This paper discusses the use of reflective learning in service-learning projects in three different undergraduate courses. In a small group communications course, groups of five or six students were assigned to work with a non-profit agency to assist them in solving a problem. The students reflected on their group meetings in journals and wrote final progress reports in which they reflected on what they had learned about small group communication. A course on teaching English in the secondary schools had students write reflections on their work as tutors to at-risk middle school students. In a hospitality management course, pairs of students were assigned to a food rescue program that gathered unused perishable food from restaurants and markets. Students were to identify an operational weakness in the program, pose solutions, and reflect on their experiences in regard to professional development in the field. The paper concludes that reflection in the context of service learning may enhance students' appreciation of the value of the service learning experience. (Contains 11 references.) (MDM)
What is Reflection? Process Evaluation in Three Disciplines
by Bill Tucker, Chris Wood Foreman, and Polly Buchanan
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Today everyone is exhorted to be reflective: students, teachers, professional practitioners in every field. Frequently we fail to define reflection or distinguish it from previously-fashionable jargon such as "problem-solving," "critical thinking," or "metacognition." Sometimes it is used to mean "questioning," "self-awareness," or "evaluation." Determining what an instructor means by "reflection" might even become a problem-solving activity of its own. And some cynics will inevitably claim it is nothing more than "thinking for a grade."

The current enthusiasm for reflection revives Dewey's notion of extended problem-solving. Dewey's (1916) paradigm for reflection requires a definable problem, an extended period of analysis, and a hypothesis tested by some action:
1. Perplexity, confusion, doubt
2. Attentive interpretation of the given elements
3. Examination, exploration, and analysis to define and clarify the problem
4. Elaboration of the tentative hypothesis
5. Testing the hypothesis by doing something overtly to bring about anticipated results

Current models of reflection challenge the notion that it is always focused on a problem and that it must lead to some action. Donald Schon (1987), the latter day apostle of reflection, used "reflection-on-action" and "reflection-in-action" to broaden the possibilities of reflection. "Reflection-on-action" isn't causally linked with a subsequent action. It can be merely retrospective, the kind that might take place in a classroom after a decisive action. Addressing real or hypothetical case descriptions might constitute reflection without consequential action.

Schon also distinguished two kinds of "reflection-in-action."
The more formulaic of the two he termed "thinking like a [practitioner]" when the practitioner applies "existing rules and procedures to the fact of particular problematic situations" (35). The second, more elusive and less propositional form of "reflection-in-action" consisted of "respond[ing] to surprising findings by inventing new rules on the spot" (35). This form of reflection considers multiple standards and perspectives by responding to the complexities of real experience.

While Schon distinguished this situated reasoning as "reflection-in-action," it makes just as much sense as "reflection-on-action." The only difference would be that it has no effect on present action. For example, in a prepracticum curriculum, reflection might have no immediate effect on the problem or consequences for a client. The solution remains hypothetical until it is implemented.

Hatton and Smith (1995) made similar distinctions among the reflections of preservice teachers during their practicum experience.
Because they studied retrospective written accounts of student teachers, they could not determine how much was "reflection-in-action," but they did distinguish between "descriptive," "dialogic," and "critical" reflection. When the preservice teachers identified a "best practice" in teaching Hatton and Smith called it "descriptive" because it focused on a single best solution to a problem, like Schön's "thinking like a [practitioner]." "Dialogic reflection" weighed competing viewpoints and constructed possible solutions. The prose was characterized by self-interrogation and problematizing learning experiences. Finally, "critical reflection" examined professional practice from a more stable ethical or political base, with a more definite course of action.

"Traditionally service-learning is differentiated from volunteerism by its attention to reflection. Reflection places the act of service in its social, political and economic contexts and may or may not be a formal part of the curriculum" (Kupiec, 1993). This view of service-learning emphasizes "critical reflection," as Hatton and Smith (1995) define it. "It can be argued," assert Hatton and Smith, "that critical reflection implies the acceptance of a particular ideology, along with its assumptions and epistemology" (35). While service-learning does not necessarily dictate ideology or social agenda, it can be distinguished from internships and other field experiences by the premium it places on self-evaluation and social awareness.

Submitting professional strategies and goals to critical reflection requires a panoramic view seldom observed by Hatton and Smith in the reflective writing of preservice teachers. Proponents of service-learning, on the other hand, argue that "critical reflection" is a characteristic outcome of service in the K-college curriculum (Morton, 1993).

