurement often has usurped a concern for the meaningful content of what is measured," [Winter, McClelland & Stewart in Eyler (2000), p.6].

To prevent vagueness, we urge beginners to make explicit in their list of S-L competencies that teacher candidates can distinguish between service-learning, volunteerism, internships, and clinical practica [Shumer (1997; 2000)]. Similarly we recommend that "P-A-R" (plan-act-reflect) be replaced with Shumer's (2000) expanded version, P-A-R-E (plan-act-reflect-evaluate), so that from the beginning teacher educators and their students grasp that S-L and evaluation are part of an inseparable process.

However, considering the unexpected outcomes that occurred in our projects we could make a case that S-L requires a high tolerance for ambiguity. Even though our S-L conceptual framework was our life raft so to speak, we learned through our collective efforts that S-L doesn't necessarily happen by copying models or by the limitations imposed by pre-ordained outcomes. As the professors' initial efforts clearly showed, they distilled S-L from the interactions between needs, growth, and reflection in real life contexts. As teacher educators we try to provide authentic learning opportunities for our pre-service teachers so they can experience the complex realities of teaching. S-L pedagogy provides this, in spite of its vulnerability to less than perfect planning, implementation, and assessment. To manage the delicate balance of action

in the context of complexity, keep in mind a thought about learning from Carl Bereiter (1991), “we learn in the messy...way that nature seems bound to...” (p. 13).

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A Brief Career Intervention: Psychology Students' Changed Views of Life Beyond a Baccalaureate

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Abstract. Most (77%) of a sample of some 300 undergraduate psychology majors indicated plans for a Master's or PhD degree, and most expressed high valuation of a job with a Bachelor's degree. Respondents then received a brief career intervention via a take-home booklet containing information about admission to graduate school, and features of jobs with a baccalaureate. Subsequently, regarding graduate school, 30% of the students reported less interest, 64% indicated reduced estimates of own chances of admission, 49% raised estimates of prerequisite GPA, and 51% lowered estimates of percent applicants accepted. There were suggestions of coherence in changed views: for example, change scores for interest in-, and own chances for graduate school correlated .26. Attitudes toward jobs were generally unaffected. We offer our brief psychology career intervention as a general model for research and advising in other non-professional undergraduate programs.

Key terms: career counseling, counseling assessment, brief career intervention, graduate school aspirations, graduate school perceptions, job aspirations, psychology majors.

I. Introduction.

Deciding on an undergraduate major implies additional decisions for students. Complicated career-path choices may follow, including possible employment following commencement versus postgraduate training. Teaching the facts of life beyond a Bachelor's degree should be a core component of the curriculum in the liberal arts and social sciences. The current study examined the effects of a convenient type of career counseling on advisees' views of graduate school and post-baccalaureate jobs.

Our work involved students enrolled in psychology informational courses, so naturally the substance of our career project focused on the facts and figures of academic psychology. Nevertheless, we believe the issues, procedures, and findings in this paper have relevance for

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non-preprofessional undergraduate programs in general. Psychology majors share many career concerns with their counterparts in the humanities and in other social sciences, as reflected in the following cases where published data or observations were available.

A. Employment with a BA: "You want fries with that?"

Psychology alumni often find themselves in a job with a baccalaureate, at incomes and with opportunities that compare poorly with those of majors from preprofessional programs (Borden & Rajecski, 2000; Kohout, 2000). Former psychology majors thus face employment challenges in common with many liberal arts graduates (cf., Knotts, 2002). Indeed, research over the last two decades indicates considerable convergence in the real-world fates of psychology and other liberal arts students.

For example, from a series of national surveys between 1977 to 1986, Amirault (1990) showed the percentage of alumni that held jobs in occupations "directly related" to their field of study one year after graduation. The average (unweighted) figure for psychology majors was a low 22%, which is comparable to levels for the non-preprofessional fields of economics (16%), English (35%), history (18%), political science (13%), and sociology (18%). Much higher rates of relatedness were reported for preprofessional majors, such as accounting (77%), engineering (79%), and nursing (89%).

From another perspective, a national survey of graduates between 1989 and 1990 asked them to indicate the nature of their jobs (Steinberg, 1994). Quite a few psychology majors (21%) found themselves in occupations defined as "administrative support including clerical," with similar numbers for students from history (26%) and the humanities (20%). Again, contrasting values were noted for preprofessional majors from engineering (4%) and the health professions (5%).

Later, between 1994 and 1998 graduates of a large public urban university were surveyed about how well their local education prepared them for their job in the year following commencement (Borden & Rajecski, 2000). The scale response option of "not at all" was chosen by a fair number of psychology alumni (25%), as well as those from liberal arts (21%), but far less frequently by health profession graduates (2%).

Lastly, national data presented by the American Psychological Association (APA) indicated an extension of these trends for psychology graduates in the class of 1999. Only 23% indicated their work was "closely related" to psychology (APA, 2003a) and as many as 44% were employed in management, sales, and administration (APA, 2003b).

B. Graduate School: Getting In and Getting Out

Beginning in the late 1960s there was a marked rise of interest among new college students in Master's, EdD, and PhD degrees (Astin, Parrott, Korn, & Sax, 1997, p. 5). Surveys in 2000 and 2002 indicated that approximately 60% of all freshmen nationwide planned to pursue one or another of these postgraduate degrees (Kellog, 2001; "This Year's Freshmen," 2003).

Psychology majors were certainly represented in the national trends. Studies have documented psychology undergraduates' high level of interest in graduate school and professional involvement (Briehl, 2001; Gallucci, 1997; Grocer & Kohout, 1997; Metzner, Rajecski, & Lauer, 1994; Rajecski, Lauer, & Metzner, 1998; Vittengl et al., 2004). One sobering consequence is that "Every year thousands of promising individuals apply to graduate school in

psychology, *but only a small percentage get in*" (APA, 1997, p. vii, italics added; and see APA, 1996, p. 9). For some who do gain admission, there can be a long road ahead: "A doctorate of psychology requires 6-8 years and further specialization often requires 10 years. [Approximately] 25% of [health service] psychologists have a debt of \$75,000 or more from their professional education" (APA, 2004, p. 1).

As in psychology, selectivity is the rule in other social science graduate domains. For instance, in the year 2001, sociology departments admitted only 25% of presumably qualified applicants to their PhD programs (American Sociological Association, 2005). Getting into a liberal arts graduate school can be tough, but for successful applicants, being in such a unit can be grim. According to one survivor, "Grad school [in the humanities] is a confidence-killing daily assault of petty degradations. All of this is compounded by the fear that it is all for nothing; that you are a useful fool" (Benton, 2003, p. C3). And there are questions about the very utility of the liberal arts PhD: "... in the real world no one considers a humanities doctorate as good for much of anything.... a degree that makes no sense" (Price, 2004, p. 1). Even in the alternative world of academe, humanities positions may be hard to find (Montell, 2002).

C. Career Interventions

Such circumstances call for career interventions, defined in the literature as any counseling treatment or effort aimed at enhancing individuals' career-related development or decisions (Whiston, Sexton, & Lasoff, 1998). The term career intervention is also found in the popular press (Smith, 2004).

A number of sources currently offer what we characterize as *brief career interventions* for psychology majors. These compact and convenient presentations variously cover graduate school requirements, professional credentials and activities, and, alternatively, finding employment with a baccalaureate. Some of these concise interventions are available in print as textbook appendixes (see Anderson, Eiler, & Rajeccki, 2003), or brochures and booklets (APA, 1996; Lawson, Jordan-Fleming, & Upton, 1997). Increasingly, succinct advice for psychology majors can be found on the World Wide Web (e.g., [Fretz, n.d.](#); [Friedman, 2003](#); [Lloyd, 2003](#); [Psi Chi, 2004](#); [Sobelman, n.d.](#)). Aside from psychology, one web site offers capsule career counseling for students in 53 additional majors ([University of Tennessee, 2003](#)).

We assume that these streamlined print and electronic sources have some desirable short-term consequences, if for no other reason than the known effectiveness of the wide variety of other types of career interventions (see Whiston et al., 1998). However, we agree with Davidson (2001) that there is a need for evaluation of the extent to which contemporary forms of counseling might affect career development.

Accordingly, we offer an assessment of the impact of our version of a brief career intervention--in the form of a booklet--distributed to students in psychology informational courses. We collected pretest and post-test data at two universities--one urban-comprehensive, one traditional-residential. For this empirical effort we employed measures in various formats (bipolar scale, multiple-choice, fill-in-the-blank) to inquire about the influence of our print counseling material on psychology students' career views, with special reference to graduate school.

Strict experimental psychology might call for control groups of students who did not receive a booklet, but in retrospect our real-life classroom conditions dictated that all students should be exposed. A before-to-after design did, however, permit two sorts of comparisons. First, to what extent did the intervention produce changes in responses to given measures? For

example, were there pre-to-post shifts in students' (a) expressed interest in graduate school, or (b) perceived personal odds for admission? Second, were changes in one variable consistent with changes in some other variable? For example, regarding graduate school, were change scores on the odds-of-admission measure associated with change scores on the interest-in measure?

In terms of general predictions, previous research (e.g., Metzner et al., 1994; Rajecki et al., 1998) suggested that a majority of current participants could have initial graduate school expectations that were too optimistic or ambitious given real-life constraints. Generally, we predicted that students' aspirations, along with their perceptions of barriers, would shift in a conservative direction. That is, personal interest or optimism about graduate school would decrease, and estimates of admissions standards would increase. Predictions about job ratings were left open.

II. Method.

A. Settings and Participants

Indiana University-Purdue University Indianapolis. Data were collected in classrooms at an urban public university. The Department of Psychology at Indiana University-Purdue University Indianapolis (IUPUI) required its students to complete a 1-credit-hour undergraduate course: B103 Orientation to a Major in Psychology. Between 1999 and 2001, the fourth and fifth authors (DCA, and CCW) each taught six sections of B103. We obtained data from questionnaires completed by their students and information from registrar's documents.

Beginners were meant to take B103, but, because of demand, sections enrolled various combinations of freshmen and other undergraduates. A total of 210 students provided usable data over the study period, including 98 freshmen (19 men), and 112 other students (19 men). Where appropriate in the paper, the freshmen (IUPUI_f) and the other students (IUPUI_o) are considered separately.

Syracuse University. We also collected data in classrooms at a traditional public university. The Department of Psychology at Syracuse University (SU) offered a 1-credit-hour undergraduate course: PSY400 Careers in Psychology. Between 2000 and 2001, the third author (MPJ) taught four sections of PSY400. The SU course was not open to freshmen. A total of 101 students (20 men) provided usable data over the study period.

Regarding sex non-differences, earlier reports indicated a high degree of similarity across men and women psychology undergraduates regarding career plans (e.g., Metzner et al., 1994; Rajecki et al., 1998) and highest degree sought (Rajecki, Appleby, Williams, Johnson, & Jeschke, in press). Accordingly, sex was not included as a variable in the current project.

B. Materials and Procedure

At the end of an early class session at IUPUI, students volunteered to fill out an initial questionnaire concerning, among other things, personal career aspirations and perceptions of the field of psychology. They then received a take-home reading assignment in the form of a seven-page handout, nicknamed the "Primer." Part of this booklet discussed at length the matter of admission to psychology graduate school. The heading of one passage read: "Some sobering facts about graduate school." Information included objective and non-objective criteria for application, and typical acceptance rates. A separate Primer section provided extensive coverage

of aspects of immediate employment with a baccalaureate, including expectable work categories, and attainable skills that enhance job opportunities. The IUPUI Primer can be inspected via the World Wide Web ([Jeschke, Rajecski, & Johnson, n.d.](#)).

Classroom instructions stated that the handout contained valuable information relevant to the goals of the course, and asked students to read the Primer before the next regular class, held one to two weeks later. During the next meeting an in-class discussion centered on the Primer, followed by the administration of a second questionnaire.

At SU, the Primer and questionnaire materials were revised to reflect academic circumstances in New York rather than Indiana. When SU students received the Primer for the take-home reading assignment, they were also assigned a 15-item worksheet, to be completed before the next course meeting. The SU worksheet items asked multiple-choice questions regarding specific Primer content.

C. Selected Questionnaire Items

The cover sheet of the first questionnaire contained an informed consent statement, and had a place for a self-report entry of the student's overall GPA. For the descriptions that follow, the order in which the items appear here is not necessarily their order in an instrument.

Highest degree sought. An item asked the respondent to consider the eventual occupation he or she planned to enter. It then instructed, "Please circle the degree you must earn to enter this occupation." Options were High School, BA/BS, Master's, and PhD. This item was not repeated in the second questionnaire.

