Reconfiguring the English Classroom for Multiple Intelligences

Peter Smagorinsky

University of Oklahoma

Even in the hands of a teacher committed to the ideals of student centered education, one who fosters personal expression in writing and discussion and endeavors to enfranchise students through the classroom structure, English classes tend to evaluate students according to their *linguistic* performance. And of course they should, for that is the designated province of Language Arts instruction. The work of Howard Gardner (1975, 1982, 1983, 1984, 1987, and other publications), however, calls this limited avenue of expression into question. Gardner has proposed that *linguistic* intelligence is only one of seven modes of intelligent behavior, only two of which are privileged in American schools: *linguistic* and *logical/mathematical*. Gardner has argued that Binet's concept of "I.Q." has contorted our understanding of how people behave in our society and of what constitutes intelligent behavior. Americans tend to associate a high I.Q. with one's linguistic or logical/ mathematical ability, with such figures as the rocket scientist sitting at the intellectual pinnacle as our ideal.

Yet Gardner has argued that rocket scientists and their intellectual kin illustrate only a narrow range of noetic behavior. He gives many examples of people who have been highly valued members of their cultures who would not fare well in American schools or perform well on our intelligence tests. Gardner gives, for instance, the example of sailors who navigate ships at night through the recognition of landmarks; we see this skill exhibited in Mark Twain's accounts of Mississippi River navigation and in the performance of the sailors' modern counterpart, the urban cab driver. Gardner maintains that these abilities stem from more than good eyesight, reflexes, and memory: He attributes them to *spatial* intelligence, the ability to perceive the visual spatial world and represent relationships graphically. Others who exhibit spatial intelligence are architects, engineers, artists, billiards players, mechanics, and so on.

Gardner has labeled his theory the "Theory of Multiple Intelligences." The full range of intelligences identified by Gardner includes the following:

- 1. *Linguistic*: a sensitivity to the sounds, rhythms, and meanings of words and to the different functions of language. Skilled writers, orators, translators, and rap singers (not including Vanilla Ice) are among those with linguistic intelligence.
- Logical/mathematical: a sensitivity to and ability to discern logical or numerical patterns, with the ability to follow or generate long chains of reasoning. Scientists, mathematicians, computer programmers, lawmakers, philosophers, and accountants display logical/mathematical intelligence.
- 3. *Musical*: the ability to produce and appreciate rhythm, pitch and timbre or to appreciate musical expression. Musicians and music cognoscente possess musical intelligence.
- 4. *Spatial*: the ability to perceive and represent physical relationships, as demonstrated by grphic artists, newpaper layout specialists, landscapers, and so on.
- 5. *Bodily/kinesthetic*: the use of the body to solve problems or fashion a product. Note that this is distinct from "physical ability" such as being able to jump high or run fast; rather, it si intelligent expression through physical movement as demonstrated by figure skaters, hunters, and athletes such as the basketball player with good "court sense."
- 6. *Interpersonal*: the ability to discern or respond appropriately to the moods, temperaments, motivations, and desires of others. Salespeople, teachers, therapists, and public-relations officers are among those displaying interpersonal intelligence.
- 7. *Intrapersonal*: the ability to achieve self-knowledge, exhibited by highly reflective individuals and ascetics.

Gardner maintains that only the first two of these intelligences are valued in American schools. We see their privileged status when budgets are cut and art, music, and sports programs are discontinued; we also see this tendency in the dominant classroom structure in which students work silently and individually on the study of personally remote information, with collaboration often regarded as cheating.

Lave's (1988) research on people's extrascholastic thinking illustrates the ways in which schools can discriminate against people whose most effective form of intelligence is not among the most privileged two. He describes, for instance, a participant in a Weight Watchers' class who was measuring quantities of food:

In this case they were to fix a serving of cottage cheese, supposing the amount laid out for the meal was three-quarters of the two-thirds cup the program allowed. The problem solver in this example began the task muttering that he had taken a calculus course in college. . . . Then after a pause he suddenly announced that he had "got it!" From then on he appeared certain he was correct, even before carrying out the procedure. He filled a measuring cup two-thirds full of cottage cheese, dumped it out on the cutting board, patted it into a circle, marked a cross on it, scooped away one quadrant, and served the rest. ... At no time did the Weight Watcher check his procedure against a paper and pencil algorithm, which would have produced $\frac{3}{4}$ cup X $\frac{2}{3}$ cup = $\frac{1}{2}$ cup. (p. 165)

The Weight Watcher participant, if given this problem in a math class, would surely have gotten the "wrong" answer. Yet in the practical world of affairs he has succeeded in his own unorthodox way in solving the problem. It appears as if he has used *spatial* intelligence to measure the correct amount of cottage cheese, instead of taking the more common mathematical approach. Such people are often inappropriately labeled as "failures" in school due to their reliance on a form of intelligence that is not recognized by the institution.

