ABSTRACT
                Paying particular attention to the far reaching
impact and policies of the goals and ideas identified in the report
"America 2000: An Educational Strategy," the papers in this book
focus on the strategies, practices, and research that may guide the
future of literacy instruction for persons of all ages. Papers in the
book are: "America 2000: An Author's Dream, An Astronaut's Vision, an
Educator's Nightmare" (Cindy Gillespie); "Response to America 2000"
(Eunice N. Askov); "Reaction to America 2000: Operation Desert
Drought" (Thomas Cloer, Jr.); "A Case against National Testing as
Proposed by America 2000: Japan since 1979" (Linda L. Arthur);
"Functional Literacy in the 21st Century: Employer, Teacher, and
Student Perspectives" (Richard Telfer and others); "Five Strategies
for Literacy and Lifelong Learning" (Lorri A. Forlizzi and others);
"Hurdles in Evaluating Adult Literacy Programs...A Few Answers"
(Barbara Van Horn and Emory J. Brown); "Comparison of a Skills-Based
and Natural Text-Based College Developmental Reading Program"
(Carolsue Clery and others); "Common Aspects of Recommended Young
Adult Literature: An Historical Perspective" (Margaret A. Johnson);
"Seventy-One Years of Distinguished Books: An Analysis of the Newbery
Award Winners 1922-1992" (Ira E. Aaron and others); "Gender Roles in
the Newbery Medal Winners" (Janet L. Powell and others); "The
Relationship of Gender to Attitudes about Academic and Recreational
Reading" (Thomas Cloer, Jr. and Beverly Pearman); "Using Literature
to Learn about Math and Science in Primary Classrooms" (Marino C.
Alvarez and others); "Reaction to Alvarez, Stewart, and Vaughn" (Don
Lumpkin); "Integrating the Curriculum: Re-Examination of a Neat
Truism" (Marv Klein); "An Exploration of the Impact of Personality
Factors on Comprehension" (Nancy Boraks and others); and "Teacher
Reflection: Researching Our Own Practice" (James R. Olson and Marti
Singer). (RS)

AR
OF
AMERICAN
READING
FORUM

AR
O F
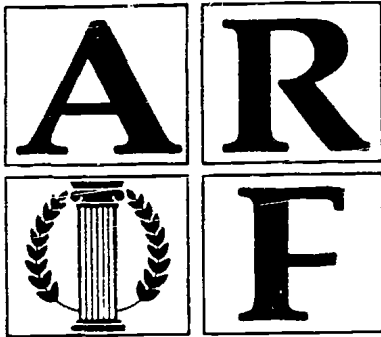
1993, VOLUME XIII

Editors

Bernard L. Hayes and Kay Camperell
Utah State University

4

Editorial Board

The *Yearbook of the American Reading Forum* is the official publication of the American Reading Forum. It comprises papers recommended for publication by the Editorial Board from those submitted by presenters at forums, problems courts, and sessions of the American Reading Forums Annual Conference.

The Yearbook of the American Reading Forum contains selected papers and reactions to issues or papers presented at each year's annual meeting. The yearbook, a peer-reviewed publication, is indexed with major reference sources nationally. The yearbook is received by the membership of ARF as well as many major libraries in the United States.

Four copies of typewritten doublespaced manuscripts (approximately 5 to 20 pages) that follow current APA form should be submitted. Manuscripts and all correspondence should be sent to Bernie Hayes/Kay Camperell, Co-editors, ARF Yearbook, Department of Elementary Education, Utah State University, Logan, Utah 84322-2805.

Subscriptions to the American Reading Forum Yearbook are $20 per year; back issues are $5. Checks should be made payable to the American Reading Forum. Subscription request and all related correspondence should be sent to Bernie Hayes, Co-Editor, American Reading Forum Yearbook, Department of Elementary Education, Utah State University, Logan, Utah 84322-2805.

From The Editors

Volume XIII of the American Reading Forum Yearbook contains papers which have been recommended by the Editorial Advisory Board from those submitted by authors who presented at the 1992 Annual Conference on Sanibel Island, Florida. Papers and reactions from general meetings, problems courts, and forums have been arranged to represent the variety of exciting ideas explored during the conference.

The American Reading Forum Yearbook has, over the past years, addressed issues which are related to present day literary concerns. The focus of this years volume is to look to the future. As we move into the Twenty-first Century, it is appropriate to look at strategies, practices, and research that may guide the future of literacy instruction for persons of all ages. This year's theme "Reading: Strategies, Practices, and Research For the 21st Century" examines a wide variety of approaches, issues and trends and their affect on reading instruction. Particular attention is given to the far reaching impact and policies of the goals and ideas identified in the report "America 2000: An Educational Strategy".

American Reading Forum

Contents

Papers

America 2000:
An Author's Dream, An Astronaut's Vision, An Educator's Nightmare

Cindy Gillespie

I don't go to the movie theater very often to watch recently released movies because I know full well they will soon be available on video-tape (It doesn't take long, particularly if the movie is a box office flop.). Many of today's movies, both on television and the silver screen, are based in fact, or partially in fact, on current events which appear in the local newspaper or the weekly tabloids. Certainly, if a bizarre incident appears in *People Magazine* you can rest assured that it will probably end up on the silver screen or on the movie of the week. At the 1992 meeting of the American Reading Forum, we had the opportunity to watch what I consider to be a box office flop: America 2000.

Now this video had all the makings of a hit: It is based in fact on current events in the newspaper (although I doubt it made the tabloids, and probably did not make the cover of *People Magazine*, I can't remember), and it was released fairly soon after the National Goals were announced by the U.S. Department of Education. The main characters are well-known figures: Former President Bush, Former Secretary of Education Alexander, and Alex Haley. (I would include Astronaut Jernigan, but I don't think she's a household name, yet). However, if the actors do not have a decent script, the movie bombs. In all fairness to the Department of Education, the video is very well done; it's the script, America 2000, the makes it a flop. Let's review the contents of the video.

First, America 2000, the video, is narrated by Astronaut Tammy Jernigan and Alex Haley, author of Roots. They introduce the video by talking about freedom: something which we all enjoy, and sometimes take for granted. They discuss how other countries, particularly Eastern European countries and the Soviet Union, look to the U.S. as they discover the excitement and challenges of their own freedom. The transition from the discussion about freedom to the discussion of America 2000 goes something like this: "Freedom takes renewal. We're the ones who keep freedom up to date, America up to date, and it doesn't happen in Washington. It happens in our own communities, our neighborhoods, our schools and our homes...To get a job and keep a job, we need new skills that will take a new kind of school and a new kind of community support and that takes all of us: parents, teachers, businesses, and government all helping to build the kind of communities where learning can happen. And we're doing it right now all over America. One community at a time, one America 2000 community at a time."

After a brief cameo by Former President Bush in which he explains that the America 2000 **movement** is spreading like wildfire, we cut to Barbara Bush who gives a compelling performance. She discusses the importance of reading to children and encourages parents to read to their youngsters. Barbara, like Rhett ("Frankly, Scarlett...") and females who play Lady MacBeth ("Out, out..."), utters what could probably be considered the most memorable lines of the video: "You should want to say, 'Our community is my business. Our schools are my business. Our children are my business.'" Then she talks about joining the **crusade:** the America 2000 **crusade**.

We then cut away from Barbara and are focused on a "we are ordinary people" discussion by some "down-home folks" who have joined the America 2000 **crusade**. They explain the **crusade** to the video watchers. America 2000 is described as the forming of a business-education partnership because "children need to come out that can work" (What's wrong with this sentence? Children are not thats.) Children need to be productive members of society." The message is: Parents, teachers, businesses and government should all help to build communities where learning can happen.

Next, flashed on the screen is the question: "What are the 6 National Goals?" What follows is a rather brief (everyone gets a turn to state one of the goals) listing of the goals to be accomplished by the year 2000:

1. All students should enter school ready to learn.

2. 90% of the students across the country will graduate from high school.

3. All students should achieve certain levels within certain core subjects and understand the importance of citizenship.

4. The U.S. and its students should be first in the world in science and math.

5. We should become a nation of learners and we should address the literacy issue for all Americans.

6. We should have drug and violence free classrooms.

Then we cut back to another question. "How does it work?" The viewer is told that America 2000 is a **catalyst** to get communities to do what they ought to do, and that it will bring people together. The four things that a community must do to become an America 2000 school are:

1. Adopt the six national education goals.

2. Develop a community strategy to meet the goals by the year 2000.

3. Produce a report card to measure results.

4. Prepare, support, and facilitate the development of a new American school.

Once you've taken the aforementioned four steps, you get a presidential proclamation declaring you an official America 2000 community. WOW!

Then, we have another cameo appearance. This time it' Former Secretary of Education Lamar Alexander. His presentation is akin to a commercial in the middle of a movie. He explains that local schools must remain local and that the change in schools must be local. He then provides his viewing audience with a list of things that are available to assist in becoming an America 2000 school: guidebooks on how to be an America 2000 community, checklists, free videos, and a toll free number (1-800-USA-LEARN). You can request "how to" sessions, seminars, a catalog of information, a newsletter, a list of experts and ideas, and a list of the 50 most-asked questions with answers.

Enter the "down-home folks" who tell us what their communities have done to achieve specific goals:

Goal 1   provide hot meals, intergenerational day care centers, free immunization, and medical screening

Goal 2   better utilize educational resources at students' fingertips in high school, allow students to advance 2-3 grades in single year, and local radio spots to get students in school thereby increasing school attendance

12

Goals 3 & 4   The goals discussed here are slightly more detailed than previously mentioned: The students will prove their competence in English, history, and geography and be first in the world in science and math. Some examples of attempts to meet these goals include: summer programs, six weeks of fun with math and science, year round schools, saturn schools, homework hotline (with help in many languages), and voice mail to increase communication between parents and teachers.

Goal 5   Again, we have a variation of what this goal is (guess it's similar to poetic license): Make all adults literate and make them want to continue learning no matter what. Examples include: satellite technology, public tv, companies giving training to employees based on real job requirements, and companies donating money to schools to develop high tech training centers.

Goal 6   Poetic license: Make schools safe: discipline and drug free. Programs have included such things as: 100 hours of community service for every high school student before graduation, boarding schools to provide a safe place to live and learn, mentors, and role models.

The climax to the video is when the audience finds out the answer to the (by now, burning) question: "How do you start?" We are told to gather together business leaders, health organization leaders, educators, politicians, religious leaders, and ethnic leaders. We should also find people from all socio-economic levels and make sure the local parent teacher association is not forgotten. Then we create a task force to decide which selected areas to study such as: subjects, curriculum, drop out rate, state regulations, and school financing. Once again, we are warned that the whole community must be involved. America 2000 is a long term **reforming** system.

As the movie is ending, we are told the federal government is not directing this **movement**. The federal government provides some help, but communities must help themselves. According to the video the advantages of little government involvement are that communities can start where they are; they can add their own local goals; and they can tailor the program to their specific situations. The audience is then treated to a "Why is it important?" discussion. We are told that communities will never survive if we don't meet "the problem" head on. They cite the major causes of "the problem:" disintegration of family, two working parents, stress on children, drugs, and drop outs.

13

Flashback to our friends Tammy and Alex. Their parting words include such things as: Education is the key to survival and success. All schools should become America 2000 schools. America 2000 will change the country. It's the new American community that gives us freedom. It's a renewal of freedom. It gets us ready for a new century. It means jobs for our young people. America will be able to compete. American will still **lead**. America 2000 combines yesterday's values and tomorrow's skills. It won't happen quickly; it's long term, and it's hard work. We are also told that Former President Bush said that when it comes to schools there will be no **renaissance** without **revolution**. Tammy and Alex then tell us that it will take a new American **revolution** in each American community: one community at a time, one America 2000 community at a time. We can change the country and get it ready for a new century if we tap the new American Spirit. The video ends.

Since the acting has been critiqued, it's time to critique the message. To put the critique in journalistic terms, America 2000 contains nothing but "glittering generalities" which keep me from "jumping on the America 2000 bandwagon." Fundamentally, I don't understand why the video refers to school reform in war terms: **crusade** and **revolution** (These have been identified heretofore in bold print).

