Oliver Wendell Holmes (1955) once said, “Every now and then a man’s mind is stretched by a new idea...and never shrinks back to its former dimensions” (p. 240). In order to stretch our students’ minds or to help them “outgrow” their current thinking, we need to give them cause to reflect. One of the most important ways to encourage students to reflect is to give them chances to think critically about their learning experiences—to talk about them, to listen to and consider others’ perspectives, and to write about their experiences and perceptions.

A number of benefits are likely to occur when learners and teachers reflect. Reflection can focus our understanding, clarify our thinking, help us retain understanding for a longer period of time, help us think critically about what we have learned and have yet to learn, make us more likely to use the knowledge, and result in new thought becoming the basis for further action (Richardson & Morgan, 2003).

A great deal has been written about the role of reflection in advancing learning. James Britton (1970) talks about the importance of language in developing thought and as a means of organizing a representation of the world:

Events take place and are gone; it is the representation that lasts and accumulates and undergoes successive modification.... We habitually use talk to go back over events and interpret them, make sense of them in a way we were unable to while they were taking place. (p. 18)

In addition, through reflective conversations we can learn a great deal about others’ perspectives, alternative explanations of events, and the relationship of evidence to decision-making (Kitchener, 1977).

In this paper, we examine the power of writing in promoting thought through reflection. Writing can be superior to talk in shaping our thinking. The process of shaping experience is likely to be sharper because writing, through deliberation and word choice, can lead to more explicitness in expression (Britton, 1993). By articulating our rationales for actions through writing, by uncovering our beliefs and examining our actions in light of those assumptions, we engage in inquiry or knowledge-generating. (Hoover, 1994).

This paper explores reflective writing as a tool for thinking in a variety of contexts. Reflective writing with K–12 students is supported by a series of studies which indicate the
value of reflection, ranging from that of Douillard (2002), with first- and second-grade students, to that of Judith Langer and Arthur Applebee (1987), whose large-scale study of reflective writing in the content areas showed growth in secondary students’ thinking.

Reflective writing processes used with preservice and practicing teachers is next. In their critical review of empirical research focused directly on reflection activities with prospective teachers, Risko, Vukelich and Roskos (2002) found many students reflecting at lower levels of thinking, such as factual and technical levels. In studies in which the prospective teachers were involved in communicating with peers and professors about their experiences through dialogic writing and talk, the teacher education students were better able to see information and ideas in new ways. We will discuss how our contexts for reflection involved both writing and communication of ideas.

Examsining From Within and Without: K–12 Students Reflect

Students of all ages are able to engage in reflection and benefit from this engagement. Although teachers frequently feel pressed for time in a crowded curriculum, spending time with students in examining what has been learned, how it has been learned, and how the learning can be utilized and further personalized is very important. This time spent in reflection supports the students in developing executive control over their learning and helps them become more independent, literate thinkers (Oldfather & Dahl, 1994). Student reflection also provides teachers with information about how the students are learning, information that might otherwise be inaccessible (Brownlie & Feniak, 1998).

The following samples from across the grades and content areas illustrate the possibilities for reflection within the school day.

**Grade 5.** In Mathematics, the students reflect on their learning about estimation and front-end truncating. They respond to three prompts:

- What I now know: “Now I know front end truncating isn’t as complicated after all. It’s easy as pie!”
- Questions I still have: “Is front end truncating exactly the same as estimating?”
- What I noticed about my thinking: “I can really try. I feel like I can do it, and I can.”

**Grade 7.** In English, the students have been asked to reflect and write what they notice about themselves as readers. The same student writes in October and in May:

October

When I read I think of the people in the book and their situation. I also think about how I would feel in their place.... Other times when I get to a tough word, I try to think if I’ve heard it before and forgotten the meaning. When part of the book doesn’t make sense, I just keep reading a line or two and see if they make the sentence fit in.

May

I try to be alone so that I can read and actually concentrate on the book. I also try to figure out what the characters are like, and I try to give them imaginary voices so the book is a bit better.
Grade 11. In Biology, the students have been studying cellular respiration and are self-evaluating and reflecting on their learning—both content and process. A student writes,

As opposed to note-taking this process of diagramming allowed us to and forced us to think for ourselves and make connections and explore the concepts. I think although we got through the material more quickly our learning was more thorough, and by talking we picked up ideas we may have missed. Diagramming the work made concepts more clear, and it'll be easier to review later on.

Other examples abound. As students take a moment to notice what they have done and how they have done it, they are enabled. They know themselves better. We teachers know them better and are better able to support their learning. Together we are able to move more skillfully and confidently into the next learning situation.