Beyond these global problems, the bounds of each discipline tend to be rigidly delineated. Most recommendations for reform do not address the compartmentalized nature of secondary schooling with distinct duties assigned to each discipline. This system works against the abilities of most students, who are not blessed with intelligence in all seven areas, but rather in a few. We see this inequity in the behavior of most people: the successful writer who cannot understand plumbing or tune a car engine, the technically brilliant doctor with a poor "bedside manner," the acclaimed musician who can't handle finances. In most English classes, even those that are consciously student-centered, students are allowed to express themselves almost exclusively in linguistic terms. This leads to problems when students understand literature but express their interpretations poorly through language. Given the opportunity to sculpt a character, compose a soundtrack for a dramatic scene, or act out a character's dilemma, these students might have avenues of expression more suited to their native intelligence.

Remarkably, such means of expression are common and highly valued in the artistic world yet are often disallowed for secondary students. Musicians and choreographers create ballet and modem dance to depict their interpretation of literature. Soundtrack artists are highly compensated in Hollywood for their ability to communicate the mood of a scene. The Disney animators expressed their response to classical compositions with their classic "Fantasia." Artists, musicians, and poets have often created works of enduring value in response to one another's creations, from Gounod's operatic version of *Romeo and Juliet* to A. B. Spellman's poem "John Coltrane" to the myriad artistic renditions of Biblical scenes and stories. Such response, however, is rarely allowed or encouraged in American English classes.

We occasionally see collages, student plays, and illustrated cover pages to book reports, all as laudable as they are infrequent. I have proposed (Smagorinsky, 1991) a reconfiguration of English classes based on the assumption that in a truly student-centered class, students are empowered not only to explore personal responses to literature and choose the content and form of their composition, but to express their ideas and interpretations through their most effective vehicle of intelligence. I am not arguing that English classes should no longer require reading and writing; composition and discussion have traditionally been the meat and potatoes of English classes and I am not suggesting anything so radical as their termination. I am proposing, however, that students be provided with -alternatives, perhaps in the form of supplementary opportunities for expression and response. Often students understand material quite well but do poorly on their linguistic evaluations. These students then perceive themselves as academic losers even though they might be quite successful in their personal relations, baby sitting, guitar playing, animal care, automobile maintenance, personal financial management, and so on.

Particularly affected by the narrow range of assessment in American schools are our cultural minorities. Members of minority groups tend to do quite poorly in our schools and are thus often perceived as intellectually inferior. The experience of Spanish-speaking students will illustrate this problem. Steinberg, Blinde, and Chan (1984) have found that native speakers of Spanish have had a distressing and persistently high rate of failure in American schools. Moll (1986, 1988, 1990) attributes this performance not to any inherent intellectual disability of the students, but to entrenched classroom practices that underestimate, undervalue, and constrain the students' means of intellectual expression. American schools, for instance, tend to isolate students for formal evaluation of remote knowledge, without allowing them to construct meaning by using personal knowledge from their own experiences. Moll argues that Spanish-speaking households rarely function alone or in isolation but are connected through complex social networks that transmit knowledge, skills, information, assistance, and cultural values that can potentially inform their school learning. Moll's study of Mexican-American families in Arizona reveals a wide range of problem-finding and problem-solving behavior, including distilling medicine from insects, building and repairing machinery, operating ranches, and creating and performing music. These acts require intelligences that are central to the lives of students yet not valued by their schools. The students thus continue to fail due not to intellectual deficiencies but to the type of behavior evaluated in school.