Secondly, the "glittering generalities" are nice, but they contain no substance. For example, Goal 1 (All students should enter school ready to learn) sounds like social reform and welfare. While this is a lofty (and somewhat idealistic) goal, it can not be accomplished by educators. Sure, we can educate parents as to the kinds of things they should be doing with preschool youngsters, but we cannot be guaranteed that the parents will provide the necessary educational nurturing necessary to ensure that students will enter school ready to learn. From the America 2000 plan, this is where the businessmen and government come in: to pay for the youngsters' food, clothes, baths, books, and medical care. What, then, is the role of the parent? and Who will fund the welfare / early start/ head start type of programs?

Goal 6 (We should have drug and violence free classrooms) also falls into the "What can educators do about his?" category. Again, teachers can educate, but parents must also accept the responsibility for teaching children right from wrong. Parents and government (particularly law enforcement) must help tackle this problem, because educators cannot do it alone. What is the role of the judicial system if not to deal with drugs and violence?

Ninety percent of the students across the country will graduate from high school is Goal 2. Now, teachers can help to make this goal a reality,

but they need to have help from parents, businessmen and government. Students must value education. It has been well-documented that children's values come from their parents. If parents do not value education, then it is unlikely that their children will value education. Businesses can also help by insisting that their employees graduate from high school or that student workers attend school on a regular basis and maintain a decent grade point average. They must look at these high school workers as students, net as cheap labor. The almighty dollar comes into play here. How do you explain to students and businessmen that an education is more important than money? How do you change the values of a family between the hours of 8:00 a.m. and 3:00 p.m Mondays through Fridays?

Goals 3 (All students should achieve certain levels within certain core subjects and understand the importance of citizenship) and 4 (The U.S. and it's students should be first in the world in science and math) lie within the realm of educators. However, these goals are intertwined with the values issue. Educators can "lead the horses to water, but they cannot make them drink." They can teach their students to value education, but if those values are not reinforced in the home, then these goals will not be met. Additionally, who decides what the "certain levels" should be and what the "certain core subjects" should be and what does "understand the importance of citizenship" mean? Doesn't this sound like mastery learning?

Goal 5 (We should become a nation of learners and we should address the literacy issue for all Americans) is my favorite, particularly the "we should address the literacy issue" part. It seems like we have been "addressing" the literacy issue for years but have done very little about it. Educators work very hard on this issue, particularly adult literacy, but businesses and government provide little support. Even the definition of literacy is up for grabs. How many adult illiterates are there in the United States? It depends on which report you read and how "literate" was defined in that report. The value society places on being literate is also questionable. How else can the fact that many adult illiterates start programs and then drop out after a few weeks or months be explained?

The America 2000 plan is not all bad. It is a start. However, much needs to be done to make the plan realistic and workable. Now that there is a basic plan in place, it is time for politicians to ask for help--not from other politicians or from special interest groups, but from educators. As it stands, if a community were to adopt the America 2000 goals, theoretically educators, parents, businessmen, and politicians would be involved. Whenever an educational issue arises and is put to a vote, educators would not have much of a say, particularly if they disagreed

15

with the other three groups. Logic tells us that educators would lose every time by a 3-1 margin. So who is determining the educational policies for the America 2000 schools? Or more broadly, who is determining the educational policies for all schools across the country?

Secondly, the America 2000 plan does not directly address the issues of curriculum and instruction. This should not be surprising considering that the America 2000 plan was developed by Former President Bush and governors. It hints around by saying "certain levels within certain core subjects." I suppose educators should be pleased that curriculum and instruction was not addressed, since most of the governors and the President do not have degrees in education. However, this emphasis on "core subjects" conflicts with past incentives (government funding) to develop driver education, sex education, drug education, and AIDS education programs. Who is in charge of curriculum? Who makes the decisions? What role do educators play in this decision-making process?

The International Reading Association offers a plan for reform which includes the following: (1) professional development, (2) focus on curriculum and instruction, (3) provide alternative assessment that informs teaching and learning and benefits the learner, and (4) link school, family, and community. While the IRA has a more concrete plan for meeting the needs of the twenty-first century, it is a very costly plan. Whether the costs associated with IRA's plan are warranted and justifiable will undoubtedly be decided by lawmakers and politicians. So we are back where we started: Who's running the "education show?" The answer is obvious--the politicians and lawmakers. What's wrong with this picture?

Educators have been dependent on parents to help prepare their youngsters for learning. Parents have been dependent on educators to teach their children. It seems that, in addition to educating the children, the schools have now taken on the additional role of providing for students whose parents have not, would not, or could not, prepare their children for learning or provide them with a literate environment. Schools also provide food for children free of charge and, in some cases, bath water and soap. Where does it end? What will the schools be expected to do next?

While I may not have the answers to these questions, I have plenty of questions that need answered. I do know that we are only curing the symptoms. We have not cured the disease. The America 2000 and IRA plans treat the symptoms; they do not treat the disease. Dan Quayle (although he didn't say it the right way) and I agree on the disease: a disintegration of the family unit, and the devaluing of education. Now, if I could only find the cure....

Response to America 2000

Eunice N. Askov

In 1989, former President George Bush convened the 50 governors to formulate six national education goals to guide school reform. The governors also pledged that students would obtain competency in challenging school subjects such as English and mathematics.

The bipartisan effort was later, in 1991, dubbed *America 2000* by President Bush. The *America 2000* strategy, while voluntary, would be the "catalyst" to help the country achieve the six national education goals, including the development of high standards and a national system of examinations.

America 2000, a "crusade" for educational reform, has, for the most part, bypassed professional educators and students. To be useful and effective as a strategy, all stakeholders, including those most closely associated with the educational process, must be involved. As Goodlad (1992) states in his astute analysis of the *America 2000* strategy,

Top-down, politically driven education reform movements (such as *America 2000*) are addressed primarily to restructuring the educational system. They have little to say about educating. Grassroots reform efforts, on the other hand, have little to say about restructuring (p. 298).

The two reform efforts must now join forces.

How can professional educators and researchers work together with political and business leaders to improve our nation's schools? By becoming involved in the political process, we can guide these enthusiastic (and probably well-intentioned) efforts. If *America 2000* is truly a local effort, then we ought to be involved in our local communities: As our communities assess their educational needs, we need to encourage

17

political and business leaders away from the "one size fits all" mentality for education. Rather than spending energy and funds on more standardized test construction, we should help our schools assess the needs of their constituencies and design instructional programs to meet those needs.

We must be cautious about endorsing education as the primary means for curing an ailing economy. If the economy does not improve, the temptation exists to "blame the victim." Political and business leaders need to become *more* (not less) involved in substantive ways in our schools to realize that education is not a simplistic remedy for complex social problems.

We must work with our teachers locally, regionally, and nationally, assisting them in assessing learners' needs and designing instruction to meet those needs. We need to help teachers see learners not as isolated individuals but as part of social systems, especially as part of a family system (Kazemek & Kazemek, 1992).

Now that school reform has the attention of the community at large, let's seek partnerships to bring about real and lasting change. Let's work as individuals and through our professional associations guiding school reform efforts, regardless of the name they bear in the new political administration. Finally, let's not forget that powerful tool, the media, which can rally public support at all levels. Partnerships must include public and private television, radio, and newspapers so that public opinion supports and enhances our efforts.

References

Goodlad, J. I. (1992). *On taking school reform seriously. Kappan,* 74(3), 232-238.

Kazemek, C., & Kazemek, F. (1992). Systems theory: A way of looking at adult literacy education. *Covergence, XXV*(3), 5-14.

Reaction to America 2000:
Operation Desert Drought

Thomas Cloer, Jr.

I was always a daydreamer, a Walter Mitty type of fellow. Since most of my formative years were spent in sawmill villages in the highest mountains of Appalachia, it was an escape mechanism that I developed in early childhood that instantaneously took me to other places as different characters fulfilling different roles. It is also a major reason for my early interest in reading.

As I watched the Education 2000 video, I couldn't keep myself from drifting away. Walter Mitty like, to *the University of Virginia where I, the Surgeon General, was being asked with the help of only Strom Thurmond and Caroll Campbell (Governor of South Carolina) to develop America's National Health Goals for the year 2000. In my dream-like state, I felt totally inept as I often do in dreams when I am ter ˈ.ing my college reading classes and look down to discover that my pants ա e missing.*

As I came to the podium and looked out over the audience, Tom Estes, esteemed Professor from the University of Virginia, was intimidatingly sitting wiա President-Elect Bill Clinton. I babbled a few words about my goals constituting an ambitious agenda, one that asks Americans to accomplish a great deal more than ever before. I used what propaganda techniques I had mastered; my forte was plain folks.

Since my Walter Mitty transformations fade in and out, I at this point awoke back at the Forum to hear Wayne Otto talk about governors and business communities jerking educators around. I turned and watched young graduate students in the Reading Forum audience nod enthusiastically. I knew Wayne Otto had profound things to say and I actually

19

tried to follow. However, the fading out started and I was back again at the University of Virginia.

In my daydreams, I was nervously trying to say something in the direction of Tom Estes and Bill Clinton when I remembered the words of Michael Kinsley on becoming co-anchor of CNN's "Crossfire" program. He declared "I know how to read a teleprompter! I can run the country now!" As I s' red at the teleprompter in front of me, there miraculously was the first goal. I glanced at the words and then projected my voice toward Estes and Clinton. "All people will eat three balanced meals per day," I mumbled with little confidence or verve. Applause was scattered, but Estes and Clinton didn't budge. "Goal number two," I said with increasing confidence. "Ninety percent of our patients in American will get better." At this point the applause seemed loudest in the section where older men in pin-striped suits were sitting. I realized then that these were the governors.

I turned in my dreams toward Strom Thurmond and Caroll Campbell who both nodded and pointed back toward the teleprompter. "Number three goal!" I said somewhat nervously because it seemed longer and more complicated on the teleprompter. "Patients at ages 9, 13, and 21 will know how to count calories and fat grams, and every hospital in America will ensure that patients learn more about health and be prepared for responsible citizenship, further learning, and productive employment." At this point, the Rotunda exploded in thunderous applause and I thought in my dreams that Estes nodded. But I couldn't tell without staring if he had nodded in agreement or had fallen slightly forward from boredom and fatigue.

At this point I was awakened and jolted back to reality at the Forum as Nicki Askov talked eloquently about a project of lifelong learning at Penn State growing out of Education 2000. This project had focused on the workplace, family, and community after defining literacy in a contextual and functional manner. Askov began to state five strategies for successful programs. I needed to hear this badly because Nicki is most productive, but I felt the chemistry in my brain changing, and back I went dreamily to the University of Virginia.

"Number four goal," I called with a glance at Estes and Clinton who now had their umbrellas in hand and were spinning them between their hands like boy scouts trying to start a fire with a stick. "U.S. patients will be the healthiest in the world by the year 2000. And now goal number five! Every American will be healthy enough to work and compete in a global economy and to exercise the rights and responsibilities of citizenship!" I looked back at Governor Caroll Campbell and he gave me a thumbs-up sign and slightly elbowed Strom who had started to make strange noises through his nose as he slept.

As I looked back toward Estes and Clinton, they had each started walking toward the exit and I made one last attempt to win them over by nearly screaming the sixth and final goal. "Every hospital in America will be free of thievery and promiscuity and will offer an environment conducive to healing." Estes turned as he walked, looked directly at me from the exit door, and mouthed "That's pathetic."

Others attending applauded thunderously as I finished and I waved and smiled until my plastic shoulder joint began to ache. As I left the podium, Strom Thurmond and Caroll Campbell were trying to restrain a hefty academician who had approached the stage and was quite animated. I recognized immediately that it was William Bennett, former Secretary of Education. He stared annoyingly at me and said in his arrogant style. "You forgot one small item in your formation of goals! You did not include any medical doctors. How in hell do you plan to affect health care without consulting medical doctors? Just how do you plan to integrate these goals? I've heard nothing about linking health care and home. Could you tell me in that God-awful Appalachian Goober-like accent how you are going to monitor these goals and assess your progress. Have you thought of an assessment system Goob?" In this Alice in Wonderland surrealism I could think of nothing in rebuttal and no teleprompter was present. I glared back and castigated him, berated him, emasculated him with the strongest diatribe I could muster. "Listen snoot," I snarled as I put my face closer to his as the media pushed each other and put microphones across people's backs to get my learned reply. You - you, you lack family values! You should practice what you preach, spark plug!" (I meant to say drug czar, but while thinking of "a thousand points of light," the spoonerism came out spark plug.)