Graduate school aspirations and perceptions. Six items related to graduate school: three inquired about students' own aspirations for postgraduate training, and three tapped perceptions of admission standards and rates. Regarding aspirations, one item asked, "All things considered, what is your current level of interest in getting into graduate school?" A seven-interval bipolar scale offered endpoints of 1 (*not at all interested*) versus 7 (*extremely interested*). Another item inquired, "What is the likelihood that *you* will be accepted into graduate school?" The fill-in-the-blank response sentence read "I have a _____% chance of being accepted into graduate school." A final aspiration item was open-ended and asked, "What specific actions should you take to improve your chances of getting into graduate school?" Five blank lines were provided.

Regarding perceptions of admission standards and rates, a fill-in-the-blank question inquired, "According to your own understanding... for getting into [a good Indiana/New York] psychology graduate school a minimum GPA is _____." This item set the response range at 2.0 to 4.0. Elsewhere, a multiple-choice question stated, "A graduate school program need not accept all qualified applicants." Then it asked, "In the area of psychology, which of the following would reflect a typical graduate school acceptance pattern?" Response options were "25 students applied [and] 25 were accepted (100%)," "25 students applied [and] 2 were accepted (8%)," "25 students applied [and] 20 were accepted (80%)," and "25 students applied [and] 12 were accepted (48%)." Finally, a multiple-choice item asked, "According to the American Psychological Association, what percentage of psychology majors enter Ph.D. programs?" Response options were 5%, 10%, 25%, and 50%.

Job aspirations. Three items related to employment with a baccalaureate. One item asked, "How important is it to you to major in a subject that leads to a job with a Bachelor's (BA or BS) degree?" A seven-interval bipolar scale offered endpoints of 1 (*unimportant*) versus 7 (*important*). Another item inquired, [concerning your interest in the psychology major] "How important is preparation for a job right after [an] *undergrad* degree?" There were five check

boxes: 1 (*never considered*), 2 (*not important*), 3 (*fairly important*), 4 (*very important*), and 5 (*extremely important*). A final employment item was open-ended and asked, “What specific steps could you take right now (and in the future) to improve your chances of getting a satisfactory job with a Bachelor’s degree?” Five blank lines were provided.

Primer items. The second questionnaire repeated the preceding six graduate school and three job items, and presented two additional questions. One new item asked: “By now, how familiar are you with the Primer’s contents?” A seven-interval bipolar scale had endpoints of 1 (*not at all familiar*) versus 7 (*very familiar*). The other item asked: “Regarding [the Primer], would you recommend that it should be required reading for new or prospective psychology majors?” A seven-interval bipolar scale had endpoints of 1 (*do not recommend*) versus 7 (*highly recommended*).

III. Results

A. Missing Data

All missing data were treated on a pair-wise basis, and are reflected in sample sizes and degrees of freedom. Substantial omissions occurred for IUPUI self-reported GPA. As indicated earlier, 98 of those participants were freshmen, and many had not yet earned a grade point average. Of the IUPUI_f group, 57.1% omitted a personal GPA; the omission rate for the IUPUI_o students was 9.8%. In contrast with the IUPUI samples, there were no missing own GPA entries at SU. However, at SU missing data occurred rather frequently on another dependent variable: highest degree sought (13.9%).

B. Highest Degree Sought

From the first questionnaire, of all the undergraduates who responded, 24.3% indicated a Bachelor’s, 37.2% a Master’s, and 38.5% a PhD as their highest degree sought. This trend was similar across the IUPUI_f, IUPUI_o, and SU student groups, $X^2(4, N = 288) = 7.83$, ns.

We examined the open-ended statements of the IUPUI_f group to determine what occupations appealed to these initiates. Of the 73 freshmen that aspired to a Master’s or PhD degree, 51 (69.9%) made reference to “psychology” (e.g., psychologist, counselor, private practice, behavioral scientist) and an additional 11 (15.1%) explicitly wrote in “psychiatry.” Clearly, a majority of even this relatively naive cohort was drawn to advanced psychological training.

C. Primer Ratings

From the second questionnaire, the seven-interval scales that inquired directly about the Primer revealed reasonably high ratings from all groups. Regarding familiarity, for the 308 students with data the average score was 4.84 ($SD = 1.53$); 68.8% of these ratings were above the scale mathematical midpoint of 4.00. Regarding whether the Primer should be recommended reading, for the 306 students with data the average score was 5.93 ($SD = 1.23$); 86.3% of the ratings were above the scale midpoint.

Table 1: Scores for Graduate School and Job Items Before and After Intervention

| Item | Mean (S.D.) | Mean (S.D.) | n | Change _(C) | F _{T1-T2} | R _{T1-T2} | R _{T1-C} |
|---|------------------|------------------|-----|-----------------------|--------------------|--------------------|-------------------|
| Graduate School Aspirations | | | | | | | |
| 1. Own interest in Graduate School | 5.81 (1.47) | 5.46 (1.68) | 309 | -0.35 | 28.46* | 0.75* | -0.20* |
| 2. Own chance for acceptance into grad school | 64.35 (24.48) | 48.23 (29.87) | 300 | -16.12 | 143.36* | +0.65* | -0.22* |
| 3. Action to take for getting into grad school | 3.01 (1.57) | 3.31 (1.49) | 310 | +0.30 | 14.55* | +0.59* | -0.50* |
| Grad School Perceptions | | | | | | | |
| 1. Minimum GPA for psych grad school | 3.31 (0.33) | 3.45 (0.25) | 308 | +0.14 | 55.64* | +0.35* | -0.73* |
| 2. Percent of applicants accepted | 37.36 (24.11) | 17.21 (18.99) | 304 | -20.14 | 195.93* | +0.34* | -0.70* |
| 3. Percent of psych majors entering PhD programs | 16.56 (12.34) | 10.62 (7.76) | 298 | -5.94 | 57.17* | +0.14 | -0.83* |
| Job Aspirations | | | | | | | |
| 1. Importance of major that leads to job with BA/BS | 5.19 (1.63) | 5.31 (1.52) | 307 | +0.12 | 1.58 | +0.35* | -0.61* |
| 2. Interest in major as preparation for a job after undergrad | 3.23 (1.19) | 3.22 (1.21) | 305 | -0.01 | 0.92 | +0.60* | -0.43* |
| 3. Steps to take for getting satisfactory job with BA/BS | 2.57 (1.42) | 3.10 (1.47) | 310 | +0.53 | 37.82* | +0.43* | -0.51* |

Note. The F_{T1-T2} column shows the ANOVA main effect for the before-to-after repeated measure. The r_{T1-T2} column shows the correlation between the before and the after scores, and the r_{T1-C} column shows the correlation between the before and the change scores.

D. Intervention Effects: Individual Item Change Scores

To examine the generality of intervention effects regarding the nine items shown in Table 1, student groups were treated as three levels of a between-subjects independent variable. For these analyses, before (T1) and after (T2) questionnaire scores represented a two-level, within-subjects independent variable. Thus we employed nine separate 3 (X 2) ANOVAs, with repeated measures on the second factor. Because of the many comparisons we set alpha at .01 for the ANOVAs, and for all other statistical tests reported in the paper.

T1-T2 changes in aspirations and perceptions were of central interest to the project. Relevant means, standard deviations, and *F* ratios for changes are shown in Table 1. Significant shifts did occur on all six of the graduate school items, and on one of the three job items.

Also important were possible differential effects of the intervention (changes) across the three student groups. However, none of the nine analyses yielded a significant 3 (X 2) interaction. Individual *F*s ranged from 0.05 to 3.14 with degrees of freedom ranging from 2, 295 to 2, 307. Intervention effects were therefore comparable across all groups.

Of general interest were possible overall main effects of group membership among the IUPUI_f, IUPUI_o, and SU students. Significant group differences were found for two graduate school items, as described below.

E. Graduate School Aspirations Items

Own interest in graduate school. Table 1 shows that interest in graduate school was generally high both before ($M = 5.81$) and after the intervention ($M = 5.46$). There was, however, a significant main effect based on an average downward shift of -0.35 scale units, $F(1, 306) = 28.46, p < .01$. In terms of the 309 individuals, 29.5% of the students expressed less interest the second time, 12.0% expressed more interest, and 58.6% did not change their ratings from before to after.

Own chances for acceptance into graduate school. Table 1 shows a significant average drop in expressed own chances from before to after, $F(1, 297) = 143.36, p < .01$. Individually, 64.0% of the students expressed lower chances the second time, 13.0% expressed higher chances, and 23.0% did not change their estimates from before to after.

Actions to take for getting into graduate school. Table 1 shows a significant average increase in number of recommended actions from before to after, $F(2, 307) = 14.55, p < .01$. On an individual basis, 41.0% of the students named more actions the second time, 22.3% named fewer actions, and 36.8% did not change their numbers from before to after.

On this measure there was a main effect for student groups, $F(2, 307) = 7.21, p < .01$. The overall means for the IUPUI_f, IUPUI_o, and SU student groups were, respectively, 2.76 ($SD = 1.44$), 3.25 ($SD = 1.34$), and 3.46 ($SD = 1.23$). Post hoc LSD tests showed that the IUPUI freshmen recommended fewer actions compared with the other two groups.

F. Graduate School Perception Items

Minimum GPA for psychology graduate school. As shown in Table 1, there was a significant before-to-after average increase in estimates of the minimum GPA required for graduate school, $F(11, 305) = 54.64,$

$p < .01$. On an individual basis, 48.7% of the students indicated a higher estimate the second time, 18.5% lowered their estimate, and 32.8% did not change from before to after.

Percent of applicants admitted to graduate school. Based on this multiple-choice item, Table 1 shows a significant average T1-T2 drop in estimates of percent applicants admitted, $F(1, 305) = 195.93, p < .01$. Fully 50.7% of the students chose a lower estimate the second time, 4.3% chose a higher estimate, and 45.1% did not change their choice.

Because some individuals initially chose the lowest of the four response options (“2 were admitted [8%]”), technically they could not reduce their estimate due to the intervention. When these 108 students were set aside, 78.6% of the remainder chose a lower estimate the second time.

On this measure there was a main effect for student groups, $F(2, 301) = 7.91, p < .01$. The overall means for the IUPUI_f, IUPUI_o, and SU student groups were, respectively, 32.81 ($SD = 18.08$), 23.33 ($SD = 17.09$), and 26.22 ($SD = 16.71$). Post hoc LSD tests showed that the IUPUI freshmen made higher estimates compared with the other two groups.

Percent of psychology majors in PhD programs. Based on this multiple-choice item, Table 1 indicates a significant before-to-after average decrease in estimates, $F(1, 295) = 57.17, p < .01$. Individually, 43.0% of the students chose a lower estimate the second time, 18.8% chose a higher estimate, and 38.3% did not change their choice.

Because some individuals initially chose one of the two lowest response options (“5%” or “10%”), it is unlikely that they would reduce their estimate due to the intervention. When these 177 students were set aside, 85.1% of the remainder chose a lower estimate the second time.

G. Job Aspiration Items

For the first two job aspiration items in Table 1, there was neither a before-to-after shift nor a group main effect. For the third item--steps to take for getting a satisfactory job--there was a significant average T1-T2 increase in the number of recommendations listed, $F(1, 307) = 37.82, p < .01$. On this measure, 48.1% of the respondents listed more recommendations the second time, 22.9% listed fewer, and 29.0% did not change.

H. Item-Level Correlational Analyses

Associations between before (T1) and after (T2) scores. The two columns of correlations in Table 1 reveal associations between certain pairs of scores for each item. The first column, r_{T1-T2} , expresses the relationship of the before (T1) ratings to the after (T2) ratings. A significant positive coefficient indicates that, regardless of changes, level of response before was a fairly strong predictor of level of response after.

The first item in Table 1 provides an illustration of such association. We arranged the T1 interest-in-graduate-school scores trichotomously: low (1-3, $n = 26$), medium (4, $n = 31$), and high (5-7, $n = 252$). The T2 means for these groupings were, respectively, 2.50 ($SD = 1.30$), 3.94 ($SD = 0.96$), and 5.95 ($SD = 1.32$), which trend yields the tabled r_{T1-T2} of .75 for this item.

All nine coefficients in the r_{T1-T2} column are positive; eight are significant. This pattern indicates that, apart from reactions to the intervention, students showed a degree of consistency in their responses, which speaks to the reliability of the questionnaire items.

Associations between before (T1) and change (C) scores. The second column, r_{T1-C} , expresses the relationship of the before (T1) ratings to the amount of change (C) in individuals' ratings from before to after. A significant negative coefficient indicates that relatively high initial scores tended to anticipate downward shifts, and relatively low initial scores were often linked to upward shifts.