In our courses service-learning was designed to serve the content of the curriculum. While we hoped for the kind of critical reflection identified with service-learning, our primary reflective goals addressed the curricula of our individual disciplines (see Figure 1). Although our disciplines might define our notions of reflection, the developmental stages of the students and their coursework also defined what we meant by reflection. CTAC 359, Small Group Communication, was an intermediate course within the Department of Communication-Theatre Arts. Eng 308, Teaching English in the Secondary Schools, represented a culminating methods class taken just prior to the practicum in the teaching English. HM496, Hospitality Management Internship, represented a capstone experience within the Hotel and Restaurant Management Department.
## Reflection at Three Levels

<table>
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<th>Course/Instructor</th>
<th>Reflective Goal</th>
<th>Reflective Model</th>
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<tr>
<td>CTAC359: Small Group Communication Chris Wood Foreman</td>
<td>To relate lessons learned (from small group interaction) to principles defined in this course, including speculation beyond classroom and textual material</td>
<td>Reflection-(on/ in)-action &quot;application of existing rules and procedures to the fact of particular problematic situations.&quot; (Schön, 1987, 35)</td>
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<tr>
<td>ENG308: Teaching English in the Secondary Schools Bill Tucker</td>
<td>To formulate/test hypotheses about secondary writers</td>
<td>Reflection-(on/ in)-action &quot;respond to surprising findings by inventing new rules on the spot.&quot; (Schön, 1987, 35)</td>
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<td>HM496: Hospitality Management Internship Polly Buchanan</td>
<td>To identify an agency problem and propose a solution</td>
<td>Reflection-in-action &quot;our thinking serves to reshape what we are doing while we are doing it.&quot; (Schön, 1987, 26)</td>
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<tr>
<td>Service-Learning Model</td>
<td>To recognize and resolve dissonances between beliefs and experience To make judgments about whether professional activity is ethical or just, respectful of persons or not.</td>
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Figure 1. Models of Reflection for Three Disciplines and Service-Learning
1. Small Group Communications (Chris Wood Foreman)

The service-learning project in this intermediate communication class was student participation in groups of five to six members where each group was assigned to work with a non-profit agency assisting them in "solving a problem." The primary reflective goal, however, focused more on the process of problem-solving, than on the problem itself. The students were asked to relate the lessons learned from the small group interactions to principles learned in the course, including speculation beyond classroom and textual material. They reflected on their group meetings in their journals and wrote final progress reports in which they reflected on what they had learned about small group communication. According to Schön (1987) this would constitute "reflection-on-action" in the more formulaic sense.

For the journal assignment students were asked to "carefully note SPECIFIC DETAILS about individual and group development according to concepts discussed throughout the semester" (Figure 2). They were provided with a sampling of questions based on material from the text (Barker, Wahlers, & Watson, 1995) and were told to "provide specific examples of actual communication that illustrate" the points they were making. The journal assignments were evaluated on a pass/fail basis, but I did provide feedback, rating the journals either "poor," "fair," "good," "very good," or "excellent."

The weakest examples treated the journals as diaries, reporting on what happened week by week. Little, if any, attempt was made to talk about the group's progress in light of what we were learning about group development. The emphasis was on logistics, rather than reflection on learning. For example, Jeff writes:

We all planned to meet at the library at 7:00. I admit I was a little late, but Dan never even showed.

Jeff goes on to tell me more about what went on at the meeting, but never mentions what he may have learned about group climate as a result of (1) his being late and, more importantly, (2) Dan never showing up -- which, as I was observing, was becoming a real trouble spot for this group.

Most journals fell within the "fair" to "very good" range -- depending on the extent of reflection on learning. None earned an "excellent" rating. Most were still highly anecdotal, yet did begin to interpret group experience in terms of course concepts. For example, Jane writes:

Some of the non-verbal cues are evident when Dan moves into the group or talks. His chair is pulled slightly away from us and when he talks, nobody really looks at him. His ideas don't really pertain to the group's goals. As soon as we begin to wrap things up, he just left and didn't ask if we wanted him to do anything else.
Reflective Journals

Each class member is to keep a record (i.e., journal) of your group's progress throughout the semester. Journals will be reviewed periodically during the semester and are due at semester's end.