In my dreams, I was devastated, my self-esteem plummeted. I staggered away toward the security of the rest room. In there, I overheard two men talking. I recognized instantly the voices of Tom Estes and Bill Clinton. I quickly closed the door on the stall. Clinton was speaking. "The pitiful little man up there was actually embarrassing. Have we come to this in America? He didn't include a process for achieving any of those glittering generalities he called goals. He didn't discuss any changes needed in society that would affect the attainment of the goals." To that Estes replied, "People who live in glass houses or white houses shouldn't throw stones."

As I faded back into reality and the Education 2000 session was coming to an end at the Reading Forum, I noticed some striking parallels between the Education 2000 goals and the ones the inept Surgeon General had presented. I realized how little the politicians really know about how to solve the gargantuan educational problems confronting us in America. I wondered if things would indeed change

with a new administration. As we dismissed and I walked to the next session in the Pelican Suite, I kept thinking of the words of Clarence Darrow: "When I was a boy I was told that anybody could become President; I'm beginning to believe it."

A Case Against National Testing as Proposed by America 2000: Japan Since 1979

Linda L. Arthur

Even though Bush has left the White House, he did not leave without a legacy regarding education in the United States. It may well be the appropriate time to take another look at what was implemented by his administration so that perhaps, as educators, we can have a voice in any changes or further decision making. One major area of concern which has surfaced in regard to our schools is that of high-stakes national testing.

America 2000, as proposed by the Bush administration, called for federally influenced national testing. Although not much information was released about the construction of these American Achievement Tests (U.S. Department of Education, 1991), they begin in 1994. There have been a number of articles published concerning this issue. In fact, the November 1991 issue of *Phi Delta Kappan* was dedicated to America 2000 with a special section on national testing.

In his article, Madaus (1991) tells us that we, as professionals have "an ethical, educational, and political obligation to weigh carefully what we know about testing's positive and negative consequences for students" (p. 227). In addition, he states that

> without adequate answers [in regard to why we are testing, what we are testing, and whom we are testing, as well as how the results will be used] it is impossible to evaluate effectively the range of potential effects of a national test . . . on education and society generally and on different kinds of students in particular. (p. 227)

Madaus (1991) is clear about a serious concern regarding high-stakes testing. That is, the American Achievement Test program, once initiated, may proceed without any "stops" or "checks" no matter how loudly educators protest. The new testing program may take on a life of its own, regardless of the intentions of the initiators, causing considerable damage.

To date, educators (Darling-Hammond & Lieberman, 1992; Madaus, 1991; and Shepard, 1991) have more than adequately surveyed the negative consequences of standardized testing in terms of academic and educational aspects in the United States. However, because testing has yet to be federally controlled in this country, they could not comment on the downsides of such a centrally controlled system.

The objective of this paper is to lend support to the aforementioned educators by giving examples of what can happen to an educational system and what can happen to a society when high-stakes tests are utilized. The country analyzed is Japan. The focus of the analysis is to expose and discuss negative sociological and school-related effects which have manifested, remained constant, or increased since the implementation in 1979 of the national testing structure.

From the catalogue of disadvantages of high-stakes tests set forth by Madaus (1991) several are discussed below and supported by what has happened over the last decade and what is happening in Japan today. The first three points are grouped together.

Point One: High-stakes examinations tend to encourage attention to material that is covered in the exams.

Point Two: High-stakes tests in the upper grades can have undesirable "backwash" or "trickle-down" effects on classroom and on study in the lower grades.

Point Three: Preparation for high-stakes tests often over-emphasizes rote memorization and cramming by students and drill-and-practice as a teaching method.

Madaus' Points 1, 2, and 3 can be validated by two aspects of the Japanese education structure: (a) the nature of preparation for the tests and (b) the emergence of *juku* or cram schools.

First, because of the preoccupation with upcoming exams, it is not unusual for third year high school teachers to allot most of their time to teaching the test. Due to the construction of the exam, the teacher focuses on presenting facts to be memorized. Thus, rote memorization takes the forefront while other forms of learning are pushed aside. Since a high school's reputation depends on how many students enter

notable universities, an enormous amount of pressure is placed on the administrators as well as teachers. This obsession with university entrance exams passes on to the students. An everyday saying is "Four hours pass, five hours fail," and it means that if a student sleeps more than four hours a night, s/he will most likely fail the examination.

Beauchamp (1982) suggests than an undesirable "backwash" manifests within the Japanese educational structure. Junior high school teachers become absorbed with testing. Junior high school students rarely have time for themselves. Their day is taken up by activities related to passing the university examination. They must compete for the university of their choice (or their parents' choice). In many cases, in order to enter the "right" university, they must first enter the "right" high school. That is, the high school which has sent the most students to that particular university.

Primary schools, too, have difficult entrance examinations. In 1988, 945 boys and 507 girls took the test at Keio Primary School but only 132 entered - 96 boys and 36 girls (*Japan Times*, June 4, 1990). Even kindergartens have competitive tests; one such example is Keio which is also affiliated with Keio University--one of the Tokyo Big Six Universities.

Second, in Japan there has been an emergence of *juku* or cram schools. In an effort to get their children into the right high school or university, most parents send their children to these "after school" schools. These schools prepare students to pass exams at various levels. They also teach the test for particular universities. By getting results, *juku* puts pressure on the public school system to structure the curriculum in ways that reflect the content of the examinations.

In 1986 the Japanese Ministry of Education (OERI, 1987) reported that 30% of all sixth graders were attending *juku*. In *Imidas* (1988) it was stated that 50% of all junior high school children and 17% of primary children were studying there. By 1990 these percentages jumped considerably. It was estimated that 72% of Japanese children in their last year of junior high school went to *juku*. They usually went 2-3 times a week for two hours at a time (*The Economist*, p. 22). Japanese educators are concerned about the exceptional response to *juku* on the part of the parents. In 1986 the Japanese Ministry of Education appointed Mr. Nippori, Chair of the Committee on Children's Outside Activities, to research the harmful effects of *juku* on the process of character building. Mr. Nippori found that *juku* attendance: (a) created stress for parents as well as students by intensifying the worry already felt by them for the forthcoming entrance examinations; (b) made parents and children distrustful of the public school curriculum; and (c) had detrimental physical effects on children (*Imidas*, 1988).

Although the Ministry of Education divorces itself from any involvement with *juku*, it is the government stance itself in regard to the national testing structure which perpetuates the existence of cram schools.

> Point Four: Scores on the high-stakes examinations come to be regarded by parents and students as the main, if not sole objective of education.

Performance on the national examination in Japan has become the major focus of education. Considering that over approximately 95% of junior high school students go on to the high schools (*Asahi Evening News*, August 25, 1992), it at first seems odd that only 36.1% of high school students go on to higher education institutions including junior colleges (*Imidas*, 1989). But in light of the competition for limited spaces in well known universities, one can easily recognize how this elitism occurs.

One might wonder why so many students want to enter these prestigious universities. Iga (1986) avers that the obsession is due to the "one-shot" principle prevalent in Japan. Japanese students have little chance of returning to formal education once the process is completed. Therefore, a Japanese person's entire life depends upon his or her success in a sole event (the entrance examination). More than any other single event, the university entrance examinations determine the life course of the Japanese. Their employment depends upon it; their promotions are determined by it; and their status in society is shaped by it.

Because of the societal attitude surrounding these exams and the pressures which ensue, two deleterious effects have become apparent--the *kyoiku mama* and corruption of officials.

The *kyoiku mama* has become a dominating figure over the last decade. Translated loosely this phrase signifies "education mother," but this term does not aptly describe what this mother is like. To begin with, in the main, the Japanese mother views her baby as a part of herself. Whereas the Western mother usually encourages her child to be an individual, the Japanese mother does not recognize psychological boundaries between herself and her child. She wishes to instill in her baby the concept of *amae*, reciprocal obligation and dependence tempered with love. Psychologist George DeVos (cited in Garfinkel, 1983) states that

> Japanese are extremely conscious in their child-rearing of a need to satisfy the feeling of dependency developed within an intense mother-child relationship in order to maintain compliance and

obedience. Goodwill must be maintained so that the child willingly undertakes the increasingly heavy requirements and obligations placed upon him in school and at home. (p. 29)

Using *amae* to assure devotion, the Japanese mother insures her future.

Many Japanese mothers are *kyoiku mama*. They send their children to noteworthy kindergartens. They attend all PTA meetings. They push their children to attend *juku* and to pass entrance exams. Because the education mother knows that her status is determined by her child, especially a male child who gets into a renowned institution, she will stop at nothing. Beauchamp (1982) explains:

> Such preoccupation with their children's success in education no doubt reflects the typical Japanese mother's lack of opportunity for personal achievement outside her family. Working to ensure her child's success enables her not only to satisfy her duty as a mother but also to achieve position and prestige in the neighborhood and among her friends and acquaintances. It is not unusual at high school graduation ceremonies for mothers, who have worked exceptionally hard to ensure their children's academic success, to be commended by the principal and awarded honorary diplomas. (p. 29)

Although parental involvement in a child's education can certainly be beneficial, in Japan it seems that frequently some parents, especially mothers, pressure their children to the extreme. Dr. Shigeta Saito in an interview with Hamish McDonald (1981) commented that part of the problem with school-related violence is "the 'education mama,' the housewife mother who transfers all her ambitions to her children and pushes them hard through school and *juku*." Saito goes on to say that the mothers need counseling, but each thinks she is the best there is in the world. (p. 57)

From the government report, *White Paper on Youth* (cited in the *Japan Times*, December 26, 1981) came the news that there was much violence in the home. Eighty-eight percent involved in the violent acts were boys, and the shocking news was that 61% of their targets were their mothers. In another report, the Prime Minister's Office surveyed 2,000 students. Forty-four percent said that they felt like using violence against their parents when scolded, urged to study hard, or nagged over personal affairs (*Japan Times*, July 24, 1982).

Two examples below illustrate how students may react to parental badgering:

1980. Nobuya Ichiryu failed to finish at Tokyo University. His father and older brother both graduated from Tokyo, and his father berated Nobuya as stupid. After drinking some whiskey, Nobuya proceeded to bludgeon his parents to death with a baseball bat (McDonald, 1981, p. 57).

1984. A 14-year-old boy murdered not only his parents but also his grandmother. The boy was from a middle-class home. Police stated that he stabbed his victims because he was scolded about his poor performance at school. The boy stabbed his parents and grandmother over 20 times each (Pepper, 1988, p. 15).

Another detrimental aspect of the pressure is corruption among government officials and educators. In the January 1992 edition of the *Asahi Evening News* it was reported that the Minister of Telecommunications, Mr. Watanabe, had accepted two million yen for acting as a middle man for university entrance examinees to help them pass the tests. It was revealed that the Minister had been accepting money over the last ten years. Also in July of 1991, three former employees of Meiji University were arrested on charges of arranging for surrogates to take entrance examinations for university applicants. Coach Mitsuzawa was accused of accepting $250,000 to find test takers (Regur, 1991, p. A34).

Point Five: High-stakes tests can force students to leave school before they have to take the examination--or after failing it.

Children who do not go to school for 50 days continuously are known as "school refusers." This kind of absenteeism reached a 30-year high in 1985. By 1986 the number had almost doubled and in 1987 the total number of school refusers numbered 5,300 in primary schools and 33,000 in junior high schools. In 1989 this number increased to over 47,000 (*Annual statistics report*, 1991-1992). The Ministry of Education has commented that the main reason given for school refusal is the rigor of the national curriculum. Other students stay away to avoid excessive bullying. Junior high school age students have the highest rate of absenteeism, and it is intriguing that this age student is the most frequently bullied (see Figure 1).