The fourth item in Table 1 provides an illustration of such shifting. We arranged the T1 minimum-GPA scores trichotomously: low (2.0-3.4, $n = 162$), medium (3.5, $n = 89$), and high (3.6-4.0, $n = 58$). The change (C) means for these groupings were, respectively, 0.33 ($SD = 0.31$), -0.01 ($SD = 0.19$), and -0.16 ($SD = 0.23$), which trend yields the tabled r_{T1-C} of -.73 for this item.

All nine coefficients in the r_{T1-C} column are negative and significant. This pattern indicates that in general the intervention had strongest effects on students with relatively extreme initial views.

Intervention vs. statistical regression. Of course, in the absence of a no-treatment control group the entries in the r_{T1-C} column can also be taken to indicate the artifact of simple regression to the mean. But we believe otherwise. If regression to the mean were the only influence, then one would expect similar T1-T2 shifts across all measures. Instead, obtained net change scores for specific items differed in ways interpretable in terms of the intended effects of the intervention.

Clear differences in change-score profiles of selected measures can be demonstrated through an analysis of standardized scores. We chose the graduate school items of (a) own interest in-, (b) own chances for-, and (c) minimum GPA for- for a demonstration because the first two showed differing net negative shifting, and the third showed a net positive shift. To achieve standardization, a given negative change score was assigned a value of -1, a change score of zero was assigned a value of 0, and a positive change score was assigned a value of 1.

These standardized scores were entered in a 3 (X 3) ANOVA, with student group as the between-subjects factor, and item as the within-subjects factor. There was neither a main effect for student group, $F(2, 296) = 2.69$, ns; nor a group X item interaction, $F(4, 592) = 0.74$, ns. There was, however, a strong main effect for item, $F(2, 592) = 100.82$, $p < .01$. The mean standardized change scores for the three items in question were, respectively, -0.16 ($SD = 0.62$), -0.51 ($SD = 0.72$), and 0.30 ($SD = 0.77$). From this perspective, the intervention produced markedly different effects for particular measures.

I. Intervention Effects: Intercorrelations of Change Scores

The intervention evidently had an impact on students' views of graduate school. Beyond changes in particular aspirations and perceptions, we inquired about alignment among such measures. That is, were the observed changes coherent? For example, to what extent were changes in own chances for acceptance associated with changes in own interest in graduate school?

To address this issue we chose five pertinent items listed in Table 2. Item change scores for the three student groups were combined and entered in a 5 X 4 intercorrelation matrix. Specific positive or negative correlations would indicate coherence between changes on particular measures.

Four coefficients in Table 2, although weak, are statistically significant. In terms of perceptions, minimum-GPA change scores were negatively correlated with percent-accepted changes, which indicates that lowered percent-accepted estimates were associated with raised minimum-GPA estimates (and vice versa). Further, percent-accepted shifts were associated with similar shifts on the majors-in-PhD-programs measure.

In terms of aspirations, own-interest change scores were positively correlated with own-chances changes, which says that lowered or raised chances were generally associated with lowered or raised interest. Furthermore, own-chances change scores were positively correlated

with percent-accepted a change, which says that shifts in percent-accepted estimates were generally aligned with shifts in own chances.

Table 2: Intercorrelations of Change Scores for Selected Graduate School Items

| Item | B | C | D | E |
|--|--------|-------|--------|--------|
| A: Own interest in | +0.26* | -0.06 | +0.07 | +0.03 |
| B. Own chances for acceptance | | -0.07 | +0.16* | +0.06 |
| C. Minimum GPA for | | | -0.25* | -0.03 |
| D. Percent accepted | | | | +0.22* |
| E. Percent of majors entering PhD programs | | | | |

Also noteworthy, we separately calculated correlations between self-reported own GPA, and the own-interest and own-chances change scores. But associations with own GPA *failed* to emerge for both the interest-in shifts, $r(242) = .08$, ns., and the own-chances pattern, $r(239) = -.03$, ns.

IV. Discussion

Many of the psychology students in our samples were surely in need of a career intervention. Based on first questionnaire responses, we judge that degree sought, and graduate school aspirations such as own interest in- and own chances for-, tended to be too high. In a complementary fashion, perceptions of barriers to admission, such as prerequisite GPA and acceptance rates, tended to be too low. It is difficult to say precisely why psychology student expectations about graduate school would generally be so optimistic. Certainly, though, such enthusiasts could benefit from convenient access to brief career interventions found in textbook appendixes, web sites, primers, or elsewhere.

Table 1 indicates downward before-to-after shifts in students' aspirations as reflected by measures of own interest in-, and own chances for graduate school. Upward shifts occurred in students' perceptions of minimum GPA for-, and percent of applicants accepted to graduate school. On the whole, these findings agree with our prediction that following exposure to the Primer, students' average views would shift in a conservative direction. It is worth noting that certain shifts in our students' graduate school expectations are at least in agreement with short-course, intervention-based attitudinal patterns found earlier (Dillinger & Landrum, 2002). For example, in the Dillinger-Landrum study students showed marked positive shifts on an item that read "I know the information necessary to apply for graduate programs in psychology." In the current study, following the intervention, students offered more actions to take for entry to graduate school.

Otherwise, Table 1 indicates that the primer had little impact on the first two employment aspiration measures, but at least on the third measure there was an average increase in offerings of steps to take to get a satisfactory job with a Bachelor's degree.

We note in the literature that some psychology career interventions were aimed at freshmen (e.g., Dillinger & Landrum, 2002) whereas others were tailored to more advanced students (e.g., Buskist, 1999; Dodson, Chastain, & Landrum, 1996). Indeed, our Method section

reports that the SU PSY400 course was closed to freshmen. But if there is controversy as to when to best orient or advise students on careers, the data from IUPUI can help put it to rest.

The freshmen students at IUPUI, like their more advanced counterparts, were in need of advice. To review, about 77% of the IUPUI_f group planned for a postgraduate degree, put their personal chances for admission to graduate school at 68%, and gave the highest estimate (44%) of applicants accepted. At the same time, as a group they offered the fewest number of actions to take for admission to graduate school. Taken together, these patterns indicate that views of life beyond a baccalaureate can be in place early in a college career, and therefore warrant early intervention.

Table 2 suggests some coherence in changes in students' views of graduate school. But strong associations did not emerge, and own GPA proved to be a very poor predictor of such change scores. If this is a problem, the fault may lie with the information presented (or not) in the current Primer. Our Primer contained many specific facts about the plusses and minuses of both graduate school and having a job with a baccalaureate. But it did not speak much about how to understand or calculate the tradeoffs or balances between the two diverging career paths. Further, it did not dwell on how students might actively integrate the various facts about careers with their own potentials and limitations. Further still, it did not take into account the before-to-after stability of, for example, personal aspirations (the r_{T1-T2} column in Table 1). Future primer and appendix writers, web site creators, and short course instructors might do well to view students' career expectations as resistant attitudes, and to design their messages as persuasive communications rather than mere informational packages. One useful response to this list of issues might be to include a decision-tree exercise in brief career interventions (see Poe, 1988).

Of course, the importance of professional, face-to-face, extended career advising is not at issue; our compact orientation package was never meant to replace personalized advice. The weak associations among changes found in Table 2 remind us that students may well need a counselor's expertise to integrate the sheer facts and figures of career planning (cf. Davidson, 2001; Johnston, Buescher, & Heppner, 1988). However, handy resources such as the Primer might get students to begin to think more clearly about matters, and provide a stimulus for seeking additional counseling.

As seen, most students recommended the Primer to their peers. Regarding our professional recommendations, to the extent that the results of this Primer project resemble consequences for other streamlined counseling approaches, we borrow assessment terminology from the financial pages: A brief career intervention represents a relatively small investment that can yield a modest but welcome return. These vehicles are worth inclusion in an advisor's portfolio.

Finally, to reiterate comments from the Introduction, psychology majors share many career challenges with their counterparts in liberal arts. Therefore, we believe the issues, procedures, and findings in this paper have utility for advisors in several disciplines. Our brief psychology career intervention can serve as a model for research and advising in other non-preprofessional undergraduate programs.

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Mock Interview Strategy: An action research study of administrator and teacher candidates' preparation for interview field experience

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Abstract: Schools of graduate and undergraduate education can be of great help to each other. To be an effective interviewer or interviewee, a person must have experience. The perceived self-efficacy of interviewing skills may help in actual interviews. A mock interview strategy is proposed to help administrator and teacher candidates become proficient in the interview process while helping one another. Action Research methods were used as the research design and theoretical framework. Data were gathered from: observation, reflection on practice, narratives and student surveys. A total of 170 surveys were completed. Results indicated that perceived self-efficacy was improved and the experience was worthwhile. Improvements and changes to the strategy were implemented.

I. Introduction

In the interest of helping schools improve, graduate classrooms must model the “how to” in everyday teaching and learning strategies. Providing as much field experience as possible is necessary to teach teachers and future administrators. Administrators are seen as the instructional leader in their schools, as they supervise, fill vacancies and initiate improvements. Principals especially must learn in an open public arena. This takes courage. At the graduate level, providing mock scenarios before implementing them in the field could foster this courage.

To elicit richer empirical data about the phenomena of school leadership, research needs a qualitative approach, examining such corollaries as beliefs, relationships, and experiences of the people involved in education. (Hallinger, 1990) In other words, leaders must act, perform, and teach before an audience, then reflect on these actions. Even though we may study all of these elements in the graduate classroom, how can they be learned in action? The action of practicing in class in front of peers and the mock interview performed in front of professors provided a stage for practice and reflection.

This research focuses on three graduate level classes in *School Personnel Administration* and undergraduate student teachers who participated in “Mock Interview Night.” All administrator candidates were experienced teachers and had fulfilled requirements for admission to the Graduate College at Southeastern Louisiana University. The three graduate level classes studied the interview process, practiced developing questions, and interviewed each other, before performing in the mock interview. Undergraduate teacher candidates also studied how to proceed through the interview process by reading sample interview questions, participating in class discussions, and practicing resume writing. They were given a “Frequently Asked Questions”

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guide before making the appointment for “Mock Interview Night.” (See Appendix 1)

Action Research techniques were used in order to improve this mock field experience for graduate and undergraduate candidates. Precisely, these research questions were posed: What interview skills are needed for selecting new teachers? What skills do teacher candidates need for effective interviewing? Did “Mock Interview Night” improve perceived interview self-efficacy for undergraduate teacher candidates? Did “Mock Interview Night” improve perceived interviewer self-efficacy for graduate administrative candidates? How can the university professors improve “Mock Interview Night?”

II. Literature Review

Since this mock experience includes both administrator and teacher candidates who practice together and help each other refine skills for interviewing, research which included perceived self efficacy and peer tutoring were sought. The construct of self-efficacy is defined by Bandura (1997) as the impact of how people feel, think and act in stressful situations that reflect accomplishments and personal development. People with low self-efficacy have pessimistic thoughts about their achievement and accomplishments in certain domains, and are fearful of talking about their expertise. Practicing for situations like interviewing could help improve perceived self-efficacy in the domain of teaching methods and interview skills by all participants, thereby helping shed the most positive light on their strengths.

Reciprocal Peer Tutoring (RPT) is one technique that several researchers have studied at the post-secondary level where students alternated role of tutor and tutee (Fantuzzo et. al, 1989). During Mock Interview (MI) both students advised each other on ways to improve interviewer and interviewing skills, but will not switch roles. Thus, like RPT, MI students have the related advantages of preparing for interviews and interviewing by receiving instruction, encouragement and advice from a peer. In RPT, students received extrinsic rewards and took graded tests (Fantuzzo, 2004).

Rittschoff and Griffin (2001) explored the relationships among conditions and academic achievement, test anxiety and academic self-efficacy. They found that the students liked the experiences and felt that it improved their performance on tests. However, no significant differences were found between the control group and the Reciprocal Peer Tutoring group in test score performance.

In research on peer tutoring at the secondary level, Mann (1994) found that good tutors understood interpersonal nature of tutoring better, were more flexible problem-solvers, and received greater satisfaction from conflict resolution than ineffective tutors. Schmidt and Moust (1995) studied peer tutors in health sciences college courses. As a result of peer tutoring positive changes were found in both the tutors' personal qualities and course knowledge. Schmidt et. al (1994) studied peer tutors in relationship with staff tutors. It was found that peer tutors were rated as more supportive in early stages, while staff tutors were rated as more supportive in the later phases. Staff tutors asked better questions of their tutees and were rated as more knowledgeable. This research supported the notion of using interviewer peers (administrative candidates) who had degrees and were currently teaching in the field for the research. It was hoped that the teacher candidates would rate the peer interviewers as excellent or good.