Format of Journal

The actual format of your journal can take whatever shape and/or form you find most appropriate. They are, however, much more than a log of the logistical details about group meetings (time, attendance, agenda, etc.). You should carefully note SPECIFIC DETAILS about individual and group development according to concepts discussed throughout the semester (i.e., group norms, group climate, nonverbal group dynamics, decision-making and problem-solving processes, conflict resolution techniques, and leadership styles, etc., etc., etc.).

A sampling of questions you should keep in mind when making journal entries include the following:

What were my initial mental predispositions (Chapter 4) toward this topic, myself, and the other group members? Do these impressions change throughout the group's progress? Why or why not?

Were individual goals congruent with group goals? Was there the existence of any mixed motive situations? (Chapter 3)? Why or why not?

What task, maintenance or self-centered roles (Chapter 3) did individual group members assume? Pay special attention to the emergence of any self-centered role behaviors and discuss how they affect the group.

Would you consider your group an open or closed system (Chapter 2)? For what specific reasons? Discuss using systems terminology.

How is our group progressing according to Fisher's four states of group development (Chapter 2)? What specific examples can be given to explain this?

What levels, if any, of status and/or power (Chapter 3) were initially apparent or developed as the group progressed?

Was the climate of the group defensive or supportive (Chapter 4)? Explain. Given any group's level of cohesiveness at different phases of development, were any of the consequences of group cohesiveness (Chapter 4) evident?

How effective are each of the group members at listening (Chapter 5)? Does feedback appear to be effective? Is there any evidence of barriers to communication? (e.g., bypassing, allness, fact-inference)?

Were any non-verbal group dynamics (Chapter 7) especially important to your group's development?

What process were undertaken to make decisions and/or solve problems (Chapter 6)? Were all decisions made by consensus? Why or why not?

How was the conflict (e.g., interpersonal, task, procedural) (Chapter 9) dealt with? If there was no conflict, do you believe groupthink was at work? Why or why not?

Were leadership characteristics (Chapter 8) exhibited by any group members? Was leadership shared? Why or why not?

The overall objective of the journal is to provide an opportunity to express (in writing) the lessons you learned as a result of being a member of this group. Make sure to provide specific examples of actual communication that illustrate the lessons learned.

Figure 2. Guidelines for Reflective Journals in Small Group Communication
This is the same "Dan" mentioned by Jeff in the previous example. While, again, there was no attempt made at solving this problem, there was analysis of group communication by applying course principles.

The final progress report was an assignment where students were asked to reflect on what they learned as a result of the small group experience. In order to demonstrate individual learning, students were asked to "prepare a final report detailing the specific (and significant) lessons learned about small group communication." Students were to focus on four or five specific lessons they had learned as a consequence of participating in the service-learning project. Once again they were asked to provide specific examples of communicative behavior that illustrate the lessons learned.

With this assignment students did a better job reflecting more specifically upon "lessons" that had been learned about small group communication. Problems arose because most had not fully detailed examples of communication in their journals, and now, at this end point in the semester, were unable to remember examples. For example, Susan writes:

I learned how to "depersonalize" statements when I was giving criticism. I had to call James and ask him why he wasn't coming to meetings. When I called him to find out what was going on, I tried to ask what the situation was, not what he was doing not showing up. A negative environment can only make the problems worse.

She does a good job here reflecting on something she learned, but doesn't provide "what was said" to illustrate that point.

The most "critically reflective" responses examined the service-learning component of the experience. Students were most successful at reflecting upon what this experience -- providing a service to a non-profit agency -- meant to them. For example, Becky writes:

This type of learning provides motivation to a small group class. The part that kept us going towards our goal (besides the grade!) was the real life non-profit organization that was relying on our help. Beverly seemed so grateful that we were doing this small project for her. To her and the people at [the agency] it was a lifesaver... I really believed in our project, and I think my group members did too.

While not all my reflective goals were met, I do believe students learned about small group communication. Reflecting upon learning appeared to be a struggle for most students who have traditionally not been asked to really think about what they are learning and why they are learning it, but rather to report the "facts." Then again, given that at this intermediate level of learning I was not expecting students to process the
learning beyond the "descriptive" stage (Hatton and Smith, 1995), I was moderately satisfied with the outcomes.