The expanding cultural diversity of American schools will exacerbate the problem illustrated by the experience of Southwestern Mexican-Americans. Presently, half of the students in California schools are members of linguistic minorities; by the year 2000 about 40 percent of American students will fall in this category (Lloyd-Jones and Lunsford, 1989). One reaction to the diversification of the American population has been to forcefeed Eurocentric values and ways to minorities in the hopes of preserving and perpetuating "American" culture (Hirsch, 1987; Ravitch and Finn, 1987). I would argue that this response is a futile attempt to turn back the Clock; that the times are indeed achanging and that we will be better off for the infusion of new ways of knowing and behaving. Rather than ignoring the gifts brought to our classrooms by children of diverse cultures; rather than failing them for their non-Eurocentric means of expressing understanding and intelligence; rather than hiding our heads in the sand while these children's talents wither, I argue, in company with Gardner, that we need to recognize their intelligence in the modes valued and taught by their cultures and allow them ways to express it in our classes.

English classes -with their natural ties to the arts, their dependence on interaction for greater understanding, their potential for both logical analysis and personal reflection in response and expression - are among the most promising areas of school for expression through multiple intelligences. Central to any response should be the act of *meaning construction:* Students' expression should signify the manner in which they have reconstructed the problem to which they are responding and illustrate their representation of it.

Teachers can allow opportunities for expression through multiple intelligences in a variety of ways. (See Smagorinsky, 1991, for detailed descriptions of a broad range of activities.) In some cases, teachers can allow students optional supplements to activities that are already in place. Let's take the old English-class warhorse, the research paper. This assignment is often a task in which the students' personal involvement gets lost in the overwhelming new information regarding proper reference-citation form (an issue even with the transition to more userfriendly forms such as APA and MLA) and procedures (finding sources, preparing note cards and so on, many of which may soon become obsolete in their present form with new technologies becoming available). A number of educators have come up with alternatives to the traditional research paper, such as Ken Macrorie's I-Search" (1988) and W. Keith Kaus' (1978) suggestions for bizarre topics, to make this project interesting and

meaningful for students. The emphasis for such papers remains, however, in the realms of linguistic and logical/ mathematical intelligence.

Students can have options for the preparation and presentation of their research that enable them to bring into play other types of intelligence. Most topics, for instance, are amenable to some form of interview. Given a choice of topics, many students select personal or contemporary subjects that interest them. A student who has been adopted might research adoption procedures. A Jewish student might research a particular Jewish tradition. The son or daughter of a Vietnam veteran might research some aspect of the conflict. Students might research a musician whose career they have followed, or a problem that threatens teenage life such as drug use or anorexia. Typically the research for such topics takes place in the library with sources found in a print medium. Yet students can gather and present information in unconventional ways. They can, for instance, interview someone who has knowledge related to their topic, such as a Vietnam veteran, a cocaine user or counselor, or the head of an adoption agency. This activity enables them to use interpersonal intelligence. One who has skill at understanding the moods and needs of others can draw out stories that will bring vitality to an informational paper and take advantage of an ability that ordinarily goes unappreciated.

Students can use their spatial intelligence to produce art or photography to illustrate concepts uncovered during research. Students can prepare a slide show or video or computer presentation to share their research with their classmates, perhaps accompanied by a soundtrack that the student either prepares personally or assembles from other sources. In this way the researcher's report can take on the form of a documentary, with the student acting as author/director as well as writer.

In addition to using multiple intelligences to supplement regular activities, students can engage in optional activities that extend their understanding of what they cover in class. Highly reflective individuals, for instance, can keep a journal to record their personal responses to literature and issues and provide an outlet for their intrapersonal intelligence. Students can use these ruminations as the basis for other optional activities. Let's say, for instance, that a student is reading S. E. Hinton's *The Outsiders* and reflects at length on experiences involving clashes between peer groups of different socioeconomic status. The student wishes to express these feelings to classmates in light of other literature they are reading regarding peer-group behavior. The student might assemble a group of friends from class to dramatize a personal experience that parallels those of the literary characters. The group prepares a script for the play and begins to conceive its production. One student is reticent about performing but owns an inexpensive portable synthesizer and decides to provide a theme song and soundtrack. Other students elect to play minor roles but also contribute by creating sets for the production. Another student, hesitant to perform but eager to participate, volunteers to videotape the performance.

This activity involves the coordination of a variety of individuals through a range of intelligences. The original reflection that inspires the play is a result of intrapersonal intelligence. The students all bring interpersonal intelligence to the project in order to engage fruitfully in the group effort. Producing the script requires linguistic intelligence, the soundtrack and theme song require musical intelligence. Several of the contributors use their spatial intelligence: those who create the sets, the person who operates the videocamera, and the person who directs the action. And bodily/kinesthetic intelligence is required of the performers who must use their bodies to convey attitudes and personalities through their stances and gestures.