McKellar (1986) discovered positive responses to peer tutoring when tutors were willing to elaborate on their explanations, bring in new information, and asked if the tutee had comments. The administrative candidate interviewers discussed and practiced these strategies during classroom preparation for Mock Interview night. They realized through practicing with

each the importance of this dialog.

Results of Morgan's study (2000) demonstrated the effectiveness of a peer-mediation strategy to assist teacher candidates in developing specific instructional behaviors and perceived teaching efficacy. In addition, results also showed benefit to the investigator/professors' teaching efficacy. The premise of this research is to evaluate and improve teaching and learning at the undergraduate and graduate levels of the field of education.

III. Procedures and Methodology

The Action Research model was chosen as the methodology because it simultaneously assists in practical problem solving, improvement of instructional methods and expands scientific knowledge. It can be seen as a study of a system while concurrently collaborating with members of the system to improve or change it. David A. Kolb's study of Kurt Lewin's work with Action Research emphasized that educational research should be concerned with the integration of theory and practice (Shields, Aaron & Wall, 2002).

Action Research is especially relevant for social situations and schools. Dick, (1997) states, "Action Research is a process by which change and understanding can be pursued at one time. It is usually described as cyclic, with action and critical reflection taking place in turn (p. 18)." Baskerville (1999) describes four steps to each cycle: plan, act, observe and reflect. That knowledge is derived from practice, and practice informed by knowledge, in an ongoing process, is a cornerstone of action research. Field (2004) describes six steps in the process, identifying issues and developing questions, learning more about the issue, developing a strategy, gathering and analyzing data, taking action and sharing results, and personal reflection. Field's process was used as the procedure for this study.

The first goal of the study was to enhance teaching methods in the graduate and undergraduate classes in the Department of Education and Human Development. The second goal was to help students to both levels improve their perceived self efficacy in interview situations. The strategies for the study followed the action research model where the participants are also the researchers. Intervention action occurred by the researchers as the actions progressed. Data were coded from themes, patterns and chart patterns, and then summarized to analyze what was learned as the research progressed, by noting images, metaphors, and any new questions. Understandings were checked by triangulating evidence (same theme, code, pattern appears in more than two types of data), and by talking to peers and students (O'Brien, 1998).

Two sets of data were gathered. Observation of in role play, and interaction and reflection was only used in the graduate candidate classes. The teacher candidates were not observed in the college classroom.

Data were gathered from administrator candidate, School Personnel Administration classes about the following aspects of "Mock Interview Night":

1. Dialog and role-play of teaching and practicing the interview process in class;
2. Reflection on interview role play with peers;
3. Observation of the Mock Interview Night performance;
4. Administrator candidate scaled survey and open ended questions;

Data were gathered from senior teacher candidates about the following aspects of "Mock Interview Night":

1. Observation of Mock Interview Night performance
2. Teacher candidate scaled survey and open ended questions.

Taking action and sharing the results with others occurred next. Lastly, personal reflection about

the learning process the researcher experienced as a result of completing the study.

The participants/students were volunteers and consented to be included in this research study. Two groups of participants made up the sample. Fifty administrator candidates enrolled in three different sections of School Personnel Administration participated in the "Mock Interview Night," while 120 teacher candidates enrolled in student teaching made up the sample. The administrator candidates were all teachers with two or more years of teaching experience. They ranged in age from 25 to 55 years old. Ten were male and 40 were female. Forty two were white and 8 were minorities. All teacher candidates were college seniors and will be seeking teaching positions and going through the interview process. They ranged in age from 21 to 36 years old. Twenty two were male and 98 were female. Eighty seven were white and 33 were minorities. All participants were enrolled at Southeastern Louisiana University.

IV. Presentation of the Data

A. Observation of School Personnel Administration Classes

Teaching and interview role play in class. The School Personnel Administration classes were taught as seminars, with candidates and instructors freely interchanging research information and samples of recruitment, selection, resume writing, and interviewing. Candidates worked in small groups to create interview protocols from their personal research. A role play situation was designed for the class. On practice night, candidates came prepared with their interview protocol and were chosen by the instructor at random by drawing names from a basket, to play the role of the interviewer or interviewee. The rest of the class observed. The participants were very nervous and afraid to perform in front of the whole class. They said, "To be observed by your peers is intimidating. This feels like a test. I am so afraid how my peers will judge me." This enlightened the participants about the fear involved from the viewpoint of the interviewees.

Reflection on role play. Upon reflection, several candidates commented, "It is frightening performing in front of the class. It is even more frightening being the interviewee. I can see that a novice teacher may not know some of these things I am asking and maybe my questions are too difficult." They said that it was much easier being on the interviewer side of the table. Class discussion revolved around how to have a comfortable dialog with the interviewees and share experiences while easing the tension. Participants expressed their concern about the time limit of twenty minutes for each interview by saying, "We will have to spend some time making the interviewee feel comfortable." Candidates formed small groups and helped each other to make adjustments to their protocols based on these reflections.

B. Observation of Mock Interview Night

Administrator and teacher candidates' performance. The Mock Interview Night took place in a large multi-purpose room on campus. Professors set up numbered interview stations with tables and chairs. The administrator candidates arrived at 5:00 PM to check in and find their table. Appointments for interviews were made at 25-minute intervals. As the teacher candidates began to arrive, a buzz of excitement was heard. Administrator candidates did a good job warming up to the interviewees. Some didn't want to leave when their time was over. Most candidates appeared to be having a good time. The open-ended questionnaire supported this observation.

C. Scaled Survey Results

Administrator candidates. Five questions were posed to the administrator candidates. One hundred percent of those who completed the interview process ranked the experience as very beneficial. The second question asked the administrator candidates to rank each of the four interviewees from excellent to poor. The majority of the rankings were in the “good” category at 43%, with 38% excellent, 12% fair and 7% poor. The third question asked interviewers to rank the feedback from the interviewees. Twenty three percent ranked this question excellent, 23% ranked it very good, 6% poor, and 48% marked no feedback. Many commented in their written statements that the interviewee wasn’t asked for feedback. The fourth question asked administrator candidates to rank their confidence level or perceived interview self efficacy as a result of the mock interview experience. Forty one percent ranked their confidence level as very confident or excellent and 59% ranked their confidence level as confident or good. The fifth and final question asked the graduates to rank their own performance. Seventy six percent ranked their performance as excellent and 24% as very good. This was verified by observation and the grades received on their final report. (See Table 1)

Teacher candidates. When asked to rank the over-all experience, 65% ranked the experience as excellent, 28% as good, and 7% as fair. When asked to rank the interviewer, 63% ranked the interviewer excellent, 33% ranked the interviewer good, and 4% ranked the interviewer fair. When teacher candidates were asked to rank the feedback they received from the graduate candidates, 67% responded with a rank of excellent, 31% good, and 2% said that they didn’t receive feedback. This may have been due to time restraints, as reported by both sets of candidates in the comment section. Self-efficacy was evaluated as a result of the experience by 52% feeling very confident about real interviews, 35% confident, and 13% same as before the mock interview. When asked to rank their own performance during the interview 45% reported that their performance was excellent, 36% very good, 13% fair, and 6% poor. Some of the teacher candidates remarked that they wished they would have been better prepared and some said that the experience was very difficult to prepare for since they had been working all day student teaching in the field. A comparison of administrator teacher candidates scaled responses are shown in Table 1.

D. Open-ended Responses: Administrator Candidates

Recommendations for future Mock Interview nights. The administrator candidates recommended that the professors should provide a panel interview, since this was like the “real world.” Panel interviews seem to be the technique some of the more affluent school districts are using. Others disagreed, by pointing out that their school district only had the principal as the interviewer. However, they said that the teacher candidates should be permitted to interview more than once. “Then the teacher candidates could practice their new strategies.” The third recommendation was for the professors to provide more information and practice critiquing resumes and resume writing. Many of the interviewees asked the administrator candidates to critique their resume. Some of the administrator candidates admitted that they didn’t know much about resumes resume writing or critiquing resumes. Others attempted to answer the resume question based on former personal experience in resume writing for securing their first position as a teacher. Finally, it was recommended to increase the length of time for each interview, so more dialog could occur between administrator candidates and teacher candidates. This was viewed as an important peer tutoring session between the two sets of students.

Another category of recommendations centered on interviewing experienced teachers for employment and interviewing administrative candidates for principals' positions. The administrator candidates said that talking with an interviewer in a central office position or a building level principal would be very helpful prior to the mock experience. Experienced teachers bring a different set of possibilities to the interview situation. Most of the administrator candidates are looking forward to the administrative job search; therefore they need experience being the interviewee. They recommended that another "Mock Interview Night" could be provided for these purposes.

Advice for future administrator candidates. Several administrator candidates advised future students to answer their own questions to ensure reliability. Another suggestion was to develop a rubric, a checklist, or a rating system, to prevent having to write everything the interviewee said. In order to emphasize the relevance of the experience one graduate candidate said, "Remember that this is an important experience to prepare teacher candidates for future teaching job opportunities." Future administrator candidates were told that they should value the experience of role-playing in class in order to feel the apprehension and anxiety of the interviewees. Showing a relaxed demeanor, being well prepared and having a good bank of questions were other words of advice.

Advice for teacher candidates. In order to help future teachers, administrator candidates offered many words of advice. They reminded the teacher candidates that being confident, calm, prepared, honest and professional is very important in the interview. Dressing appropriately and bringing a well-prepared resume is necessary, because you will never have a second chance to make a good first impression. They told them that if they relaxed, made eye contact and were honest, that it would help them. Administrator candidates recommended practicing interviewing before the Mock Interview night by verbalizing answers, so responses could be practiced. Anticipating possible questions by taking notes of various questions and types of questions before and during the mock interview would be of help. They suggested that there are many sources where questions can be found, including the Internet. One item that is on every educator's mind is whether new teachers would be knowledgeable of current trends in schools, legislation and accountability. One administrator candidate said, "Take a deep breath and use this learning experience in a safe environment. Remember, the graduate candidates are here to help teacher candidates refine their interview skills in order to secure their first teaching position."

E. Open-ended Responses: Teacher Candidates

Recommendations for future Mock Interview Nights. Many teacher candidates recommended that more time should be provided for interviews. One said, "I know that time is important, but I would have loved to have more time with my interviewer. She was great!" Another said, "This was a wonderful experience for me. I feel much more confident about future interviews." Many commented that it was wonderfully planned and organized and all student teachers should be encouraged to attend. They recommended that future "Mock Interview Nights" should be scheduled on a day when teacher candidates are on campus, rather than at their field-based assignment, to provide more time for planning. One teacher candidate wanted the activity to be held in her own school district, so it would be more convenient. Some said, "I enjoyed the experience and would not change anything."

Teacher candidates were asked what suggestions were received from administrator candidates. They were told to not chew gum or mints. Administrator candidates gave teacher

candidates a picture of the skills they would need in the “real world” of education by making these comments: With the law “No Child Left Behind” individual differences must be met and each applicant should be able to explain how this should be accomplished. Schools are looking for teachers who can accommodate every student and their learning abilities. Administrator candidates told the student teachers that administrators would be looking for teachers who are willing to improve themselves by attending workshops and collaborating with other teachers. They expressed that it was important to be a team player and read professional journals and literature. One teacher candidate, when asked about parental involvement and parent-teacher conferences, said she had to admit that she was very nervous about this subject and didn’t feel confident about dealing with parents. One student teacher said, “I was told that I was too nervous and it was good to show confidence in myself.” Some of the teacher candidates said that they wanted more feedback and suggestions from graduate candidates. One said, “I would have liked them to spend more time going over my resume with me.” This may be possible if more time were provided for each interview. One administrator candidate told her interviewee to be relaxed, show her true self and keep the enthusiasm. Most teacher candidates said they received positive encouragement and praise and felt more confident about the job search and the interview process.