The Guidebook for the Prevention of Child Suicide (1985) published by the Japanese Office of the Prime Minister makes this observation about school attendance

... under today's administrative education system, a school is not an enjoyable place anymore for children and is a very painful place for some of them. This phenomenon, that children think of school as a painful place, seems to exist only in Japan. (p. 14)

Figure 1
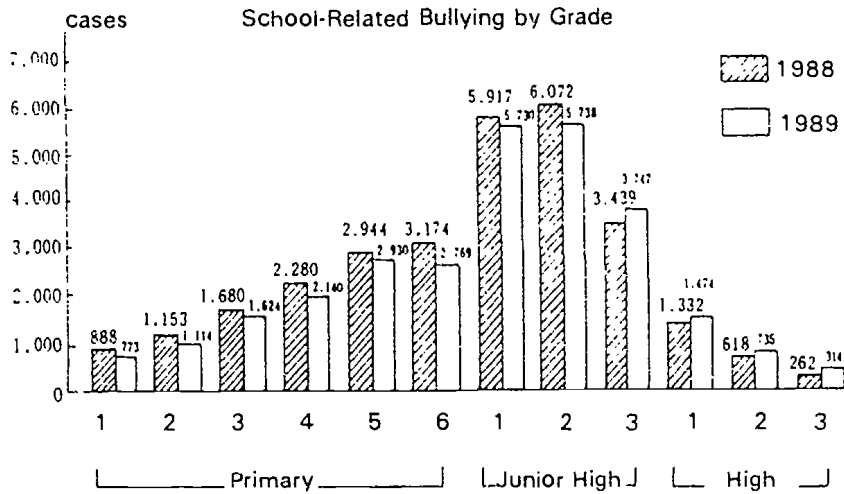
cases   School-Related Bullying by Grade

Source: *Children's white paper: 1991 Protect the child.* (1991).
Tanabe, Toru (ed.). Tokyo: Soda Bunka Company. p. 207.

Point Six: National tests are not suitable for all students and can be
extremely stressful for some.

The educational pressures in Japan overwhelm some students and
the effects of this stress are frightening. The major consequence of the
situation is a dramatic increase of violence among school-age children
and teens. In a country that once revered the school and idolized
teachers, more violence exists between students and against teachers.

The Japanese Ministry of Education (cited in the *Japan Times*, No-
vember 9, 1985) recorded that in 1984 the greatest increase in school
violence was that of bullying. The figure represented an increase of 23%
over that of 1983. By 1985, 68.8% of the junior high schools had reported
incidents of violent bullying; the Ministry of Education had 155,066
incidences of bullying to contend with (*Japan Times*, March 8, 1986).

Below are examples of student against student bullying which have
occurred over the years and been reported in the *Japan Times*. These
selected incidences will give the reader an idea of the types of bullying
taking place.

February 1983. Kisarazu City. Chiba Prefecture. Four 8th grade
girls were subjected to group violence for three hours by other girl
students.

April 8, 1983. Tajimi. Gifu. Police arrested five students in
connection with the killing of a new student of Chukyo High School.
Keishin Takeda, 15 years old, was beaten for two hours in the dormi-

29

tory. His assailants, 16 and 17 year old, used a metal baseball bat and a wooden sword. School officials failed to notice the beating as it occurred on a Sunday evening.

November 1984. Osaka. Two high school students killed a classmate who had tyrannized them. They hit him repeatedly on the head with a hammer; then they threw his body into the river.

October 22, 1985. Fujimi. Gunam Prefecture. A 14-year-old boy ingested poison because of being bullied. An 8th grader, he had been harassed by classmates who punched and kicked him earlier in October. He left a suicide note which was found in his school bag which said that he resented his schoolmates for bullying him.

Student violence against teachers has also escalated. Incidence of violence directed at teachers numbered 605 from January through June 1980 according to the National Police Agency (*Japan Times*, December 27, 1980). That year showed a 69.8% increase over the previous year (note: the governmentally controlled university entrance exams were implemented in 1979). Violence against teachers at junior high schools showed a particularly dramatic rate of increase—a 76.3% jump.

Again, the excerpts from the *Japan Times* should give the reader an idea of what Japanese teachers are encountering:

October 27, 1980. Owase. Mie Prefecture. A group of junior high school students ganged up on 10 teachers.

November 12, 1980. Minimi Ashigara. Kanagawa Prefecture. Police arrested three 9th grade boys in connection with an attack on six teachers.

January 1983. Tokyo. Mr. Yagi was attacked and injured by a student with a knife. Fellow teachers said they were helpless and could not do anything when they saw him being bullied by students.

February 1983. Twenty teachers were victimized at school. Seven of them were women.

March 23, 1988. Shinjuku. Tokyo. A 16-year-old male was arrested for the stabbing death of Jun Ozawa, his teacher. Ozawa who worked at Yotsuya Daichi Junior High School was lying in a pool of blood in front of the student's home. The student apparently had asked the teacher over and stabbed him repeatedly with a kitchen knife.

June 1990. Takaishi City. Osaka. Violence against teachers continue to escalate at Konan Junior High School. Due to mounting violence the principal has resigned from office four years ahead of scheduled retirement.

One in every three junior and senior high school students feels like using violence against teachers according to the survey by the Prime Minister's Office (cited in *Japan Times*, July 24, 1982). Some 51% cited teacher favoritism as the reason for the hostility. Other reasons mentioned were persistent scolding and teachers' indecision. It is of interest to note that in 1983, 97.7% of the attacks on teachers were committed by 14-15 year olds (*Japan Times*, March 5, 1983) and that 60% of the acts occurred during classroom hours (*Japan Times*, September 24, 1983). Please refer to Figure 2 for numbers regarding physical injury of teachers.

Figure 2
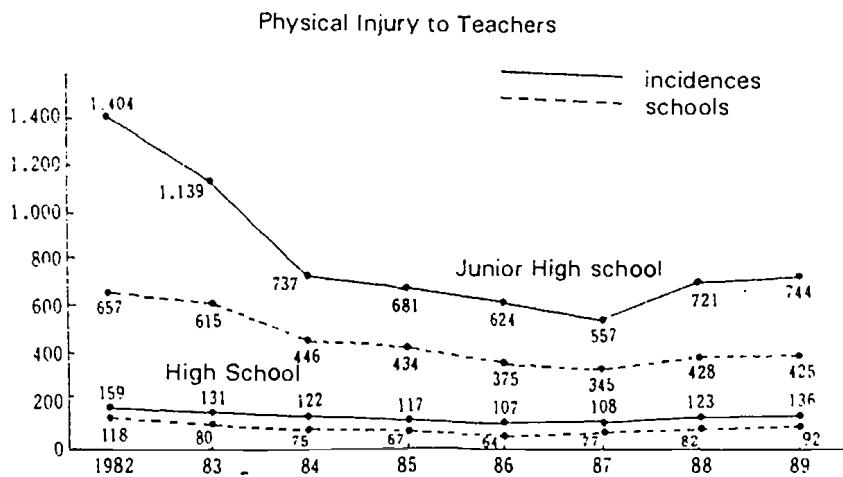
Physical Injury to Teachers

Source: *Children's white paper: 1991 Protect the child.* (1991).
Tanabe, Toru (ed.). Tokyo: Soda Bunka Company, p. 207.

Who are these bullies? Though no studies have surfaced in regard to this question, I would suggest that many are the *ochikobore*, "those who fell to the bottom" or "those who fell through the cracks." These are children who cannot perform and are victims of a demanding curriculum. Contrary to what is publicly said about the academic performance of Japanese children, from a survey conducted by the Prime Minister's Office (1982), it was shown that only 26% of all Japanese students fully understood what they are being taught (*Japan Times*, December 14, 1982). With a student teacher ratio of 1:40, remedial attention is rarely given in the public school framework and children who are unable to keep up suffer. Since a school's name is made by the number of graduates who pass the entrance exams, teachers target those students who have a good chance of passing the tests. Other students are all but forgotten.

The *ochikobore* are the students who find they cannot possibly meet the test requirements. They are children who find a school system directed primarily at passing the academically gifted apathetic to their needs. According to the *White Paper on Youth* (cited in the *Annual statistics report*, 1991) a growing problem symbolizing today's Japan is that of "spiritlessness." The *ochikobore* are truly the children of the educational underclass (a term coined by Torsten Husen) of Japan.

Point Seven: High-stakes examinations can negatively affect such personality characteristics as self-concept and self-esteem.

There have been articles written by Westerners that brush aside the issue of child and teen suicide as if these suicides are rarely related to the educational structure/testing system (OERI Japan Study Team, 1987; Sheridan, 1987; and White, 1985). When reviewing what the Japanese themselves have disclosed on this subject, a completely different view materializes. Saito (cited in McDonald, 1981) addresses this problem.

> In Western countries suicides increase gradually with age, while in Japan we have two peaks: one among young people, and the other among old people. The suicide peak is getting younger. And if you exclude mental disease, this examination hell is one of the biggest causes. (p. 57)

How can these educators separate the entrance exam from the educational process? Japanese children spend their short childhoods studying for these tests. Their mothers are constantly reminding them to study diligently so that they will perform well on the examinations. Their teachers are incessant in drill and preparation.

Consider this case history:

> Owase, Mie Prefecture. A junior high school girl died in a hospital here February 23 after she attempted a suicide apparently to escape bullying by her classmates in school. This girl is identified as Kimiho Sano, 13, first year student of Owase J.H.S. . . . . According to police accounts, Sano found his daughter hanging from the ceiling of her room of their house at about 11:30 a.m. February 22. . . . The school authorities and some of the students of her school said that a group of Kimiho's female classmates started calling her "filthy" at the beginning of last September and treating her as an outsider. Consequently, Kimiho often did not report to school and she was absent from school for more than one third of the second quarter last year. Even when she went to school, Kimiho often complained of a headache and stayed at the school health office. Kimiho's parents consulted with her teacher Toshiaki Shimo, 25, about the bullying,

and the teacher had been working to eliminate the tormenting problem in his class. Kimiho's mother, Tsuyako, 51, told police that she had hit her daughter several times with the broom on the morning of February 22, urging her to go to school. While Mrs. Sano began preparing a meal downstairs, Kimiho hanged herself on the second floor (*Japan Times*, March 8, 1986).

The National Police Agency (cited in the *Japan Times*, June 27, 1981) gave three leading reasons for juvenile suicides: (a) scoldings from parents and teachers; (b) inability to keep up with schoolwork; and (c) problems with friends/opposite sex. These reasons tie in very closely with what the *Guidebook for the Prevention of Child Suicide* (1985) gives as the major motives for student suicide in lower age children: (a) being scolded by teachers; (b) being scolded by parents; (c) being bullied; and (d) receiving bad scores on tests. The number one reason that elementary and junior high school children take their own lives is school-related. This includes pressure to study, pressure to enter a good school, and school friendships. In interviews with children who planned to commit suicide or attempted suicide, it was found that this type child is honest, earnest, and sensitive   They excelled in their courses but overworked themselves to win their parents' approval. Because these children are psychologically immature, they despair when they are scolded or betrayed. Though adults may not understand why these children cannot bear these difficulties, the guidebook suggest that understanding is most crucial to eliminating the powerlessness these students feel.

Perhaps Americans believe that Japan is completely different from the United States and that devastating effects such as these could never occur here. It is imperative that educators and professionals in all areas consider Madaus' criticisms and suggestions carefully. Further, it is extremely crucial to be particularly mindful of his comment that the new testing program may take on a life of its own. In light of the information presented, this seems to be what happened in Japan. The U.S. educational system could suffer similar kinds of detrimental sociological effects if American educators do not critically review The American Achievement Tests.

References

Asahi "Evening News." (1990-1992). Tokyo: Asahi Shimbum Company.

Beauchamp, E. (1982). *Education in contemporary Japan*. Bloomington: Phi Delta Kappa Educational Foundation.

Caudill, M. (1973). Cross-cultural studies of child-rearing in America and Japan. In B. Brown (Ed.), *International collaboration in mental health*. (pp. 161-167). Washington, DC: U.S. Government Printing Office.