2. Teaching English in the Secondary Schools (Bill Tucker)

One-third of my teaching methods class volunteered in an after-school tutoring program at a local middle school. The entire class was required to write case studies of secondary school writers, but most of my class chose their own school sites. Only eight worked with the designated at-risk students in the middle school program. Most of the reflective commentary was supposed to focus on collected samples of secondary level writing spread over the entire ten weeks. Although Dewey's idea of theory-building resembled my expectations for reflection, I was hoping for more than problem-solving. The ability to suspend judgment on student texts, the recognition of personal biases, and the ability to consider multiple variables in evaluating writing figured prominently in this kind of reflection. Postponing closure on a problem could be more valuable than quick, decisive action. Practicing teachers have too-often been accused of being unreflective. In a prepracticum I wanted to exploit the luxury of time for maximum reflectivity without pressing for closure or decision-making. Schön's "reflection-in-action" did not apply as much in a prepracticum setting as it might have for a practicum.

The tutors wrote reflections on their experiences and on the student writing samples every two weeks for eight weeks. At the conclusion of the program they each wrote a case study of one of their students as a writer. The reflections were intended to document their changing view of the writer over time and were included in the appendix of the case study.

Prepracticum teachers first have to face their preconceptions about student writing. The following reflective entry both uncovers personal bias and suspends judgment on a student text. The teacher had previously seen an example of vivid and expressive memoir from this student she calls "Breanna." For this assignment she asked Breanna to write a story. Breanna pretty much regurgitated the plot for a new television show. I was so disappointed when she told me she had written a story about the show that she had seen. I didn't say anything to her, but I wonder if she is aware that writing a story means "writing a story," not summarizing someone else's ideas. I found I was more critical of the paper knowing that none of it came from her. (Well, perhaps the dialogue was hers, as I can not imagine that she remembered it from days before).

This teacher reflected on the writing task from the student's point of view, and recognized her personal bias, demonstrating more self-awareness than
most experienced professionals. An unreflective response to the appropriation of a TV plot might have been a lecture on plagiarism, a concept not entirely grasped by many middle school writers. The teacher's dialogic reflection (considering the student's perspective), in this case, might have prevented a misunderstanding.

An important reflective skill for teachers is the ability to develop theories or hypotheses about writers and apply them to classroom experiments. After working with an eighth grade boy for several weeks, this prepracticum teacher began to develop theories about the writer's strengths and weaknesses. He examined the full context of a developing piece of writing and the motivational problems of the writer in this reflection:

His paper's biggest problem is the tendency to cover many small topics in a very broad manner that really tells the reader nothing in an attempt to tell everything. Partly this problem arises from his distractions. He'll come up with an idea, write a line or two, and then get involved with something else going on around him. By the time he gets back to the paper he will not expand on his previous thoughts, instead he will move right on to another related topic.

Having developed the hypothesis about the student's distractability, the teacher tests it against the surprising outcome: the student eventually got an "A" on the paper.

I think working at home alone is better for his personality. I was not surprised at his 'A' grade, he was open to my suggestions in tutoring and continues to show a natural talent for writing.

These reflections link multiple causes: the student's talent, his behavior in school, his hypothesized behavior at home, and the evaluation of the classroom teacher. Even as a tutor who saw this student only once a week, the teacher could develop a "situated theory" from a complex array of variables.

Critical reflection in a case study of a writer depends on viewing the larger context of instruction. While the above example makes references to a broader context, the case studies were generally limited by the brief ten-hour field experience and a general lack of school-based experiences prerequisite to this course. Despite these limitations, the case studies of future courses might be enriched by more reflection on the socio-economic and cultural setting.

"Reflection" for writing teachers means considering a wide range of variables that influence student writers. Their skills at suspending judgment and forming hypotheses work in counterpoint to problem-solving, because their conclusions are often tentative. While writing problems require solutions, the best solution is often not the first one that
comes to mind, especially for the novice teacher. Therefore reflection consists less of problem-solving and more of problematizing and problem definition. It thrives less in the crucible of decision-making than in the field of inquiry. Unlike the practicum, closure and action are not always the goals for reflection in a prepracticum methods class.

3. Hospitality Management Internship (Polly Buchanan)

Strong leadership skills are often associated with successful professionals no matter what their field of expertise. In the hospitality industry, leadership skills may be seen as parallel to effective management performance. Successful managers must "lead" their organizations whether through direct employee contact or through delegation to supervisors. Synonyms for leadership vary from direction, guidance and administration to command, control and superiority. More casual explanations include "getting people organized toward a goal or objective" or "getting people to perform at their best." Leaders must be "self-starters" and have an ability to solve problems and think critically. In business, leaders must determine the best route to take, the quickest or least expensive alternative. . . . the fastest option or the most effective choice.