Advice for future teacher candidate interviewees. Teacher candidates gave a wide range of advice for future participants. They reported that it was a very helpful experience. Most importantly, many said that they felt much more comfortable about attending their first interview. This perceived self-efficacy was supported by other teacher candidates when they said, “I know now what to expect,” and “The advice I received boosted my self confidence.” The teacher candidates said that future interviewees should go in with a positive attitude and be open to suggestions and take the process seriously. In order to perform well they recommended that interviewees know how to assess their knowledge formally and provide examples from their student teaching experience. They said that each interviewee needs to know how to set up a classroom and implement their preferred discipline policy. Most advised that every future teacher candidate attend the “Mock Interview Night” and be well prepared. One very important piece of advice to future interviewees was to ask for clarification of questions if the questions are not understood, because it gives interviewees more time to organize their answer and does not indicate lack of knowledge. One teacher candidate said, “Relax and enjoy what you have learned over the last four years. Use this experience as a tool and take advantage of the whole opportunity by asking questions when the interview is over.” Future teacher candidates were advised to reflect back on all of their experiences of student teaching and acquired knowledge. Both sets of candidates had similar comments about advice and recommendations

V. ANALYSIS OF THE DATA

A. Scaled survey results.

Since the overall experience was ranked as excellent by 100% of administrator candidates compared to 65% of teacher candidates, it appears that administrator candidates benefited from the Mock Interview experience more than the teacher candidates. The reason for this difference could be that one of the objectives of the School Personnel Administration course was to learn skills of interviewing and selection of new teachers, while teacher candidates do not have a specific course or course objective for acquiring a teaching position and interviewing skills. When comparing the perceived quality of the interviewer and interviewee, teacher candidates

ranked their interviewer much higher than the interviewer ranked teacher candidates (63% excellent compared to 38% excellent.) Teacher candidates received more feedback from the interviewer. There could be two reasons for this: Most participants said that the 20 minute time limit was too short, thereby not allowing enough time for feedback. Administrator candidates assumed they were the tutors and the teacher candidates were the tutees, therefore feedback from teacher candidates was not sought. Both groups of participants had similar feelings of perceived interview self efficacy, with 41% excellent and 59% good for administrator candidates and 52% excellent and 35% good for teacher candidates. However, 13% of teacher candidates didn't feel more confident. Since this was one of the major objectives of this exercise, these were positive results. When the two groups are compared by ranking their own performance, they differed greatly. Seventy six percent of administrator candidates compared to 45% of teacher candidates ranked their own performance as excellent. This discrepancy points to a discrete set of objectives for the skills of interviewing skills between administrator candidates and teacher candidates. This could be remedied by adding a course or course objectives that cover resume writing and interviewing skills for teacher candidates. (See Table 1)

B. Skills needed for the interviewer.

Administrator candidates discovered that they need to spend time helping the interviewee feel comfortable, in order to elicit the sincere personality and knowledge of entry year teachers. The ability to critique and evaluate resumes should be a skill of interviewers and taught in the School Personnel Administration class. A good protocol is necessary in order to reveal the types of answers interviewers wish to elicit from prospective teacher candidates. To develop this questionnaire the interviewers need to answer the questions themselves and practice the questions on skilled, experienced teachers. Skill in developing rubrics for recording answers during the interview could be helpful. The "Mock Interview" was seen as a good practice for real field experience by graduate students. Finding a match between characteristics and needs of the school or school district with the applicant is probably the most important skill. This is very difficult to do in a mock scenario, but something to consider.

C. Skills needed for the interviewee.

Exercises in resume writing should be part of teacher candidates' practice for the job search process. Teacher candidates need to be aware of current trends in educational research and legislation. With the recent emphasis on increased parental involvement, student candidates need much more knowledge about how to deal with parents as partners in the education. They need to be knowledgeable and be able to cite examples of their student teaching experience. Skill development should include practice with sample questions and answers, eye contact with interviewer, poise and confidence about the self-efficacy of the teaching process. Teacher candidates should take advantage of the "Mock Interview Night" as practice for real experience.

From the viewpoint of the university and undergraduate classes several curriculum changes could be made. New courses could be added to address these issues or content could be added to existing classes. These skills need to be addressed; resume writing and interviewing skills, conducting parent conferences, use of informal assessment techniques to address multiple on-going assessments, addressing differing needs of a wide range of students, study and knowledge of current legislation that affects teaching and learning like, "No Child Left Behind." Many of the undergraduate students seemed very surprised at the breadth of knowledge they

seemed to be lacking.

Table 1: Summary of Scaled Responses

Administrator Candidates' Responses

| Question # | Excellent | Good | Fair | Poor/None |
|---------------------------------------|-----------|------|------|-----------|
| 1. Overall experience | 100% | 0% | 0% | 0% |
| 2. Rank of interviewer or interviewee | 38% | 43% | 12% | 7% |
| 3. Feedback received | 23% | 23% | 6% | 48% |
| 4. Perceived interview self efficacy | 41% | 59% | 0% | 0% |
| 5. Rank of own performance | 76% | 24% | 0% | 0% |

Teacher Candidates' Responses

| Question # | Excellent | Good | Fair | Poor/None |
|---------------------------------------|-----------|------|------|-----------|
| 1. Overall experience | 65% | 28% | 7% | 0% |
| 2. Rank of interviewer or interviewer | 63% | 33% | 4% | 0% |
| 3. Feedback received | 67% | 31% | 0% | 2% |
| 4. Perceived interview self efficacy | 52% | 35% | 0% | 13% |
| 5. Rank of own performance | 45% | 36% | 13% | 6% |

D. Perceptions of perceived interview self-efficacy.

Both administrator and teacher graduate candidates reported improved feelings of self-efficacy for interview skills as exhibited in the scaled survey and open-ended responses. Generally, the teacher candidates reported feeling more confident about the job search and interviewing process. One teacher candidate said, "I was so nervous about interviewing. This process helped me to become aware of my own strengths. My interviewer taught me how to confront my

weaknesses and emphasize my recent acquisition of new knowledge and student teaching experience.” Administrator candidates had similar feelings of self-efficacy by commenting that they learned how to listen carefully and show compassion for those entering the profession at the entry level. Several reported that their first interview questions were much too difficult and they may lose the opportunity to hire an excellent entry-level teacher. Some of these novice teachers have the potential of touching students’ lives and if they concentrated solely on high levels of knowledge these important qualities would be missed. Many of the administrator candidates remarked how well prepared they felt for conducting actual interviews. This perceived interview self-efficacy was supported by the scaled survey, observation of the School Personnel Administration class and classmates and observation during the Mock Interview experience

E. Improvements for “Mock Interview Nights.”

Even though the program was a success, several improvements could be created. These suggestions for improvements were made from dialog, role-play, and reflection in the School Personnel class, observation of the Mock Interview night, scaled survey results and open ended responses. The School Personnel Administration classroom activities were very beneficial for administrator candidates and no changes need to be made. However, teacher candidates could benefit from the same type of class and activities, so it has been suggested that this course or objective be added to the teacher candidate program. “Mock Interview Night” could be provided on a night when teacher candidates are on campus rather than off campus student teaching. If two different nights were offered teacher candidates, they could have two interviews for practice. The interviews could be lengthened to 45 minutes. This could improve the experience greatly, since both candidates reported on the likert-style questionnaire and comments that they needed more time to cover all parts of the experience. Panel interviews would be very difficult to arrange; however, it may be possible to practice with administrative candidates. The professors may want to study this type of mock interview scenario further. These changes would be feasible, but fewer teacher candidates may be able to experience this interview practice.

Some of the teacher candidates felt stress from having worked all day student teaching in the field and didn’t have enough time to thoroughly prepare for the “Mock Interview Night.” This was shown when they ranked their performance as “fair” and “poor,” and verified when they wrote about stress and rushing around to participate in the event.

An additional “Mock Interview Night” should be considered for experienced teachers and administrator candidates. A new set of questions and skills would be needed for this type of experience. Experience could be gained for all groups of candidates, precisely graduate candidate interviewers, teacher candidates, teacher leaders and administrative candidates.

VI. Reflections and Implications

Previous research has established the benefits of Reciprocal Peer Tutoring at the post secondary level. But his peer tutoring strategy differed by including both administrative and teacher candidates who practiced together to help each other refine skills for interviewing. The two groups of students weren’t exactly peers, because one group had experience in the field and a higher level of education. In RPT, students alternated between the roles of tutor and tutee in contrast to this study, *Mock Interview (MI)*, where the students did not alternate roles. However, during MI both students advised each other on ways to improve interviewer and interviewing skills. Thus, like RPT, Mock Interview students have the related advantages of preparing for

interviews and interviewing by receiving instruction, encouragement and advice from a peer. Unlike, RPT, Mock Interview students did not receive extrinsic rewards, but intrinsic rewards on a job well done and perceived interview self-efficacy. This strategy using a mock experience before field work is relatively understudied at the post secondary level and more research is needed in this area. As universities across the nation strive to redesign and improve the school leadership course work in graduate administrative programs, more research must be conducted on effective practice for field experiences. This study was only one small example of an effort to evaluate a mock experience before real interviews are conducted in the field. More mock experiences that address other leadership skills could benefit field experiences through increased practice.

The findings from this study showed that administrator and teacher candidates can work together for the perceived benefit of both. This study could be expanded to see if the professors' perceived self-efficacy improved as a result of the strategy and action research. Feedback through action research has proven very motivational for professors (Morgan, 2000). To bring credence to the notion of self-efficacy, further research could discover if administrator and teacher candidates actually did benefit from this mock interview strategy in the field. Each administrator and teacher candidate could be surveyed within a year. Some suggestions for questions are provided in Table 2.

Table 2:

| | Entry Year Teacher Survey |
|---|---|
| 1 | When you were invited to be interviewed for the first time, did you feel confident about your upcoming performance? |
| 2 | After your first 'real' interview experience, what did you attribute your success or failure? |
| 3 | Reflecting back on Mock Interview what factors helped you the most? |
| 4 | What advice do you have for the professors conducting future Mock Interviews?" |
| | Entry Year Administrator Survey |
| 1 | "When preparing for interviewing prospective teachers, did you feel confident in your knowledge about types of questions and strategies to use? |
| 2 | After the interviews, did you feel like you had enough information to make a good choice? |
| 3 | If you perceived that you would be successful administering the interview process, did those feelings remain after the sessions? |
| 4 | Could you attribute this confidence level to the Mock Interview strategy used in School Personnel Administration? How and Why? |

This extension of this study could provide more information for improving or changing teaching strategies for administrative and teacher candidate preparation courses and field experience. Courses in educational administration and teacher education could implement improvements based on this survey, like suggested improvements from this study can impact courses at Southeastern Louisiana University. Bringing the classes back together for discussion

and reflection may prove useful for future analysis and improvement of the mock interview strategy and perceived interview self-efficacy.

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The Communication Triad: A Participatory Model for the Scholarship of Teaching and Learning in Communication

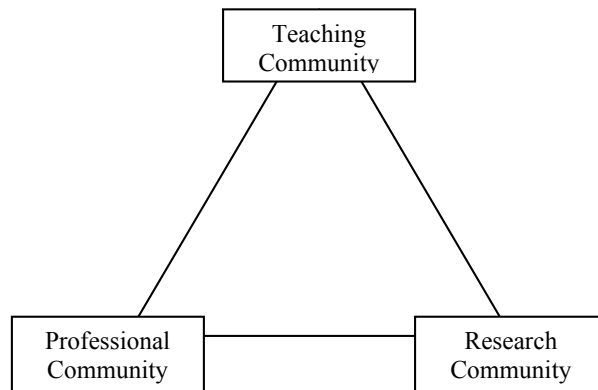
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I. Introduction

As an area of research, instructional communication has struggled to map out the role of communication in the teaching process (Sprague, 1992). More recently, the scholarship of teaching and learning (SOTL) movement has emphasized the importance of applying the same systematic, informed rigor in our teaching that we do in our research pursuits (Cohen, 1997; Cohen, Barton & Fast, 1999). Both concepts share considerable overlap and stem from the desire to improve education. But how can one advance the SOTL beyond buzzword status and put it into substantive practice? For communication educators, the key to applying scholarly rigor to the improvement of their teaching lies first in embracing all sides of the communication discipline and then in capitalizing on the many similarities between what they are teaching (communication) and the act of good teaching itself. These prerequisites are vital to a full understanding of the discipline and to generating thoughtful questions about how its teaching might be improved. This paper proposes a model that facilitates discipline-wide understanding for communication educators by illustrating the connections between three components of the discipline—professional practice, the classroom, and the research academy. The model suggests that familiarity with each of the three components increases our purview of the discipline and enables a more thoughtful inquiry into the teaching of communication.

Figure 1

Three elements of the communication discipline joined visually.



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II. The Communication Discipline as a Whole Composed of Its Parts

Much has been written about the supposed divide between the research academy and the newsroom (Pew Center, 2000; Riffe, Hedgepeth & Ziesenis, 1992), and arguably, the communication classroom is out of touch with both (Duhe & Zukowski, 1997; Bolding, 1996). Even among communication educators, there are those who embrace the industry by reading only trade publications, while a separate group embraces academia by reading only research journals (Weaver & Wilhoit, 1998). It is clear that in some ways, the discipline has become a segregated lot with distinctly separate points of focus. So where are these different perspectives on communication located? What are the various vantage points from which the discipline can be observed, and what insights do they offer for this quest of self-improvement from within the craft?