Darling-Hammond, L. & Lieberman, A. (1992, January 29). The shortcomings of standardized tests. *The Chronicle of Higher Education*. pp. B1-B2.

Fukagawa, A. (Ed.). (1991-1992). *Annual statistics report.* (pp. 905, 916). Tokyo: Jiyu Kokumisha

Garfinkel, P. (1983, September). The best 'Jewish mother' in the world. *Psychology Today,* pp. 56-60.

Iga, M. (1986). *The thorn in the chrysanthemum.* Berkeley: University of California Press.

Japan Times. (1980-1990). Weekly International Edition. Tokyo: Japan Times.

Japan's schools: Why can't little Taro think? (1990, April 21). *The Economist,* pp. 19-22.

Madaus, G. (1991). The effects of important tests on students: Implications for a national examination system. *Phi Delta Kappan,* 73(3), 226-231.

McDonald, H. (1981, September). Pressure in Japan. *World Press Review,* 57.

OERI Japan Study Team. (1987). *Japanese education today.* A report from the U.S. Study of Education in Japan. Washington DC: U.S. Government Printing Office.

Pepper, A. (1988, October 15). A teenager's tragedy is society's tragedy. *Business Japan.*

Regur, N. (1991, July 10). Three arrested in Tokyo over use of surrogates for university exams. *Chronicle of Higher Education,* p. A34.

Shepard, L. (1991). Will national tests improve student learning? *Phi Delta Kappan,* 73(3), 232-238.

Sheridan, G. (1987). How the Japanese beat us in school. *World Press Review,* 34, 32-33.

The guidebook for the prevention of child suicide. (1985). Office of the Prime Minister. Tokyo: Printing Division of Ministry of Finance.

U.S. Department of Education. (1991). *America 2000: An education strategy.* Washington, DC: U.S. Government Printing Office.

White, M. (1985). Japanese education: How do they do it? *Principal,* 64(4), 16-20.

Yamagi, H. & Horiuchi, S. (Eds). (1988) *Imidas: Annual statistics.* (p. 801). Tokyo: Shue Company.

Yamagi, H. & Horiuchi, S. (Eds). (1989) *Imidas: Annual statistics.* (p. 806). Tokyo: Shue Company.

Functional Literacy in the 21st Century: Employer, Teacher, and Student Perspectives

Richard Telfer, Robert Jennings, Reed Mottley, George McNinch

Educational critics and pundits have assailed the U.S. educational system over the past several years with alarming statistics and predictions about the lack of preparation of American workers and the marginal educational skills of American high school graduates. These reports and observations have relied on two major sources of information: statistics from internationally administered standardized tests and anecdotes from employers. As a result, educators have felt whipsawed, criticized because of failure to meet standards that are defined after the fact, and derided because of reports of inadequacies of single individuals.

Often, the criticisms have been collected under such headings as "American students can't read" or "millions of Americans are functionally illiterate," with resultant statements about America's loss of position in competition in international markets. Beneath the criticism, however, there has often been confusion about just which weaknesses are present. Some comparisons have focused on perceived weakness in performance on such tests as the Scholastic Aptitude Test (SAT) or on international subject matter examinations. The American Association of Colleges for Teacher Education (AACTE, 1991) noted that central to President Bush's proposed "America 2000" was a testing program "...based on five core subjects and tied to the 'World Class Standards.'" Other comparisons have used examples of students' lack of knowledge, citing "innumeracy" or the lack of "cultural literacy."

On a separate but related plane, American plants have been moved to "third world" locations, where workers are available at less cost to the manufacturer (Moore, 1988; *Time*, 1992). A result of such moves has been the loss of jobs of thousands of American workers. In effect, the relocated jobs require lesser skills/competencies; the remaining jobs that are available to the newly unemployed American workers demand greater skills/competencies. Several writers and researchers (Mikulecky, 1992; Rush, Moe & Storlie, 1986) have pointed to this increasing complexity of the demands of the workplace, including, but not restricted to, literacy demands.

Newman and Beverstock (1990) pointed out that concerns regarding adult literacy grew during the 1980s. They wrote, "[T]he adult literacy movement (evolved) from a slight (but growing) awareness of the problem of illiteracy in the previous generation to national recognition of the literacy needs of adults" (p. vi). There are reports of successful efforts to make changes in school literacy programs; for example, Samuels and Pearson's *Changing School Reading Programs* (1988).

But if education is to respond appropriately to criticisms and challenges, at least two pieces of information are necessary: an estimate of current demands and worker competencies, and perceptions of future demands/competencies. That is, there needs to be a current baseline and some notion of future needs. Further, in order for education to meet future needs it is important to know the current perceptions of the principals who will be directly involved in shaping the workplace in "America 2000" (*Reading Today*, October/November, 1991). The AACTE (1991) article cited American 2000 references to four such parties, "parents, educators, politicians, and employers." In this study, we survey some of the principals, namely business persons, teachers, and students to get their perceptions of workplace literacy demands for the outset of the 21st century.

Objectives

This study has two major purposes: (a) to identify perceptions of potential literacy demands of the workplace now and ten years from now, and (b) to compare perceptions of those demands among some of the principals involved: business persons, teachers, and students. A survey instrument was developed to elicit responses from individuals in each of these groups. The instrument consisted of 25 items to which individuals responded by rating the importance of the particular reading/literacy demand now and in the year 2002, ten years in the future. Questions related to reading, writing, literacy-related interaction, and knowledge thought to be important for on-the-job performance now and in 2002.

Methods

The subjects for this study were two hundred thirty-eight individuals in four small cities located in Georgia, Kansas, Mississippi, and Wisconsin. The subjects represented three groups: business persons, teachers, and students. Business persons were identified through membership in service clubs in the four cities. Teachers were practicing teachers enrolled in university courses in the areas of administration or supervision. Students were high school juniors and seniors. In all seventy-two business persons, ninety-one teachers, and seventy-five students responded to the survey.

A questionnaire was constructed to measure the perceived importance both now and ten years into the future of a variety of literacy-related factors in the areas of reading, writing, interaction, and knowledge. This survey instrument consists of twenty-five items (See Appendix A). Subjects responded on two separate five-point, Likert-type, scales for each item; one scale referred to the perceived importance now (in 1992) and the other scale reflected the perceived importance ten years in the future (in 2002). The wording of the survey directions varied slightly with one set of directions for teachers and students and another set for business persons. The directions for teachers and students referred to importance "for workers in businesses" while those for business persons referred to importance "for workers in your business."

All subjects were given an introductory letter briefly explaining the purposes of the study (See Appendix B). In addition, respondents were asked to provide some general demographic data. The requested demographic data varied by group (Appendix C).

Data Analysis and Results

Initially, the basic demographic information was summarized for each group. Then, the responses were tabulated and analyses of variance were computed to compare the group responses on each of the questions. In addition, individual items were grouped into four categories: reading, writing, interaction, and knowledge. Separate repeated measures analyses of variance were computed for each of the four categories.

Demographic Information

The business persons in this study represented mainly service and educational occupations, with 52 percent indicating that they were employed in service businesses and 33 percent in education-related jobs. The respondents were owners (15 percent), presidents or vice

presidents (15 percent), other executives (29 percent) and other employees (42 percent). The businesses also varied in size: 26 percent represented businesses with ten or fewer employees, 12 percent were in businesses with 11 to 50 employees, 26 percent with 51 to 200 employees, 26 percent with 201 to 1000 employees, and 7 percent with more than 1000 employees. Most of the business persons had been in their businesses more than ten years (65 percent).

The teachers in this study represented a variety of levels: 21 percent taught at the primary level, 14 percent at the intermediate level, 30 percent at the junior high, middle school level, and 35 percent at the high school level. They described their communities as villages (17 percent), towns (48 percent), small cities (23 percent), and large cities (12 percent). Another measure of the communities was the size of their high schools: 55 percent came from districts that had medium sized high schools (500 to 1000 students).

Most students described their communities as towns (38 percent) or small cities (60 percent). They typically described their high schools as large (78 percent).

Scores on Individual Items

Overall, the three groups did not differ significantly on the individual items either for the present (1992) or for ten years in the future (2002). Tables 1 and 2 show the average ratings of each item by group.

Table 1

Average Ratings of Importance in 1992
for Business Persons, Teachers, and Students

Item Number	Business Persons	Teachers	Students
1	3.82	3.72	3.80
2	4.71	4.71	4.33
3	4.38	4.30	3.97
4	4.44	4.15	3.97
5	4.36	3.98	3.72
6	4.35	4.06	3.89
7	4.39	4.14	4.01
8	4.53	4.29	4.04
9	4.40	4.16	4.17
10	4.19	4.04	3.78
11	4.03	3.77	3.48
12	3.58	3.49	3.65
13	3.86	3.81	3.69

14	3.73	3.80	3.76
15	3.55	3.65	3.83
16	3.44	3.53	3.47
17	4.18	3.90	1.00
18	3.32	3.36	3.42
19	3.97	3.99	3.80
20	4.50	4.35	3.96
21	3.04	3.23	3.49
22	3.24	3.43	3.79
23	3.54	3.62	3.92
24	3.36	3.48	3.57
25	3.57	3.70	3.89

Table 2

Average Ratings of Importance in 2002
for Business Persons, Teachers, and Students

Item Number	Business Persons	Teachers	Students
1	4.08	3.83	4.15
2	4.88	4.85	4.45
3	4.75	4.67	4.32
4	4.76	4.58	4.25
5	4.60	4.33	4.00
6	4.68	4.32	4.04
7	4.76	4.50	4.17
8	4.78	4.55	4.39
9	4.81	4.71	4.51
10	4.43	4.31	4.26
11	4.49	4.24	4.04
12	4.14	4.30	4.01
13	4.45	4.47	4.36
14	4.57	4.76	4.53
15	4.50	4.69	4.52
16	3.97	4.02	3.83
17	4.42	3.66	4.09
18	3.83	3.52	3.75
19	4.47	4.40	4.10
20	4.68	4.41	4.21
21	3.60	3.80	3.96
22	3.69	3.88	4.01
23	4.18	4.33	4.28
24	3.90	4.10	4.09
25	4.10	4.17	4.13

The results did differ significantly, however, from 1992 to 2002
($F=138.5$, $p<.0001$). Individual differences ($p<.05$) were seen on nine

items in the perceptions of the needs in 1992. Differences were seen between students and the other two groups on items 2, 3, and 20. These items reflected the ability to read and understand directions, the ability to critically analyze what is read and the ability to correctly fill out forms. On all three items, the students' rating of importance was significantly lower than that of business persons or teachers. Differences between business persons and students were seen on items 4, 6, 8, 11, and 22. These items dealt with using information from several sources, explaining what is read, reacting appropriately to written information, writing a description of a work process, and knowledge of U.S. history. On the first four of those items, students rated the items significantly less important than did business persons. On the history knowledge item, students rated the item as more important. Differences between business persons and the other two groups were seen on item 5: discussing what is read with co-workers. Business persons rated this item more important.

Differences (p<.05) in the perceptions of the importance of items for 2002 were seen on twelve items. On items 2, 3, 4, 5, and 19, students differed from the other groups. These items included directions, critically analyzing what is read, combining information from several sources, discussing what is read with co-workers, and using a variety of references. Students rated these items as less important than did business persons and teachers. On items 6, 7, 8, 9, and 11, all three groups differed. These items included explaining what is read to co-workers, writing directions or memos, reacting appropriately to written communication, reading information in a variety of formats, and writing a description of a work process. In each case, business persons rated the importance the highest, followed by teachers and then students. Teachers differed from the other groups on item 17. They rated the ability to spell lower than did the other groups. Business persons differed from students on item 20. They rated the ability to fill out forms higher than did students.

Scores on Groups of Items

The items in the questionnaire were grouped into four categories for analysis. The category "reading" included items 1-4, 8, 9, 13, and 19. The category "writing" included items 7, 11, 12, 14, 15, 17, and 20. Items 5, 6, 10, 16, and 18 were placed in the category "interaction." The final five items, items 21-25, were in the category "knowledge." Repeated measures analyses of variance were used to examine differences among the three groups and to look at differences across time.