Preservice Teachers Reflect to Become Thoughtful Practitioners

The power of reflective writing to help preservice teachers become thoughtful practitioners is evident when they engage in written reflection about lesson plans, common readings, experiences related to internships, and their own education classes. We have found structured reflective writing about lesson plans to be beneficial to preservice teachers. We structured the writing about lesson plans using a three-step process that can be summarized in three brief questions: (1) What? (What happened? What did I observe? How did the child respond? What did I see and hear?) (2) So what? (What did I learn about the child’s literacy? What did I learn about my teaching moves?) and (3) Now what? (How will I alter my instruction to meet the child’s specific needs?). This structure facilitated preservice teachers’ growth through three levels of deliberate reasoning (van Manen, 1995). In the first level, teachers are focused on the technical accuracy of teaching procedures. In the second level, teachers provide reasons for instructional actions and their outcomes. In the third and highest level of reasoning, teachers question thoughts, feelings, and actions that they had previously taken for granted, thereby critically considering the extent to which teaching practices foster equitable conditions for learning. These levels of reasoning parallel the levels of teacher learning elsewhere described as knowledge-for-practice, knowledge-in-practice, and knowledge-of-practice (Hoffman & Pearson, 2000).

Technology is another venue that we have used successfully for reflective writing. Having the preservice teachers e-mail professors about their reactions to class activities and participate in listservs with preservice teachers on other campuses has provided authentic avenues for critical thinking. There were several benefits when preservice teachers responded to professional listserv postings that were reflections written by their professors about professional journal articles. First, the professors journal postings served as a model for reflective writing about practice. Analysis of the responses the preservice teachers made about the professional journal entries revealed a structure very much like the levels of reasoning mentioned earlier. Second, it provided a channel of communication between student and professor that minimized power issues. The professor sought honest critique from students and responded in ways that engendered mutual respect. Third, the students provided valuable feedback on the success
and failure of teaching strategies, which enabled the professor to adjust teaching prac-
tices to maximize all students’ learning.

Students participating in on-line discussions about their field experiences as well as discussions of common readings reported several benefits. First, students felt that having to write about their field experience observations and readings forced them to be more active observers and readers. Second, their exchanges increased their understanding of theory and practice. Third, the asynchronous nature of the listserv enabled students to think before they responded to messages. Finally, preservice teachers reported that participation in the listserv project fostered their own technological literacy. In other research, these types of exchanges have been found to create more democratic discussions with fewer power issues, promote reflective thinking, and promote active rather than passive learning (Ridgeway, 1997; Ridgeway, Harmon, & Pritchard, 2000; Tao, 1995; Tao & Reinking, 2000).

Reflective Writing as a Tool for Professional Development

The 21st century asks for a new type of personality—someone who can work in a team, adjust to the fast-changing reality and demands of the surrounding world, exhibit tolerance and listen to differing views, and keep an open and critical mind, internalizing the ever-growing flow of information and reflecting on both personal and professional levels.

One project that fosters such changes in the teaching and learning process is Reading and Writing for Critical Thinking (RWCT) (Beach, Ward, & Mirseitova, 2001; Hausenblas, 2000). (For information about the RWCT International Consortium, see www.rwct.net.) In RWCT, the dominant approach to learning involves active participation. Educators assume the roles of facilitator, encourager, supporter, and mentor, using methods that promote dialogue, sharing of ideas, problem solving, decision making, and risk-taking. Learners are no longer learning alone; they are members of supportive learning teams. Students are not afraid of asking questions, showing curiosity and inquisitiveness, or sharing their reflections, because they know their thoughts will not be criticized.

Initial implementation of the Latvian RWCT project has concluded, with 1,240 participants, ranging from primary teachers to university educators, completing the course. Preservice and in-service teachers increasingly use reflection in free writes, self-reflections, portfolios, reflection notebooks or journals, and dialogue with “critical friends.” In the reflective essay required of all teachers completing the RWCT course, participants responded to the prompt: “What has the participation in the course given to me professionally, to my students/pupils, and to me personally?” The following responses are representative:

- “My students have had a possibility for self-realization. They have understood that every person has to be accepted the way he/she is. They have learned to put forward objectives and assess their progress.”
- “They have learnt that knowledge is not only what books or their teacher says, but also what they themselves know.”

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• “I feel the changes not only in my attitude towards work at school, but also towards life itself. I have become more natural, bolder. I have gained optimism and self-assurance, but the main thing—I am ready to listen and to accept different viewpoints and it is easier for me to find contact with people.”

• “I have learnt to try and walk in my students’ shoes and not to blame them if something goes wrong, but think more about my own performance and strategies.”

The results found in Latvia mirror the results found in the International Evaluation of the RWCT project worldwide (Heyman & Salinger, 2002). There is ample evidence that RWCT teachers are accomplishing the goals set by contemporary society. If students are not taught from a critical thinking perspective, how can we expect them to become the leaders and decision-makers of the future? Those who experience self-realization (Knowles, 1975), who think independently and reflectively, and who are ready to cooperate and contribute will be prepared to flourish in their lives.

REFERENCES


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