Obviously, one is the media. Without professional journalists and their product, mass communication would not resemble what we know it as today. J-schools are surely another point. They may be the only place on earth where you'll be given the definition of a nut graph or a news peg without asking for it. Scholarly research, too, is a home for the discipline of communication. It's there that the theories of our discipline are incubated.

It seems that interest in communication has arisen and evolved simultaneously in newsrooms, classrooms and academic research circles, but these three domains do not always overlap in practice or in the exchange of ideas. These "points" of the communication model—the teaching community, professional community, and research community—all have something vital to offer us in our quest to become better teachers through the SOTL. Only in knowing each of them can communication educators achieve full disciplinary understanding, and only then are they prepared to systematically and empirically approach the improvement of their teaching. For communication educators, this way of thinking about their subject matter and their teaching practices should be a useful examination of familiar ideas from a combined perspective that they may not have considered before. It is the similarity between the teaching process (pedagogy) and what is being taught (communication) that allows the three-way model of intradisciplinary improvement to be uniquely useful for the teaching of communication.

III. The Teaching Community

"Those who can, do. Those who can't, teach" is a jab that working professionals often take at teachers and researchers. Lee Shulman (1986) provided academics with a strong defense to such banter when he wrote. "Those who can, do. Those who understand, teach." The comeback means that effective communication teachers are not failed practitioners who took up another line of work, but rather holistic communication experts who maintain and integrate skills from the discipline's professional, pedagogical, and research communities. It is only through such discipline-wide synthesis that real understanding and the SOTL can be achieved.

For communication faculty who "understand" (as Shulman defines it), it is clear that the act of teaching and the act of communicating share many similarities. That's why the "teaching point" of this model belongs here as a legitimate member of the communication discipline. The field of instructional communication affirms that fact by recognizing that teaching is itself a specialized form of communication. Whether it's a course in documentary film or an introductory newswriting class, bringing students to the "same page" as the instructor—establishing common ground—will itself emphasize many of the higher-order goals and

objectives of the curriculum. Good teaching implements some of the same observational and synthesis skills that are listed among the desired outcomes of communication courses.

The best communication is clear, straightforward communication that tells people what they need to know without confusing them. It anticipates and pre-empts uncertainty and, where possible, provides an avenue for feedback. This simplicity is not necessarily the key to excellence in mathematics, biology, engineering, or other disciplines, but for communication, it is the stock of the trade. It just so happens that the methods of clear communication also make some of the best teaching strategies.

Instructors face a complex task in teaching communication skills and concepts to their students. To do so, they must synthesize their insight of the discipline just as professional practitioners do when faced with a novel communication situation. In general, both must work diligently to be sure that the correct message is meaningfully understood in the correct context.

These parallels between teaching and communication become especially relevant when the subject being taught is communication. Shulman (1997) asserts that a profession requires the ability to navigate a complex variety of circumstances and that to do so necessitates a “deep understanding” of the discipline and possession of higher-order skills in its areas of specialty. These skills are what communication students are in school to learn. To best handle the task, communication faculty should polish their teaching skills while staying on top of their discipline by maintaining professional skills at the same level they would if working in the industry.

It has been argued that teaching communication requires a special set of skills that mirror the metacognitive, self-monitoring skills of communication itself (Book, 1989). The idea that communication educators with experience in the industry would be best equipped to capitalize on these similarities of process between communication and pedagogy is supported in the education literature. For example, Sarah Dinham (1996) asserts that in addition to knowledge about teaching and knowledge about the discipline, the best teachers must have “discipline-specific teaching knowledge.” Dinham explains that discipline-specific teaching knowledge goes beyond a working knowledge of the subject matter to include an ability to adapt the disciplinary concepts in an infinite number of ways to best suit the teaching needs at hand. Such higher-order synthesis can only come from the mastery of the whole discipline—in the case of communication, its teaching, research, and professional communities. For communication educators, such mastery necessarily involves membership in all three communities.

As communication educators seeking the SOTL consume current education literature emphasizing collaborative, engaged, and student-centered learning (Eggen & Kauchak, 1999), they will begin to see many conceptual similarities to trends currently shaping the direction of communication and the media, including newsroom teams, civic journalism, and a new awareness of “audience.” Conceptualizing those similarities is a big step toward both the SOTL and the broader understanding described in Dinham’s discipline-specific teaching skills.

Pursuing the SOTL is about becoming an “expert” teacher. To borrow from schema theory, it can be said that when a communication educator’s teaching schema and professional practice schema are each rich and strong, a considerable amount of generalization will occur between them as knowledge and skills are exchanged (Walls, 1999). The result will be even more connections in the schema network, which, according to schema theory, is what distinguishes expert, higher-order proficiency from lower levels of ability. The more connections that are made between the teaching schema and the professional practice schema, the more thorough, creative, and effective the instructor will be in facilitating meaningful understanding among students.

So for communication professionals heading into the classroom as teachers, it's worth noting that the skills gained in the work world are not simply **what** they should teach but a strong blueprint for **how** they should teach as well. The skills owned by the best reporters—finding the truth, extracting the essence of a complex process or situation and helping others to understand it, perhaps even better than they ever could have on their own—are the same skills that make great communication teachers. In short, this teaching point of the model can be said to show that “to communicate is to teach; to teach is to communicate.”

IV. The Professional Community

After interviewing hundreds of reporters, researchers at the Pew Center for the People and the Press concluded that for most journalists, being able to communicate for a living was the most compelling influence guiding them to their chosen careers (Pew Center, 1999). The sincere desire to communicate thoroughly on the part of professional journalists includes making sure that the message they're sending is clearly and fully understood (Burgoon, Bernstein & Burgoon, 1983).

For journalists, this drive to fully enlighten can overshadow other commonly touted roles of the media. In a survey of journalists and news consumers, Burgoon et al. (1983) found that reporters rated the goal of “explaining how important events and issues relate to the community” highest of eight possible functions of the media, including “uncovering wrongdoings,” “providing a thorough (historical) record of events,” and the “watchdog role” of the press.

When the Department of Journalism at Ball State University sought to identify differences in the news selection processes employed by student and professional journalists, they found that professional reporters were driven by the need to fully inform (teach) their audiences by explaining all possible aspects of the issue or topic being communicated (Pitts, 1987). Whereas the less-skilled student journalists in the experiment were content to provide a less-than-thorough explanation, professional reporters were frustrated if they were unable to provide their audiences with complete insight. Just as good teachers want their students to have the most enriching educational experience possible, professional communicators are motivated to communicate in ways that result in learning and full understanding.

All this would seem to suggest that communication educators who have worked as professional communicators have much to offer in the classroom, and indeed they do. There is evidence in the literature to suggest that everyone, even diehard academics, agrees on the value of realistic, job-specific instruction (Duhe & Zukowski, 1985; Oregon Report, 1987). But the need for association flows both ways. Newsroom research by the Freedom Forum (1994) indicates that working journalists are starving for additional instruction about how to do their jobs. Of 652 journalists surveyed at 123 daily newspapers in 1993, a consistent majority reported dissatisfaction with the quantity and quality of training, instruction and skills seminars offered by their employers. They also indicated that outside training programs were much more effective and popular than in-house programs. About 22 percent of outside training for reporters is offered by nearby colleges or universities, creating an ideal pathway through which to begin connecting the newsroom and the classroom.

Such a connection is not a new idea. Phillip Gaunt, who has researched in detail the history of journalism training throughout the world, writes that the United States has a long history of co-mingling between professional practitioners and J-schools. As early as 1912, major newspapers were throwing significant funding into J-schools at various public and private universities (Gaunt, 1992). And internships, which are now seen as a mutually beneficial

arrangement between the industry and J-schools, were soon to follow. By the late 20th century, 80 percent of graduates who found work in their field participated in an internship (1991 Journalism Career and Scholarship Guide, 1990).

But there is still a rift between academics and working journalists. A survey of newspaper editors by the American Society of Newspaper Editors suggests that media professionals believe one of the best ways to make J-schools better is to have more work-hardened journalists in teaching positions. When J-school faculty have previous professional experience in the media, it's easier for them to serve as ambassadors to both the newsroom and the classroom. The idea of work-hardened faculty serving as a bridge between the newsroom and the classroom facilitates the model proposed here and advances the pursuit of the SOTL for communication educators.

Journalism teachers can remain active in the newsroom by serving as a stringer or correspondent for a local newspaper. As a part-time contributor, it may be possible for a journalism teacher to cover the regular meetings of a city council or similar event. Such meetings usually take place only twice a month on weeknights, so they would not interfere with the daytime duties of a faculty member. Those with strong ties to a local paper often write a regular column or contribute to the op-ed page. Whatever the arrangement, finding a way to simultaneously occupy all corners of the discipline is invaluable for communication educators in pursuit of the SOTL.

After 17 years of teaching, Jan Whitt (1995), an assistant professor of Journalism at the University of Colorado, returned to the newsroom to refresh the skills she teaches her students. Whitt asserts that it is vital for educators to acquire professional experience before they teach and to maintain it throughout their careers to avoid stagnating and drifting out of touch with the changing industry. After returning to the newspaper, Whitt wrote, "Perhaps I have a clearer answer to the student question, 'If the media are such exciting places to work, why did you leave?' I now say, 'Two answers really. I love to teach, and I never really left the newsroom.'"

V. The Research Community

As fascinating as this interplay between the practice and teaching of communication might be, there's more to the story. The model includes a third layer—research. For the SOTL, the research component is important because, not coincidentally, the SOTL concept is built on the idea of emulating the rigor of empiricism and research in one's teaching pursuits. If the communication discipline is going to thrive, its research must be connected to the other parts of the discipline. But communication research doesn't make it into the classroom nearly as often as it should (Book, 1989), and it receives an even chillier reception in the professional world (Pew Center, 2000). What that means is that few people with a good understanding of the communication research literature are involved successfully with the other points of the model, and vice-versa. The scarcity of people with a comfortable foothold in all three points of the model means that few are truly able to claim complete understanding of the discipline.

Book (1989) argues that "translators" are needed to make the fruits of research more accessible. But who has the ability to do this translating and a reason for wanting to? The most feasible candidate seems to be the communication educator who knows the importance of true disciplinary understanding.

In September 2000, 17 journalists and editors met for a symposium sponsored by the Pew Center for Civic Journalism. Their mission was to "create new lifelines between journalists and academics." Titled "Cracking the Code," the symposium generated plenty of dialogue that fits this paper's model well. The ideas put forth during the "Cracking the Code" symposium centered

around trying to foster relationships between the two camps. However, most such relations have proved to be contrived and short-lived, perhaps because none was conceived around the one motive for interconnection that lasts—true mastery of all points within the discipline. Phil Meyer, professor of journalism at the University of North Carolina, asserts that academics and journalists don't connect well because they have different priorities.

"The newspaper business is now a business that doesn't want to go to much trouble to do stuff that doesn't have an immediate payoff. That's why they don't connect with academics, because we think in the very long term and they think in the very near term, and our horizons are just too different" (Pew Center, 2000).

Meyer is correct to point out that, individually, researchers and professional practitioners will have very different horizons if the extent of their focus is on their respective corners of the discipline. Only someone whose goal is mastery of the entire discipline is likely to aspire to long-term membership in both camps, but that is exactly what is needed to fully inform one's teaching as a communication educator.

Another way of winning acceptance for research in the newsroom is to begin with students who are studying communication. When students are familiarized with research, the benefits include a greater awareness of what academic research is all about and how communication theory is developed and tested. Too many undergraduate students finish their academic careers without ever knowing that the research community exists. The idea that new knowledge is generated through scholarly inquiry is a foreign concept to them. They see "research" as looking something up in the encyclopedia, not as the production and testing of novel hypotheses. If communication educators were plugged into the discipline's research community, such an oversight could be avoided.

When exposed to the research mindset by an educator who embraces the SOTL, communication students benefit from improved critical thinking skills, a better awareness of how data can improve certain news stories and how to separate scientifically valid research from junk polls and bad science. These basic research skills are important to working journalists as well, but the value of theory-based academic research for the newsroom is a tougher sell, in part because it is greatly misunderstood (Pew Center, 2000). The value of complex, theory-based communication research does not lie in some utilitarian application that a copy editor can make use of in a jam, but rather in exploring the state of the discipline, making predictions about it, and, to some extent, shaping its future. Communication educators who understand and embrace this component of the SOTL will be far better able to impart the benefits of academic research in their classrooms than will their colleagues who do not. This is because they have a more thorough conceptual grasp of the entire discipline and thus can better synthesize it for their students. It allows the development of sophisticated repertoires for engaging the subject matter (Walls, 1999). Knowing the research literature will enable communication faculty to synthesize the discipline, making rich inferences and connections that would be impossible for those without such a familiarity. Only those teachers who have this mastery of the research literature and who can make it accessible to students will truly have the full view of what communication education should be. It is they who are equipped to implement the SOTL.