Generally, the respondents saw all four groups of items as "somewhat important" to "important" for workers in businesses in 1992;

average scores ranged from 3.52 (knowledge) to 4.10 (reading). For each of the four groups of items, significant differences were seen between the perceptions of current demands (1992) and perceptions of future demands (2002). Average scores for importance in 2002 were all at least "important," ranging from 2.10 (knowledge) to 4.46 (reading). Tables 3-6 show the total scores as well as the scores for each of the subgroups.

Table 3

Mean Scores on Reading Items by Group for 1992 and 2002

	1992	2002
BusinessPersons (n=72)	4.24	4.60
Teachers (n=91)	4.11	4.49
Students (n=75)	3.96	4.30
Total	4.10	4.46

Groups (p<.01), Years (p<.01)

Table 4

Mean Scores on Writing Items by Group for 1992 and 2002

	1992	2002
Business Persons (n=72)	3.96	4.50
Teachers (n=91)	3.84	4.36
Students (n=75)	3.82	4.23
Total	3.87	4.36

Years (p<.01)

Table 5

Mean Scores on Interaction Items by Group for 1992 and 2002

	1992	2002
Business Persons (n=72)	3.93	4.31
Teachers (n=91)	3.78	4.08
Students (n=75)	3.62	3.96
Total	3.78	4.11
Groups (p<.01), Years (p<.01)		

Table 6

Mean Scores on Knowledge Items by Group for 1992 and 2002

	1992	2002
Business Persons (n=72)	3.35	3.89
Teachers (n=91)	3.49	4.06
Students (n=75)	3.71	4.10
Total	3.52	4.02
Years (p<.01)		

Significant differences were seen among the groups of respondents on the reading items (Table 3) and the interaction items (Table 5). Business persons found both sets of items to be most important, followed by teachers and then students. Although a similar pattern was noted on writing items (Table 4), the differences were not significant.

Differences were also not significant for knowledge items (Table 6), although the observed differences were opposite of those noted on reading, writing, and interaction items. Students' observed ratings of knowledge items were the highest, followed by teachers and then business persons.

Discussion

This study looked at the perceptions of business persons, teachers, and students about current and future literacy demands. Specifically, the study was designed to (a) identify perceptions of potential literacy demands of the workplace now and ten years from now, and (b) compare perceptions of those demands among business persons, teachers, and students. The responses to the questionnaire point to several characteristics of those perceptions.

First, the respondents see all the literacy items contained in the questionnaire as at least "somewhat important" (3.0 or higher). For 12 of the 25 items, at least one group saw the items as "important" (4.0 or higher) in 1992.

Second, all three groups see an increasing demand for the literacy skills, abilities, and knowledge reflected in the questionnaire. The overall average rating increased from 3.86 to 4.27. While the items are generally seen as important now (in 1992), they are seen as likely to be more important in the future (2002).

Third, the reading skills and abilities are seen as the most important, both now and in the future. The knowledge items are seen as the least important.

Fourth, the groups differ in their perceptions of the importance of the reading and interaction items. Business persons see the group of reading items and the group of interaction items as more important than do the other two groups. The gap between the perceptions of business persons and students is particularly large.

Fifth, although the differences are not significant, the general pattern of responses on the knowledge items is opposite that of the other sets of items. That is, students seem to see these items as relatively more important than do the other groups.

The results suggest that some differences exist in perceptions of the importance of various current and future literacy demands. As educators work to build curricula that address both current and future needs, ascertaining the perceptions of involved groups is essential for two reasons. One, educators need to gain a better understanding of those needs. By consulting those involved, they will gain a better under-

standing. Two, educators need to help reconcile discrepancies in perceptions of those demands. Discrepancies among the perceptions of the three groups need to be addressed to ensure that involved parties have a shared understanding of the educational needs of students who will become workers in our society. Discrepancies between current requirements and future requirements will help us identify the need for change and the direction of the required change. These perceptions from several different stakeholders will help us address the need for school reform.

Results from this study, then, will help educators better understand potential literacy demands and expectations for the beginning of the twenty-first century and also help identify areas of common concern and areas of disagreement. By identifying areas of common perception, we can work together to enhance literacy development. By highlighting areas of disagreement, we can begin to work to bridge those disagreements and solve literacy problems.

Knowledge of perceptions of literacy demands in the early 21st century will help us prepare to meet those demands. As demands change, schools must be aware of those changes and continually re-examine the effectiveness of programs for meeting such changing demands. Rather than going "back to the basics," educators need to help establish ways of meeting future needs. Essential to meeting future needs is a willingness to change on the part of all parties involved. However, before change can take place, differences in goals and expectations must be identified and addressed. By looking at the perceptions of employers, teachers, and students, this study will help to highlight common perceptions as well as critical differences.

References

American Association of Colleges for Teacher Education (1991). Special briefing in assessment. *Briefs*. *12*, 1.

Mikulecky, L. (1982). Job literacy: The relationship between school preparation and workplace actuality. *Reading Research Quarterly*, *17*, 400–419.

Moore, M., Producer. (1988). *Roger and me* [Film]. Hollywood: Warner Home Video/Warner Brothers Pictures.

Morrow, L. (February 10, 1992). Japan in the mind of America/America in the mind of Japan. *Time*, *139*, 16-24.

Newman, A. P. & Berstock, C. (1990). *Adult literacy: Context and challenges*. Newark, Delaware: International Reading Association.

Ostling, R. N. (1991, April 29). A revolution hoping for a miracle. *Time*, *137*, 52-53.

Rush, R. T., Moe, A. J. & Storlie, R. L. (1986). *Occupational Literacy Education*. Newark, Delaware: International Reading Association.

Samuels, S. J. & Pearson, P. D. (1988). *Changing School Reading Programs*. Newark, Delaware: International Reading Association.

Appendix A

Survey of Business Literacy Needs

Directions: Indicate the current importance of each of the following items for workers in your business by rating each item in the column headed 1992 from 1 (very unimportant) to 5 (very important). Then, indicate the expected importance of each of the items ten years in the future by rating each item in the column headed 2002.

1992	2002	
1 2 3 4 5	1 2 3 4 5	1. ability to read aloud fluently
1 2 3 4 5	1 2 3 4 5	2. ability to read and understand directions
1 2 3 4 5	1 2 3 4 5	3. ability to critically analyze what is read
1 2 3 4 5	1 2 3 4 5	4. ability to read and combine information from several sources
1 2 3 4 5	1 2 3 4 5	5. ability to discuss what is read with co-workers
1 2 3 4 5	1 2 3 4 5	6. ability to explain what is read to co-workers
1 2 3 4 5	1 2 3 4 5	7. ability to write a clear set of directions or a clear memo
1 2 3 4 5	1 2 3 4 5	8. ability to react appropriately to written communication
1 2 3 4 5	1 2 3 4 5	9. ability to read information in a variety of formats (memos, instructions, electronic formats)
1 2 3 4 5	1 2 3 4 5	10. ability to describe a work process orally
1 2 3 4 5	1 2 3 4 5	11. ability to write a description of a work process
1 2 3 4 5	1 2 3 4 5	12. ability to write a technical report
1 2 3 4 5	1 2 3 4 5	13. ability to read a technical report or professional journal

1 2 3 4 5   1 2 3 4 5   14. ability to use a word processor

1 2 3 4 5   1 2 3 4 5   15. ability to use a computer database, spread sheet, or statistical program

1 2 3 4 5   1 2 3 4 5   16. ability to critique and/or edit the written work of another

1 2 3 4 5   1 2 3 4 5   17. ability to spell correctly

1 2 3 4 5   1 2 3 4 5   18. ability to help someone else improve his/her writing

1 2 3 4 5   1 2 3 4 5   19. ability to use a variety of references to seek information

1 2 3 4 5   1 2 3 4 5   20. ability to correctly fill out forms

1 2 3 4 5   1 2 3 4 5   21. knowledge of world history

1 2 3 4 5   1 2 3 4 5   22. knowledge of United States history

1 2 3 4 5   1 2 3 4 5   23. knowledge of the interrelationships between events in the United States and events in the rest of the world

1 2 3 4 5   1 2 3 4 5   24. knowledge of world geography

1 2 3 4 5   1 2 3 4 5   25. knowledge of United States geography

---

Appendix B

Date

Dear :

What literacy demands are posed for workers at all levels of employment and in all segments of our country? What will they be in 2002, a short ten years from now? These are important questions since knowing about and preparing for such demands is vital for the well being of our country. One might suspect that any major corporation might have differing literacy needs for its employees now and ten years from now. So, too, might smaller businesses. The researchers involved in this project are attempting to find the views of business people, teachers, and students regarding their perceptions of current and future job requirements regrading literacy skills.

Your assistance with this pilot survey will yield three types of valuable information: (a) your perceptions of job-place literacy needs now and in the future; (b) differences in perceptions of job-place literacy needs between and among business people, teachers, and

students; and (c) needed information for further developing and refin-
ing the survey itself. An appropriately refined survey instrument will
yield information providing necessary pieces of information for build-
ing curricula and methodology to meet our country's education needs
ten years from now, including programs for adult education programs
designed to "update" literacy skills as technology continues to grow
and to change.

Will you please take a few minutes to respond to the following
survey items? Thank you for your help.

Sincerely,

Appendix C

Survey of Business Literacy Needs

Directions: Please fill out the following information. We are seeking
this information to better understand your ideas concerning current
and future literacy needs. You will not be specifically identified in any
reports of the results of this survey. The reports will describe general
characteristics of students who respond.

Size of High School

___ 0-500 students

___ 501-1000 students

___ 1001 or more students

Years in School

___ Freshman

___ Sophomore

___ Junior

___ Senior

After I Graduate From High School I Plan to:

___ go to work

___ attend college or university

___ attend technical school or technical college

___ other

Survey of Business Literacy Needs

Directions: Please fill out the following information. We are seeking this information to better understand your estimates of current and future workplace literacy needs. You will not be specifically identified in any reports of the results of this survey. The reports will describe general characteristics of teachers who respond.

Type of Community in Which Your School is Located

___ Large City (over 50,000)

___ Small City (25,000 - 50,000)

___ Town (2,500 - 25,000)

___ Village (less than 2,500)

Size of High School

___ 0-500 students

___ 501-1000 students

___ 1001 or more students

Grade Level(s) Taught (check all that apply)

___ K-3

___ 4-6

___ 7-9

___ 10-12

Survey of Business Literacy Needs

Directions: Please fill out the following information about your business. We are seeking this information to better understand your estimates of current and future literacy needs. Your business will not be specifically identified in any reports of the results of this study. The reports will identify types of business, however. Thank you for taking this time to respond to this survey.

Type of Business

    __ Service

    __ Manufacturing

    __ Retail

    __ Farming

    __ Sales

    __ Education

Number of Employees in Business

    __ 0-10

    __ 11-50

    __ 51-200

    __ 201-1000

    __ 1000 or more

Number of Years You Have Been in this Business

    __ 0-5

    __ 6-10

    __ 11 or more

Your Position with the Business

    __ Owner or Co-Owner

    __ President

    __ Vice President

    __ Personnel Director

    __ Other Executive Officer/Administrator

    __ Other

Five Strategies for Literacy and Lifelong Learning

Lorri A. Forlizzi, Eunice N. Askov,
Prisceilla Carman

In 1990, former President George Bush and the governors of the United States agreed upon six National Education Goals, among them Goal #5:

> By the year 2000, every adult American will be literate and will possess the knowle ,e and skills necessary to compete in a global economy and exercise the rights and responsibilities of citizenship.

What do we currently know about ways to achieve this goal? In 1991, the U.S. Department of Education, Office of Educational Research and Improvement, funded a project to identify successful strategies that can move the country toward this goal, and to design video and print materials that would inform three audiences--the general public, decision makers (such as chief executive officers, school board members, and policymakers) and practitioners--about the strategies and how they can be applied in programs. The five strategies identified as part of Project Lifelong Learning are supported by discussion with literacy and adult education experts and by literature in a variety of topic areas. They can be applied to programs serving learners in a wide variety of settings, including community education programs, workforce preparation, education programs, and family literacy programs. This paper gives a brief overview of how the strategies were identified, then takes a look at each of the five strategies for literacy and lifelong learning.