We see in this sort of activity a reflection of the ways in which individuals tend to perform outside school: they are collaborating on an activity of their choice to construct meaning through personal expression. Different group members contribute different talents to create an effective whole, one that none of the group members could have achieved individually. They are able to benefit from and learn from one another's unique gifts and contributions to participate in an important activity that represents an expression of their understanding of the experiences of literary characters.

These activities illustrate in some detail ways in which teachers can structure classrooms to enable students to express themselves through unconventional avenues of intelligence. I wish to stress again that I do not wish to displace the traditional emphasis on linguistic ability in the English class, but to allow students opportunities to signify their understanding and awareness when their linguistic skills are limited. Teachers can

organize their classes so that students can have frequent opportunities for application of unconventional types of intelligence without departing from their established curriculum. Students can engage in frequent informal reflective writing in response to literature and issues, thus employing their intrapersonal intelligence: for prewriting planning sessions, for group composing (as in script writing or working through the process of a new type of composition), for peer-group response to compositions, and for literary discussions.

Students can use their spatial intelligence to draw, paint, or sculpt literary characters or terrains, photograph relevant scenes (i.e., a desolate cityscape to illustrate the setting for *Native Son* or a bucolic countryside to depict themes of Romanticism), or create sets for dramatic productions. They can respond to literature by creating a musical interpretation (as in Simon and Garfunkel's version of "Richard Cory" or Ralph Towner's instrumental "Icarus"), by creating an original song for a text along the lines of the theme song for "Laura" or countless other films, by adapting an existing musical work as a theme song for literature (such as the borrowing of Pachelbel's "Canon in D Major" for the film *Ordinary People*), or by providing a soundtrack for a dramatic production. And students can use bodily/kinesthetic intelligence for a variety of types of productions; while they needn't necessarily produce Broadway-style musicals or perform Kabuki versions of plays, they still require physical expression to execute roles in simple classroom productions, and for the dexterity required in artistic expression and projects involving construction.

Most suggestions for engendering student-centered classrooms have had the interests of students at heart. I would argue that we should extend them even further, broadening our notion of what is acceptable for evaluation in English classes. We have the examples of master artists who quite naturally construct meaning for themselves and fashion inspiring products for their public by creating original expression or responding to one another's work; if we regard this as a legitimate means of expression for them, then we should certainly approve of it for our students.

REFERENCES

Gardner, H. (1975). The shattered mind. New York: Knopf

_____. (1982). Art, mind and brain. New York: Basic Books.

_____. (1983). Frames of mind. New York: Basic Books.

_____. (1984). The seven frames of mind. *Psychology Today*, June, 21-26.

_____. (1986). The development of symbolic literacy. In M. Wrolstad and D. Fisher (Eds.), *Toward a greater understanding of literacy*. New York: Praeter.

_____. (1987). The theory of multiple intelligences. Annals of Dyslexia 37, 12-35.

Hirsch, E. D. (1987). Cultural literacy. Boston: Houghton Mifflin.

Kaus, W. K. (1978). Murder, mischief and mayhem. Urbana, IL: NCTE.

Lave, J. (1988). Cognition in practice. Boston, MA: Cambridge.

Lloyd-Jones, R., and Lunsford, A. (1989). *The English coalition conference: Democracy through language*. Urbana, IL: NCTE; New York: MLA.

Macrorie, K. (1988). The I-search paper. Portsmouth, N.H.: Boynton/Cook.

Moll, L. (1986). Writing as communication: Creating strategic learning environments for students. *Theory Into Practice* 25(2), 102-108.

______. (1990). Literacy research in community and classrooms: A sociocultural approach. Paper presented at the conference on "Multi-disciplinary Perspectives on Research Methodology in Language Arts," NCRE, February 16-18, Chicago.

Ravitch, D., and Finn, C. (1987). What do our seventeen-year-olds know?. New York: Harper and Row.

Smagorinsky, P. (1991). Expressions: Multiple intelligences in the English class. Urbana, IL: NCTE.

Steinberg, L., Blinde, P. L., and Chan, K. (1984). Dropping out among minority youth. Review of Educational Research 54, 113-132.

_____. (1988). Key issues in teaching Latino students. *Language Arts* 65(5), 465-472.