VI. Connecting the Model

If drawn as a model, the three elements of the communication discipline (education, research, and professional practice) form a triangle with a series of two-way connections among each of its points. The term "triangulation" describes using two other known fixed points to put

one's own position into context. When thought of in this way, the model proposed here allows communication educators to put their teaching into proper disciplinary context because they are aware of how the professional and research communities relate to their classroom. Dinham (1996) describes this pedagogical view of "context" by saying that teaching must not be conducted in a vacuum. Instead, it must be placed in the context of a "larger curriculum." In this case, that larger curriculum can be seen as the communication discipline's three communities.

It is possible to be a teacher, a practitioner, and a researcher all separately, but perhaps communication education is best served when these roles are blended with one another in mind. Only someone with an intimate, working knowledge of each can claim true disciplinary understanding. A communication educator who pursues that goal will surely find the SOTL along the way.

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Building Connections, Building Communities: Strategies for Integrating Music and Literature in an Undergraduate Learning Community

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Abstract: This article explains the strategies that were used to create a closely integrated, paired-course learning community in the fall of 2001 and presents focus-group assessment data from the combined courses. Five specific strategies were used to create a high degree of connection between the World Literature course and the Music Appreciation course that formed the learning community: 1) Exploring the formal connections between literature and music; 2) Organizing the class by movements in intellectual history common to both disciplines; 3) Focusing on musical works inspired by works of literature; 4) Selecting music and literature from identical non-Western regions; and 5) Combining course web supplements for both courses into a single, "super site" web page. Approximately half of the students in the English class and one third of the students in the Music class were direct participants who were part of the learning-community cohort. The rest of the students were indirect participants enrolled in one class but not the other. In focus groups held at the end of the semester with both groups of students in the English class, the direct participants reported a strong feeling that the information presented in the two classes was more connected, more integrated, and more relevant than information presented in a stand-alone class. Surprisingly, however, the indirect participants in the learning community reported similar feelings, which strongly suggests that the benefits of these integration strategies are not limited to those who participate directly in the course clusters or linked courses.

Introduction:

This article explains specific strategies used to create a closely integrated, paired-course learning community combining Music Appreciation with World Literature. Focus-group assessment data from the combined courses is presented. One of the most interesting findings shows that students not directly involved in the learning community (students only enrolled in one class or the other, or "indirect participants") reported similar feelings as the direct participants. Namely, that the information presented was more connected, more integrated, and more relevant than information presented in a stand-alone class.

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I. Literature Review

Though the term *learning community* has been applied to a number of different approaches to community-based education at all levels (Lenning and Ebbers, 1999), in higher education, it has increasingly come to be associated with curricular strategies that “purposefully restructure the curriculum to link together courses or course work so that students find greater coherence in what they are learning as well as increased intellectual interaction with faculty and fellow students” (Gabelnick, MacGregor, Matthews, and Smith, 1990, p. 5). Before 1990, only a handful of colleges and universities in the United States offered undergraduate courses specifically designed as learning communities (Smith, 1993). These initial experiments, however, have become influential models for educators responding to many of the structural trends in higher education that have decreased students’ ability to integrate the perspectives of different disciplines and to form peer groups into which knowledge can be processed and applied.

Critiques of higher education in the 1980s and early 1990s often argued that disciplines had become too provincial, students too isolated, and faculty too complacent for colleges and universities to provide the kind of genuine intellectual community that had once been an important part of the higher education experience (Boyer, 1987; Levine, 1993; Study Group, 1984). Early proponents of learning communities saw the model as a way to integrate knowledge across a wide variety of academic disciplines and to establish the communal foundations needed to make abstract knowledge meaningful for students. Learning communities were also seen as a way to reinvigorate faculty by promoting collaboration among a wide variety of disciplines (Gabelnick, et al., 1990; Hill 1985; Smith, 1991). For the bottom line, learning communities offered increased student retention, increased customer satisfaction, increased faculty productivity, and, most importantly, a more integrated and higher quality educational environment for everybody involved in the learning process.

Most of the research collected from learning communities in recent years supports the claims of its early advocates. Minkler’s (2000) interviews and analyses of evaluation data revealed a strong preference for learning community courses among both students and faculty at community colleges in Idaho and Washington. Gardner (2001), Bean and Shevawn (2001), and Johnson (2000) have all demonstrated a strong correlation between participation in learning communities and retention of college freshmen. A study by Zheng, Saunders, Shelly, and Whalen (2002) found participation in a learning community to be one of the primary indicators of academic success for freshmen living in residence halls. Walker (2001) found that involvement in freshman learning clusters at UCLA increased, not only the quality of students performance in a class, but also their overall social and academic integration at the university. And several recent studies (Baker and Pernerantz, 2000; Thompson, 1998; Tinto and Love, 1995) showed a strong tendency of students enrolled in learning communities to earn higher grades and be more satisfied with their overall college experience than students who take only stand-alone courses.

The research also shows that faculty members, as well as students, benefit from the cross-disciplinary collaboration that the learning community model fosters. By bringing faculty members from different disciplines into the same classrooms, learning communities often lead faculty to reexamine both their own disciplines and their own teaching strategies, leading to a general innovation of the curriculum (Stark and Lattuca, 1997). Benefits are especially evident

for mid-career faculty who have fallen into a comfortable routine in their classroom teaching and who tend to be invigorated by the interactive, collaborative pedagogical strategies that the learning community model encourages (Durrington and Bacon, 1999). Learning communities have also been shown to “encourage faculty members to share knowledge with one another,” “broade[n] faculty members’ knowledge about pedagogy” and “increase collegial trust” (Lenning and Ebbers, 1999, p. 57).

II. Strategies for Building an English-Music Learning Community

The learning community in the present study took place in the Fall of 2001 in a comprehensive, four-year public college in the Mid-Atlantic Region. The community consisted of two linked general studies courses, Survey of World Literature II and Introduction to Music. Though the learning community model had been in use in the College Honors Program for nearly 10 years, this was one of the first two learning communities offered to the general undergraduate population. Two different professors taught the English and Music portions of the course separately, but great care was taken to ensure that course content was tightly linked. Both professors attended each other’s classes and were free to comment on material presented in order to help enhance instruction. In addition, both professors modified their basic departmental syllabi to achieve a high level of content integration. Five specific strategies were employed to link material from the two courses together. What follows is a description of each of these five strategies with examples, where appropriate, of class presentations resulting from each strategy.

A. Exploring the Formal Connections Between Literature and Music

The initial weeks of each class covered the fundamentals of both music and literature, with a special emphasis on concepts shared by the two disciplines such as meter, theme, rhythm, motif, and form. In the music portion of the community, students learned the basics of music notation. They were taught to identify the meters of songs such as “Home on the Range” and “Mary Had a Little Lamb” through exercises involving singing and clapping. Students were subsequently taught to notate music in a given meter at a very basic level via the use of correct musical note shapes and time signatures. Finally, students practiced identifying meters while listening to classical and popular music examples.

In the beginning of the music class, students were taught to listen for primary and secondary themes or melodies in classical music excerpts. They were asked to discern whether or not themes were repeated or varied at different points in the course of a piece. Students were then asked to notate or map these themes or main musical ideas by using letters of the alphabet. For example, a piece with a three-part formal structure may be notated as follows: “A” (primary thematic idea), “B” (secondary thematic idea), “A” (primary thematic idea returns but is slightly varied as far as rhythm, mode or timbre). Subsequently, every piece studied in the course included a discussion of meter and formal structure.

In the literature portion of the learning community, the instructor spent the first two weeks of the class exploring what makes literature, and especially poetry, “musical.” Students were encouraged to take the basic principles of rhythm that they learned in their music class and use these principles to scan selected poems and identify basic meters (iambic, trochaic, spondaic, anapestic, and dactylic) and simple rhyme schemes in poetry. Longer prose works were read with special attention to the kinds of thematic repetitions and symbolic motifs that also characterize musical composition. Most of the literature studied during these early weeks of the course was

selected for its “musicality” rather than for its chronological relationship to the remainder of the course.


B. Organizing the Class by Movements in Intellectual History Common to Both Disciplines

Both classes in the learning community were largely organized according to intellectual movements common to music and literature, as well as to other disciplines such as visual art, history, philosophy, and political science. In most class lectures, visual art was also employed to supplement discussions of these various movements. Not only did this prove to be a highly effective teaching tool, it allowed students to perceive the kinds of strong connections between the two disciplines that, while usually obvious to instructors, are often missed in a less integrated general- education core.

For example, the class sessions in both courses devoted to “Impressionism” began with displays and descriptions of visual art from the impressionist period. The professors explained that in impressionistic visual art there is a strong reliance on the effect of light, color, blurring and brilliance. In essence, the brush strokes suggest an image and the viewer’s mind must piece the image together into a concrete picture. It was emphasized that this movement, prominent in the last quarter of the nineteenth century, extended not only to visual artists but to musicians and writers as well. In the music portion of the community, students were shown ways in which one could musically create the same effect of color and suggestion found in the visual art. For example, use of irregular phrases and parallel chordal motion, avoidance of traditional harmonic progressions, suppression of the leading tone and coloristic choice of instruments are stable traits of impressionistic music. A brief description of the lives of musical impressionists such as Claude Debussy, Maurice Ravel and Lili Boulanger was followed by an analysis of musical excerpts containing several of the specific musical traits listed above.

In the literature portion of the community, students studied the poetry of Charles Baudelaire and Rainer Maria Rilke and a brief selection from Marcel Proust’s *Remembrance of Things Past*. The instructor extrapolated from visual and musical impressionism several key characteristics from the intellectual movement in general, such as the use of strong emotional associations, a resistance to traditional connections, and a formal incompleteness that invites the auditor to complete connections only suggested by the artist. During the course of the discussion, students were shown a single PowerPoint slide (below) containing an impressionist painting (Monet’s “Rough Sea,”), an impressionist poem (Rilke’s “Song of the Sea”), and an impressionist musical composition (Debussy’s “Dialogue of the Wind and Sea” from *Le Mer*). Students were asked to interpret each work in light of the other two and to draw specific conclusions about the phenomenon of impressionism from their collective impression of the three works. These conclusions became the framework for studying work by other impressionists.

Figure 1: Impressionism Power Point Slide




Song of the Sea
by Rainer Maria Rilke

*Blowing from beyond the ages,
sea-wind of the night:
you answer no one's call;
if someone is keeping watch,
he must figure out how
to survive your might.*

*Timeless sea wind
whose waves sculpt ancient rocks,
you are purest space
sweeping in from far away...*

*Oh how a verdant fig tree
high up in the moonlight
feels your force.*

“Rough Sea,” by Claude Monet



Dialogue of the Wind and the Sea, by Claude Debussy

Translated by Rachel Ritterbusch and
used with permission

In all, seven Western intellectual movements were used to organize the majority of the lectures and discussions for both courses in the learning community:

Classicism
Romanticism
Nationalism
Realism

Impressionism
Expressionism
Minimalism

When these movements were discussed, they were discussed on exactly the same days in both classes, with both instructors participating in both discussions. All visual materials generated for these discussions were converted to PowerPoint format and loaded onto the learning community web site where students could view and download them at their convenience.

C. Focusing on Musical Works Inspired by Works of Literature

Two major works in each class were specifically selected for study because of their connection to a work in the other discipline. Students studied the paired works simultaneously, with frequent references to both work in both classes. With these pairings, the instructors hoped to connect the two courses more concretely than they had on either the formal or the thematic level. Near the midpoint of the semester, Charles Gounod's opera *Faust* was paired with Johann Wolfgang von Goethe's dramatic poem *Faust*, the source upon which it was based. Students viewed portions of the opera on VHS in class and listened to other musical examples based on Goethe's work, including Hector Berlioz's *La Damnation de Faust* and Franz Peter Schubert's *Gretchen am Spinnrade*. In addition to reinforcing the story, the discussion of Gounod's music in particular allowed the instructor to incorporate additional lecture material focused on characteristics of French lyric opera.

Later in the semester, students spent a week studying Henrik Ibsen's play *Peer Gynt* as an important example of nationalism in literature. After reading the story in the literature portion of the community, students were introduced to Edvard Grieg's music, originally composed as twenty-three movements of incidental music to accompany Ibsen's stage play. Although the play was initially unsuccessful, the music became one of Grieg's most famous works. In the late nineteenth century, eight movements from the original score were extracted and fully orchestrated. These movements were later separated into two orchestral suites, both of which are widely performed today. The use of *Peer Gynt* was a very effective way to link course material. Students often remarked how well the music helped them to easily and vividly imagine various scenes from the play studied in the literature class.