Identification of the Strategies

The project team began by forming an advisory panel of fifteen experts in the fields of literacy and adult education, and asking their suggestions regarding key strategies for achieving Goal #5. The project team also discussed key strategies with 30 other experts in the field. The information we obtained suggested five strategies, each with several substrategies (ways to implement the strategies). The advisory board commented on the strategies at two points in the development process. In addition, focus groups composed of practitioners suggested some minor changes to the structure of the strategies.

As the strategies took shape, project staff reviewed a variety of print materials to verify support for the strategies. Print materials reviewed included research journals and other periodicals, books, current newsletters, and publications from organizations around the country. Reports on research and demonstration projects, theoretical and position papers, and literature reviews covered a variety of topic areas, among them workplace, family, and community literacy, cognitive psychology, learner participation, and instructional technology.

Strategy #1: Meet the Needs of the Learner

Meeting the needs of the learner means ensuring that learners see how learning is meaningful, how it can be used in their lives, and how they can be comfortable in the learning setting.

Many adults who left school do not participate in adult education programs because they do not see how school or program activities are related to their lives (Popp, 1991; Quigley, 1992). When programs meet learners' needs, the learners see how education can be applied in their lives, making them more likely to pursue further educational opportunities (Beder, 1991).

Programs can meet the needs of the learner by using a learner-centered approach, by embedding instruction in contexts that are relevant to the learner, and by using non-traditional methods of instruction and delivery.

Use a Learner-Centered Approach

In a learner-centered approach, learners have active input into all aspects of the program.

First, they guide the course of their own programs. Staff ask learners about individual needs and goals when they enroll in the program and periodically thereafter. Staff get to know the learners in order to understand their life situations, needs, and goals. These needs and

goals are addressed in instruction. For example, a tutor may guide learners as they do research to discover which local grocery store has the lowest prices. During instructional activities, learners have substantial amounts of input, control, and responsibility.

Second, learners have a say in the designing and running of the program. There may be a learner advisory panel that guides program activities and advises on decisions.

The use of a learner-centered approach is important for two reasons. Successful adult education programs in workplace, family, and community contexts use a learner-centered approach (Association for Community Based Education, 1986; Lerche, 1985; Nickse, 1990; Philippi, 1992; Wrigley & Guth, 1992). In addition, it makes learners see how learning is relevant to their lives. For example, in their evaluation of Literacy Volunteers of New York City, Inc., Fingeret & Danin (1991) found that the program's learner-centered approach helped adult students develop increased appreciation of literacy and involvement of literacy in their lives.

Embedding Instruction in a Relevant Context

The program focus is new skills and knowledge that are meaningful to adult learners. Real situations which involve the adult learners provide a springboard for instructional activities. For example, a parent and the parent's teacher may role-play in preparation for a meeting with the child's teacher.

Literacy instruction in contexts that are meaningful to learners in more effective than more traditional school-based literacy instruction. Sticht's work in the military showed that teaching literacy by using job materials increased both job-related literacy and general literacy skills, while generic literacy instruction did not improve job-related literacy skills (Sticht, 1987). Later studies by the American Society for Training and Development (Carnevale, Gainer, & Meltzer, 1990), the United States Department of Labor (1991), and the Minority Female Single Parent Program (Burghardt & Gordon, 1990) agreed that contextualized approaches to instruction are more successful than decontextualized approaches. Successful family (Auerbach, 1990) and community programs (Association for Community Based Education, 1986; Lerche, 1985) also embedded instruction in meaningful contexts.

Offer Non-traditional Instruction and Delivery

Programs that meet the needs of the learner often use methods of instruction and delivery (tools, situations, and relationships) that are different than those experienced by adults in their previous schooling.

Methods of non-traditional instruction and delivery include small group and technology-based instruction, cooperative learning and peer tutoring, and distance education. Using these methods is important because they draw in and keep involved learners who would not or could not otherwise pursue their education (Popp. 1991; Quigley, 1992). In addition, they prepare students for the real world.

Technology-based instruction, including computer-assisted and computer-based instructional programs and instructional and interactive video, is important because the ability to interact with technology is fast becoming a necessary skill (Nickerson, 1985). Technology-based instruction familiarizes learners with new technologies (Packer, 1988). Learners may work in pairs or in small groups using technology as a tool for learning. This helps develop communication and teamwork skills so important in today's society, especially in the workplace (U.S. Department of Labor, 1991). In addition, technology-based instruction has been shown to improve self-esteem and self-confidence of low-literate adults (Askov & Brown, 1991; Askov, Maclay, & Bixler, 1992).

Cooperative learning and peer tutoring represent non-traditional ways for learners to interact with teachers and peers ir .n educational environment. In cooperative learning, learners and instructors interact on an equal footing. Peer tutoring allows learners to facilitate each others' learning, and provides opportunities to build essential communication skills. Both of these learning environments provide opportunities to feel in control of learning--important for keeping adults enrolled in a program. Community-based programs have relied on these methods and have been successful in retaining adult students and increasing their self-esteem (Association for Community Based Education, 1986; Fingeret & Danin, 1991; Jackson, 1989). Both cooperative learning and peer tutoring have been identified as characteristic of successful programs (Kutner, Sherman, & Webb, 1991; Wrigley & Guth, 1992).

Distance education, educational television, teleconferencing, or computers provide the basis for interaction between instructors and learners. These methods are particularly valuable for providing educational opportunities to learners in isolated areas, who might not otherwise be able to pursue their education (Moore, Thompson, Quigley, Clark, & Goff, 1990).

Strategy #2: Develop Support for Lifelong Learning

At the local level, programs must draw on their own resources, pool resources, and coordinate efforts with other programs in the community, in order to assist adults as they pursue learning throughout their

lifetimes. Programs must form partnerships and strengthen their connections with other providers in the community, and must provide support services to learners. There must also be support for local efforts at the state and federal levels. Participating organizations may include the education system (public and private schools, higher and adult education), libraries, human service organizations, business and industry, public services, community organizations, citizen groups, local, state, and federal governments, and families.

When programs in a community work together to develop support for lifelong learning, the programs, learners and society all benefit. In the past, only well-educated white-collar professionals had opportunities to pursue learning throughout their lifetimes (Darkenwald & Merriam, 1982). But society is changing and becoming more complex, making it necessary that all adults become lifelong learners (Beder, 1991; Johnston & Packer, 1987). When programs in a community work together and provide support services to learners, learners who may not otherwise be able to pursue educational opportunities have the means they need to do so. Society, in turn, benefits when greater numbers of citizens are able to achieve their potential as a result of participating in lifelong learning opportunities. And, when programs in a community work together to avoid duplicating services, each individual program can concentrate on doing what it does best.

Programs can develop support for lifelong learning by forming partnerships and strengthening their connections with other providers, and by offering support services.

Form Partnerships and Strengthen Connections with Other Providers

This means that each program in a given community communicates regularly with all other programs and agencies to become aware of their activities, the populations they serve, the services they offer, their locations, their hours of operation, and so forth. Programs then direct learners to other organizations that provide services that they do not offer. In addition, programs may pool their resources in order to provides services or may coordinate efforts in order to avoid duplicating services. For example, a group of programs that are unable to provide transportation for their learners may make arrangements with a local volunteer center to provide transportation for all of their clients.

Recently, many experts have called for such collaborative efforts. For example, Chisman (1989) writes of the growing consensus that the nation's literacy-related problems are too complex to be solved by one federal agency or organization. He stresses the need for widespread

cooperation among diverse groups, with an eye toward reducing what many see as fragmentation of services. Nickse (1990) writes about the need in family literacy to draw on the strengths of a variety of providers in a community, such as adult education providers, early childhood educators, libraries, social service providers, and schools. She points out that such a multidisciplinary approach is necessary because no one program is an authority in all the areas drawn on by family literacy programs.

While improving efficiency is important for service providers and students, Beder (1991) cautions that an overemphasis on streamlining service provisions could rob the field of its flexibility and diversity. While programs in a community should try to work together to make themselves more efficient and provide broader opportunities to students, they must not limit the options available to students in a variety of different circumstances. This is a fine line that programs must walk, but is necessary for optimum provision of services.

Effective programs rely on partnerships and collaboration. For example, successful workplace education programs work with employers in the community in order to ensure that they are preparing students for available jobs (Burghardt & Gordon, 1990). They ask for input from business, unions, and students planning, designing, and operating the program (Kutner, Sherman, & Webb, 1991). Nickse (1990) notes that a hallmark of successful family literacy programs is reliance on collaborations among adult education providers, early childhood educators, libraries, social service providers, and schools. Many successful programs are moving to formalize coordination of services through case-oriented strategies. For example, one effective community-based program uses a case-management approach, in which a caseworker coordinates all social services received by a client (Enterprise Foundation, 1991). Kahn and Kamerman (1992) discuss case-oriented strategies to integrate services for whole families.

Offer Support Services

Support services can include such things as child care, transportation, job skills development, counseling, and moral support. Support services remove barriers that keep adults from participating in educational programs (Beder, 1989; 1990), allowing them to focus energies on learning. In addition, successful programs in family, community, and workplace settings provide support services to students (Burghardt & Gordon, 1990; Kutner, Sherman & Webb, 1991; Lerche, 1985; Merrifield, Norris, & White, 1991; Quezada & Nickse, 1992).

Auerbach (1990) emphasizes that getting learners involved in coming up with solutions to their own need for support services is critical.

This fosters their abilities to rely on their own resources in problem solving, rather than encouraging them to continue looking toward others to solve their problems. This point is echoed in the social services literature (Gueron & Pauly, 1991).

Strategy #3: Accommodate Learner Differences in the Program

When programs accommodate learner differences, they become aware of the background, experiences, and needs of individual learners, and then design and adapt services to recognize, respect, and address those backgrounds, experiences, and needs.

Every learner comes to a program with unique values, beliefs, strengths, and weaknesses that interact with program factors to make experiences with the program more or less successful for that learner. For example, a learner who works during the day may not be able to take advantage of some day courses offered by a program. A learner from a culture that does not highly value formal education may not react to a program in ways expected by staff. Another learner may prefer to learn by doing his or her own research, and may not feel comfortable or have success in a program that relies on lecture. A learner may have a vision problem which means that he or she cannot use the same texts as the rest of his or her class. In order to keep learners in programs, and on the road to lifelong learning, programs must enable learners to have as many successes as possible. They must strive to provide a comfortable and appropriate learning environment for each learner.

This is a particularly important strategy for workforce preparation and workplace education programs. The majority of new entrants into the workforce in the next 7 years will be minorities, immigrants, and women (Johnston & Packer, 1987). In addition, greater numbers of disabled individuals will be entering the workforce, as the Americans with Disabilities Act of 1990 mandates equal access to all disabled individuals. Workforce education programs will have to respond to the needs of a very diverse workforce.

Programs can accommodate learner differences by developing sensitivity to learner differences and responding to those differences. These practices are supported by literature that describes practices successful in working with adult learners in workplace, family, and community contexts (Association for Community Based Education, 1986; Lerche, 1985; Nickse, 1990; Wrigley & Guth, 1992). This conclusion is echoed by literature on working with adults from diverse cultural and ethnic backgrounds (Auerbach, 1989, 1990; D'Amico-Samuels, 1990; Ross-

Gordon, Martin, & Brisco, 1990; Wrigley & Guth, 1992), adults with learning problems (Ross, 1987; Ross-Gordon, 1989), adults in rural areas (Askov, 1988; Ferrell & Howley, 1991), incarcerated adults (*Learning Behind Bars*, 1989), and migrant workers (Bartlett & Vargas, 1991).

Develop Sensitivity to Learner Differences

Programs that work discover the cultural, social, and educational history of each learner and what life is currently like for each individual. Sensitivity includes finding out what learners consider to be their strong points, how they learn best, how they did and did not learn in the past, and how they would like to learn. It includes asking learners to talk about barriers that may be keeping them from fully participating in the program. Methods include staff interviews with learners, informal discussion between a learner and a teacher or between groups of learners and teachers, and the use of formal assessment instruments. Programs can provide staff development activities to raise staff awareness of the unique situation of each learner and how these situations prevent or influence learners' participation in the program.