While educating students to be successful hospitality managers and professionals, I questioned whether we were helping students develop their potential leadership skills. Were we providing situations and environments that would test and encourage the seeds of leadership to sprout, grow, and strengthen? How could they practice and hone their leadership skills while with us as undergraduates?

Pondering these questions prompted me to implement a service-learning activity with a senior internship class, a capstone course designed to evaluate competencies and skills learned in all previous hospitality management courses in the curriculum. Students were paired and assigned to one of 75 receiving agencies of Food Gatherers, a local prepared and perishable food rescue program. The course objectives were based on the management competency that targeted "the improvement of the greater community" and which included the use of "professional skills to resolve operational dilemmas in order to better serve identified community populations."

Course Objectives (HM496)

13.1 Identify an operational weakness in an assigned service agency or service activity/program; determine an effective solution and implement it.

13.2 Assess what you learned during your service activity and the benefits of the experience to you and your professional development.
Early reflections from students provided shallow comments the first semester with little thought or depth. "The truck was cold" or "Organizing the vegetable refrigerator was a hard job" were typical statements. The following semester the reflective written report by students followed a detailed outline with six major sections, each section based on a leadership trait found in the work of Stanton (1993) and Billingsley (1994). Below are two of the six segments of the Service-Learning Reflective Report. Student comments were much more thoughtful with this framework to follow, as can be seen by the accompanying reflections.

1. **Sense of Vision (Intuition) and Balance (between vision and reason)**
   - Relate the specific goals of the agency or organization
   - What were their views on what they wanted to be doing in one year? In 5 years?
   - Can you see other activities they could also be doing in 3 to 5 years?
   - What training did you do there? With whom?
   - Did you feel that they (the staff or volunteers) could do more after your training? How?
   - How did you determine in what aspect of the organization you could be most effective?

   Regarding the balance of "vision" and "reason," a student had to negotiate the donations to various charities from a service organization he was representing. His reflection expressed his ability to balance the resources of one organization with needs of another.

   From a business standpoint, I feel it's very important to stay involved with your community and give back to the people who are giving to you. Star Trax is involved with charities year around, which is something I really respect. I showed my leadership by being the only representative and contact from Star Trax and not letting them talk me into more than we wanted to donate. Sometimes that's not easy to do because you want to please everyone, because sometimes you can't. When all was said and done, they were very pleased with what we were donating and doing.

2. **Cognitive Initiative, Ethics and Service to the Broader Good**
   - Was everyone treated fairly? Explain with examples.
   - Would you suggest any changes?
   - Was the program serving all possible components of the community? Why or Why not?
   - Describe your self-perception as a professional working at this agency. How did you "see" yourself there?
   - How did you feel about this?
In regard to self-perception, one student wrote, “On campus all my friends and some staff and faculty knew what I was doing. That not only gave them a better image of me, but also they gave me more respect. I even recruited a couple of them to do a food run [for Food Gatherers].”

In a professional practicum, "reflection-in-action" drives the learning experience. Students must grapple with the ambiguities of real problems, recognize all the stakeholders, and implement consequential solutions. As educators we want students to experience learning that is problem- and issue-oriented because leaders and professionals in all fields are constantly solving problems that require sustained initiative (Billingsley, 1994). Service-learning projects focus on specific problems for students to solve in real organizational environments.

What is reflection? It is clearly more than digesting theoretical knowledge, but not limited to solving problems and implementing solutions. It often results in action, but often it prompts more reflection. As we have compared our own versions of reflection on service-learning, we find they are constructed around the developmental progress of our students, as well as the goals of our discipline. The social awareness associated with service-learning often depends on the prerequisite disciplinary growth of our students. At the same time we hope to arrive at the critical reflection that the service-learning curriculum should eventually deliver.

In foundational courses, we want our students to apply theoretical knowledge to authentic problems. In pre-practicum classes we emphasize ambiguities and contradictions to help our students consider all the variables before acting. These reflections postpone decisions, in a way a practicum would not allow. In professional practicums, we hope for enlightened decision-making or least for thoughtful "reflection-on-action." We also want students to define service for themselves, but failing this, we hope the memory of service will last long enough to stir "reflection-on-action." We didn't understand all this when we began our pilot program in service-learning, but, having reflected ourselves, we know better how to tell our students what we mean by "reflection" in an academic service-learning experience.
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