D. Selecting Music and Literature from Identical Non-Western Regions

India and Africa were selected for an in-depth analysis of both non-Western music and literature. In the music portion of the community, students examined general characteristics of classical Indian music and sub-Saharan African music. These characteristics were further applied via the analysis of various musical examples. The differences between Western and non-Western musical systems was largely emphasized. For example, the students were shown that concepts focused on at the beginning of the semester, such as meter, form, and even pitch could be approached in very different ways depending on the musical culture. Socio-political factors were also incorporated. One example used was the music of Zimbabwean artist, Thomas Mapfumo, who wrote several songs protesting the white domination of his country in the 1960's and 1970's. Mapfumo's music was paired with Chinua Achebe's postcolonial novel, *Things Fall Apart*, a realistic narrative, heavily influenced by European Modernism, about a pre-colonial Igbo civilization in present-day Nigeria encountering, for the first time, the forces of European colonialism. From these discussions, students were able to see clearly how formal and ideological concerns can be connected in many different kinds of artistic production.

E. Combining Course Web Pages for Both Courses into a Single, "Super Site" Web Page

Research has consistently shown that the use of computer technology as a classroom supplement has the potential to significantly increase the sense of community among students enrolled in traditional learning communities (Dial-Driver & Sesso, 2000; Lally & Barrett, 1999; Lenning & Ebbers, 1999). In order to foster this sense of community in the English-Music community, an extensive course web site was created with the popular course management system, Web CT. All lecture notes for the two classes were posted to the web site, as were the PowerPoint presentations containing visual art that were used almost daily in the class discussions. Also included were links to research-grade Internet sources relevant to both classes that students could use to supplement material from class and homework assignments. Another important element of the web site was the discussion board, which has been shown to be an effective tool for creating communities in cyberspace (Caverly & MacDonald, 2002). Each week, students were required to provide two posts containing questions or comments based on that week's lecture material, readings, or listening examples. Discussion posts often continued discussions begun in normal class sessions, and they were also used by instructors to generate discussion on new topics or readings.

The most important function of the learning-community web site was to help students create a single, unified learning experience out of the two distinct courses that made up the community. Early in the semester, students learned to go to this single site for notes, study aids,

visual aids, and handouts from both courses. Instructors also worked to structure the electronic bulletin board as a single discussion about the connected aspects of the two courses rather than as a series of separate discussions about the two separate classes. With the exception of a few small administrative matters unique to each course, no effort was made to separate elements of the bulletin board into “music” and “literature” components. It was simply the Learning Community Web Site.

III. Results of Student Focus Groups

Because of lower-than-expected enrollments in the learning community classes, both the English and the Music class were opened to students not enrolled in the learning community. A core cohort of 13 students enrolled in both the Music and the English classes. An additional 12 students enrolled only in the English class, and an additional 20 students enrolled only in the Music class, for total class sizes of 25 and 32, respectively. The blending of learning-community and non-learning-community students into one half of a closely integrated, cross-disciplinary setting provided a unique opportunity to study the effects of the learning community model on students who did not participate in it directly but who were exposed to it indirectly through the connection strategies that both teachers employed. To assess the effect of the learning community on both direct and indirect participants, two focus groups were conducted during the final month of the semester, one among students enrolled in both learning community classes and one among students enrolled only in the English class. Focus groups were used because students were already filling out standard evaluation forms, and the instructors wanted to generate assessment data that was not connected to normal instructional evaluation so as to measure as accurately as possible the effect of the learning community portion of the course. A total of 20 students participated in the two focus groups, nine in the LC group and 11 in the non-LC group. The gender composition of the two groups differed dramatically. The LC group was composed entirely of women (100%) and 91% of non-LC participants were men (10 men, 1 woman). In addition, the number of years attending college differed between the two groups. LC participants were in their first or second year of college, and non-LC participants were in their fourth year.

The focus group facilitator used open-ended questions to elicit the thoughts and feelings of the participants. Participants were assured of the confidentiality and that names would not be identified with any comments. The students sat in a circle and the atmosphere was informal. Snacks were provided. The facilitator analyzed the data and identified the common themes after the completion of the focus groups. Students were asked to participate in the focus group during the normally scheduled class period for the English component of the learning community. The LC and the non-LC groups were separated. While one group participated in a focus group session, the other group attended class. After the first focus group finished, the LC group and the non-LC groups switched. Students who were absent from class on the day scheduled for the focus groups did not participate in the focus groups.

The focus group discussions focused on four general themes: interest and enthusiasm, depth of learning, connections, and technology use. Each theme is described in the following paragraphs.

A. Interest and Enthusiasm

Focus group participants in both the LC and non-LC expressed interest and enthusiasm over the course material. Participants in the LC were animated and lavish with their praise, making statements such as the following:

"Best classes I've taken."

"[The LC] are my favorite classes."

"LC makes you interested and excited."

"[I] wish there were more LC classes."

"All general education courses should be Learning Communities."

When asked if there were any disadvantages to being in the Learning Community, LC participants felt that mixing LC and non-LC students together was a problem. They believed that the LC students had more drive and wanted to learn. The participants stated that non-LC students were not interested in the class, frequently came to class late or skipped, and were disruptive during class. They wondered if the non-LC students understood the content. They also felt that non-LC students missed a major component of the course content because they did not attend the music course. The LC group strongly felt that it should be mandatory to enroll in both linked-courses. As one participant said, *"It should be all LC or none."* Students unanimously expressed interest and enthusiasm in the Learning Community. They strongly endorsed expanding the Learning Communities at the College.

B. Depth of Learning

Participants were asked about their understanding of the course material. Both LC and non-LC participants strongly felt that they have a "deeper" understanding of the material. Not only did respondents state they learned more, but they also thought they would retain the material. Two participants summed-up the groups' feelings,

"I've learned more than in any other course."

"It comes alive to you."

The non-LC participants related how they were able to comprehend the material. One participant stated, *"I couldn't understand what the author was talking about. Finally I got it."* Another student became excited describing an author that he could relate to, stating, *"He [author] talked to me. [He] wrote about my life."* Focus Group participants viewed learning as greatly enhanced by the Learning Communities. This viewpoint was reported by both LC and non-LC members. In fact, one unexpected finding of the focus group was that students in the LC felt that they learned about disciplines besides the two linked courses. They stated that they also learned about History and Visual Arts. In addition, both the LC and the non-LC participants stated that they learned about themselves.

C. Connections between Courses

Participants were asked specifically if the Learning Communities impacted their feelings of connection between the two courses. The participants expressed their belief that the connections between the two courses were strong. They expressed the value of relating course material to current events. The participants explained that cultural beliefs, norms and values were compared between the literature and our current times. The following quotes highlight these connections:

"In a normal class, you just take notes. In this class, you remember material because you relate it to current life."

"It makes students read when we relate it to current events, such as women's roles."

"There should be more joint classes. The material comes together."

Participants earnestly affirmed their understanding of the influence music and literature have on each other. They said it took a few weeks for them to learn the basics of music, but then it all came together. As mentioned above, they also felt they learned more about history and art. The following paragraph represents the group's discussion:

"I felt I knew the author. I listened to the music he listened to and I saw the art he saw. We talked about what was happening historically. As I came to understand the perspective he was writing from, I came to understand him. This helped me understand myself and relate what he was writing about to what's happening in our time."

Significantly, the non-LC participants also saw a strong connection between English and music. The participants became very excited and animated when they described the Halloween class. They stated, *"It was eerie. The art (The Scream) together with the instructor's sound effects, the music, and the literature were something else."*

These positive findings about the connections between English and music were in spite of non-LC participants frequently stating that they were not aware of the learning communities. Overall, focus group participants expressed an immense appreciation for the connection between the disciplines, even when they were not direct participants in both halves of the learning community.

D. Course Technology

Focus group participants were asked about the technological components used in the courses. Participants were unanimously positive about the PowerPoint presentations, web discussions (WebCT Bulletin Board), and the notes/handouts. The non-LC participants viewed the Internet supplements as helpful. Both LC and non-LC participants appreciated the PowerPoint presentations. They liked seeing the art and hearing the music from the time period. They said, *"This helped the author's personality come alive."* They also felt that the use of this technology greatly enhanced their interest and enthusiasm in the course. The non-LC group summarized their thoughts as follows: *"The PowerPoint was great. [We] liked the music and pictures. [It] gets me more into class, especially the time-period."*

Participants were also positive about the web discussions. The LC participants liked being able to express their opinions. They stated that the web discussions especially helped the quiet students who don't like to speak out in class. The non-LC participants felt that the web discussions allowed them to ask questions and express their feelings without having to be concerned about criticism. However, the non-LC participants stated that it was easy to get behind in posting on the web discussions. As one student pointed out, *"It's easy for it to get away from you."* In this regard, the LC and non-LC participants viewed the web discussions differently. The LC participants saw the discussions as a fun and easy way to earn extra credit for exceeding the mandatory postings per week. The non-LC participants found that their grade was lowered because they did not keep up with mandatory requirements, even though they enjoyed reading and responding to the discussions.

All participants viewed the on-line notes and handouts as beneficial. Participants made the following statements:

"The notes on line allow us to participate in class instead of taking notes."

"The notes allow me to know the 'points' ahead of time."

"It's a win/win situation for us."

The non-LC participants said the Internet supplements were helpful for research. One participant stated, *"It was good when reading complicated stuff that I didn't get."*

The use of technology enhanced participants' interest and learning of the course material. Participants specifically valued the power point presentations, WebCT Bulletin Board, and on-line notes/handouts.

IV. Conclusions

As other research has suggested, the direct participants in the learning community expressed a high degree of satisfaction with the linked courses and with the learning community model in general. More specifically, our focus-group assessment shows that the students responded very positively to the ways in which the course content was linked. In other words, our selected integration strategies were highly successful. The classroom performance of our students conforms to the findings of other researchers. The grade point average of the students in the learning-community cohort was 2.85 in the English class and 3.08 in the Music class, whereas students not in the learning-community cohort averaged 1.78 and 2.50, respectively, in the same classes. Similarly, of a total of six withdrawals in the two classes (four in Music and two in English) none came from students in the learning-community cohort. The learning-community students felt that the linked courses provided a more coherent, integrated, and dynamic approach to undergraduate, general education than that found in stand-alone classes. Furthermore, because the cross-disciplinary approach to intellectual history (a major part of our course integration strategy) used in the linked courses required the instructors to include materials from disciplines other than music and literature, specifically, history and art, students reported making connections to academic disciplines beyond those represented in the learning community.

One of the most significant and interesting findings of the focus group assessment, however, was that the indirect participants in the learning community (students who were not co-enrolled in the linked classes, but who were exposed to the course-integration strategies discussed in this article) reported receiving many of the same advantages that students enrolled in both classes received, even though they were not aware of the fact that the class was structured differently than any other. Whereas the instructors initially feared that students not in the learning community cohort would feel left out, alienated, and confused, the focus group assessment reveals exactly the reverse: these students reported making connections across disciplines and integrating knowledge from other fields. They also responded well to the instructors' obvious enthusiasm for the courses—an enthusiasm brought on, in no small measure, by the excitement of teaching familiar things in fresh, innovative ways. Furthermore, it was found that the technology integration strategy developed for use in the learning community (a course web page, a threaded discussion board, and a series of multimedia PowerPoint presentations) benefited both learning-community and non-learning-community students equally, and, though the bulletin board was less popular with non-learning-community students, it did have the desired effect of bringing them into the community in substantial ways. Hence, the responses of both the direct and the indirect participants in the learning community suggest that there are even more advantages to a tightly integrated learning-community model than those normally articulated by its proponents. Additional research into different categories of "indirect participants" in learning communities is clearly warranted.

Learning communities clearly have a profound influence on faculty as well. By invigorating faculty members and challenging them to become less isolated in their own disciplines and more collaborative in their pedagogy, learning communities create connections that can extend well beyond the classroom setting and influence the culture of an entire institution. Once faculty collaborate with colleagues in other disciplines and reevaluate their teaching styles, it is likely that they will bring a stronger cross-disciplinary focus to the other classes they teach and that they will be more likely to try to make connections with other disciplines even when they are not teaching in an institutionally created learning community.

No single approach to learning communities or course integration, of course, will work for every institution or even for any two instructors; part of the intellectual stretching required in these kinds of courses comes when faculty members design specific, individual strategies for connecting their disciplines into a single learning experience. And, as this kind of joint course development occurs, a tightly integrated learning community model has the ability to begin important conversations within academic institutions at every level. Building such communities builds greater connections between students, faculty and academic disciplines, all of which are much needed and long overdue at the college level.

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