Respond to Learner Differences

Programs that maximize the ability of every learner to participate fully should respect learner backgrounds and differences and build flexible approaches that can suit the needs of each learner. Programs build on learner strengths. For example, a student with artistic abilities may be asked to help design and produce recruitment materials. Such invitations allow learners to take the role of expert, building confidence and self-esteem, while at the same time benefiting the program. Programs provide ongoing staff development to ensure that staff remain flexible. Programs encourage professional development and leadership in staff from diverse backgrounds, including those from underrepresented groups and those with special needs. They also encourage learners to take leadership roles in the program. They encourage such leaders to offer their valuable perspectives.

Strategy #4: Develop Higher Order Skills

Programs should strive to help adult learners strengthen their reasoning, problem solving, and decision making abilities, their abilities to analyze and evaluate information, and their abilities to look at information and situations in new and imaginative ways. All adults, even those who are low-literate or academically unsuccessful, use higher order cognitive skills. For example, low-literate adults use elaborate coping strategies to successfully navigate their worlds without having to rely on personal interaction with print (Heath, 1988).

And, children and adults who perform poorly on school-type literacy and math tasks perform much better when they are asked to apply the same skills in more realistic tasks (Carraher, Carraher & Schliemann, 1985; Lave, 1988; Scribner, 1984). Thus, the challenge for programs is to assist adults as they improve their abilities to use higher order skills and transfer those abilities to new areas.

The nature and amount of the information that adults must deal with, and the problems they must solve, are complex and changing rapidly (Mikulecky & Drew, 1991). Adults regularly choose among a wide range of available products, juggle work, parenting, and personal responsibilities, and deal with information needed to pay bills or to obtain services. These activities are not as simple now as they were just a few years ago. In the workplace, new trends such as total quality management (empowering front line workers with more authority), and statistical process control (where employees use statistical methods to monitor the quality of products as they are being produced), make it necessary for all employees to use their higher order cognitive skills flexibly and in a variety of situations (Philippi, 1992). Yet, a recent study of the abilities of young adults (between the ages of 21 and 25) to perform activities they would find in work, school, or other social contexts revealed that about half had difficulties with complex infor- mation-processing skills such as scanning for information, interpreting information, identifying a theme, or generating prose related to an idea (Kirsch & Jungeblut, 1986). A study involving adults enrolled in Job Training Partnership Act programs and Employment Service/Unem- ployment Insurance programs revealed very similar findings (Kirsch & Jungeblut, 1992).

Programs can help students to develop their higher order cognitive skills by providing direct instruction in those skills, and by providing realistic opportunities for practice and application of those skills.

Provide Direct Instruction in Higher Order Skills

Instructors must demonstrate to learners the skills in question, how they already use them, and when they can be used and why. Instructors may begin by showing learners how they already use problem solving skills. Then, instructors work to help learners think about and practice problem solving in other situations. Instructors may then demonstrate for learners how they can use the same problem solving skills in new situations. In learners' first attempts, instructors provide a consider- able amount of cognitive guidance, gradually withdrawing this sup- port as learners become more confident of their skills. This has been called "cognitive apprenticeship" (Brown, Collins, & Duguid 1989; Collins, Brown, & Newman, 1989). Research has shown that direct

instruction that encompasses the factors described above is effective in developing higher order skills (Palincsar & Brown, 1984; Collins, Brown, & Newman, 1989).

Provide Realistic Opportunities for Practice and Application of Higher Order Skills

Providing realistic opportunities for the practice and application of higher order skills means that real-life situations become the context for instruction and provide instructional materials and tasks. Role-plays and discussion groups may be used to simulate situations, such as a conversation between a learner and his or her landlord. If possible, programs provide opportunities for learners to practice and apply skills outside of the program: Returning to the teacher and parent in working together to prepare for a meeting between the parent and the child's teacher, add a component where they discuss the events of the meeting after it occurs.

Providing cognitive skill instruction in an environment similar to the environment in which the skills will be applied maximizes transfer of skills to new situations (Mikulecky & Ehlinger, 1986; Singley & Anderson, 1989; Sticht, 1987). In addition, as noted earlier, instruction in contexts that are meaningful and relevant to learners is more effective than decontextualized, generic instruction (Auerbach, 1990; Burghardt & Gordon, 1990; Lerche, 1985; Sticht, 1987).

Strategy #5: Enable Learners to Use All Language Processes in their Lives

The language processes are reading, writing, speaking, and listening. Programs should help adults develop the reading, writing, speaking, and listening skills that are required of them on a day-to-day basis.

The language processes are tools we use for communication. In the workplace, success depends on advanced communication skills. Workers use the language processes in different ways, depending on the tasks at hand (Philippi, 1992). Employees may gather information from several sources to solve problems, correspond with others to make requests, explain plans or procedures in writing, listen to and follow directions, make a presentation about a procedure, or read a manual to understand a new procedure. They may use electronic mail to report problems and read memos to learn about changes in procedures. In addition, the language processes are intricately related to higher order skills (Baker & Brown, 1984a; Hurley, 1991; Scardamalia & Bereiter, 1986). We use reading, writing, talking, and listening to help us reason, solve problems, and make decisions. In turn, these language processes

require the use of higher order skills. As we maneuver through a difficult passage of text, listen to a speech, struggle to organize a piece of writing, or clarify a point we want to make in a discussion, we call upon the skills of reasoning, problem solving, and decision making. Finally, the language processes are tools for learning (Emig, 1977; Hurley, 1991). We read the newspaper and books, listen to the radio and television, write to help ourselves know where our own understanding falls short, and ask questions of speakers that might help us, as listeners, clarify our understanding of what they have to say.

It is important to develop all four of the language processes, not just reading and writing. They are related, and the use of one process can enhance the others (Horowitz & Samuels, 1987). Group discussion (involving speaking and listening) helps adult learners better understand materials they are reading, and may help them clarify their thoughts before they write about the same topic. In addition, communication often requires that adults be facile at switching between language modalities: A worker may need to summarize a problem with a generator in a note to his or her replacement on the next shift or a parent may receive a note from his or her child's teacher.

Programs can enable learners to use the language processes by building discussion into all learning activities, and by teaching reading and writing for meaning.

Build Discussion into All Learning Activities

Building discussion into learning activities facilitates learning of speaking and listening skills, as well as other kinds of knowledge and skills (Richardson & Thistlethwaite, 1991; Wood, 1992). When learners tell a group of peers how they figured out how much money to set aside for a mailing to recruit new students, they develop speaking and mathematical knowledge and skills while the rest of the group develops listening and mathematical knowledge and skills. When a group of learners wishes to prepare snacks for a large gathering, they may read and discuss several recipes before they make a list of what they will prepare and what ingredients they will need. In the process they develop knowledge and skills to read, reason, and do mathematics.

Teach Reading and Writing for Meaning

To teach reading and writing for meaning, programs show learners that reading and writing are ways to communicate with others and the self. Programs show learners that the goal of most reading and writing is to receive, produce, or notate meaning or information (Baker & Brown, 1984b; Rush, Moe, & Storlie, 1986). They do this by providing opportunities for learners to communicate through reading and writ-

ing, or otherwise use reading and writing, with realistic purposes and audiences in mind. For example, a group of parents may read a variety of magazine and newspaper articles as they research potential hazards in their drinking water. A group of learners may write letters to local politicians expressing their view on an issue or a group of workers may read a chart to figure out how to wire a thermostat in a particular installation.

When programs teach reading and writing for meaning, learners come to see the importance of these skills in their own lives. They see how the skills enhance learning, and how, in turn, learning itself can be important in their lives. For example, Literacy Volunteers of New York City, Inc. is one community program that bases all reading and writing instruction on the goals and tasks that learners bring to instructional sessions. As noted earlier, this program has been very effective in helping students develop increased appreciation of literacy and involvement of literacy in their lives (Fingeret & Danin, 1991).

Summary and Conclusions

These five strategies, identified through discussions with experts and a search of the literature in adult education and related fields, can help adult education programs of many types and in a variety of settings enable their learners to be responsible for and benefit from learning. They call for an appreciation of the value of learning. They call for a focus on the learner as the expert on his or her own needs, goals, and interests. And, they call for a society that supports, with effort, resources, understanding, and rewards, the concept of lifelong learning. Their application can move us toward being a nation of lifelong learners.

References

Askov, E. N. (1988). *ABC rural: A report on adult literacy in rural Pennsylvania.* Harrisburg, PA: Center for Rural Pennsylvania.

Askov, E. N., & Brown, E. J. (1991). Workplace literacy instruction and evaluation: R.O.A.D. to Success. In B. L. Hayes & K. Camperell (Eds.), *Yearbook of the American Reading Forum: Vol. XI. Literacy: International, National, State and Local* (pp. 203-209). Logan, UT: American Reading Forum.

Askov, E. N., Maclay, C., & Bixler, B. (1992). An intergenerational study of the impact of computer-assisted reading instruction with low-literate parents. In T. G. Sticht, J. J. Beeler, & B. A. McDonald (Eds.), *The intergenerational transfer of cognitive skills, Vol. 1* (pp. 149-158). Norwood, NJ: Ablex.

Association for Community Based Education. (1986). *Adult literacy: A study of community-based literacy programs* (Vol. 1). Washington, DC.

Auerbach, E. R. (1989). Toward a social-contextual approach to family literacy. *Harvard Educational Review, 59,* 165-181.

Auerbach, E. R. (1990). *Making meaning, making change: A guide to participatory curriculum development for adult ESL and family literacy.* Boston, MA: University of Massachusetts.

Baker, L., & Brown, A. L. (1984a). Metacognitive skills and reading. In P. D. Pearson, R. Barr, M. L. Kamil, & P. Mosenthal (Eds.), *Handbook of reading research* (pp. 353-394). New York: Longman.

Baker, L., & Brown, A. L. (1984b). Cognitive monitoring in reading. In J. Flood. (Ed.), *Understanding reading comprehension: Cognition, language, and the structure of prose* (pp. 21-24). Newark, DE: International Reading Association.

Bartlett, K. J., & Vargas, F. O. (1991). *Literacy education for adult migrant farmworkers* (ERIC Digest). Washington, DC: Center for Applied Linguistics.

Beder, H. (1991). *Adult literacy: Issues for policy and practice.* Malabar, FL: Kreiger Publishing Co.

Beder, H. (1990). Reaching ABE students: Lessons from the Iowa studies. *Adult Basic Education, 14,* 1-18.

Beder, H. (1989). *Reasons for nonparticipation among Iowa adults who are eligible for ABE.* Des Moines, IA: Iowa Department of Education.

Brown, J. S., Collins, A., & Duguid, P. (1989). Situated cognition and the culture of learning. *Educational Researcher, 18,* 32-42.

Burghardt, J., & Gordon, A. (1990). *More jobs and higher pay: How an integrated program compares with traditional programs.* New York: Rockefeller Foundation.

Carnevale, A. P., Gainer, L. G., & Meltzer, A. S. (1990). *Workplace basics: The essential skills employers want.* San Francisco: Jossey-Bass.

Carraher, T. N., Carraher, D. W., & Schliemann, A. D. (1985). Mathematics in the streets and schools. *British Journal of Developmental Psychology, 3,* 21-29.

Chisman, F. P. (1989). *Jump start: The federal role in adult literacy.* Washington, DC: The Southport Institute for Policy Analysis.

Collins, A., Brown, J. S., & Newman, S. E. (1989). Cognitive apprenticeship: Teaching the crafts of reading, writing, and mathematics. In L. B. Resnick (Ed.), *Knowing, learning, and instruction: Essays in honor of Robert Glaser* (pp. 453-494). Hillsdale, NJ: Erlbaum.

D'Amico-Samuels, D. (1990). *African-American perspectives: Program guidelines for recruitment and retention.* New York: Literacy Assistance Center, Inc.

Darkenwald, G. G., & Merriam, S. B. (1982). *Adult education: Foundations of practice.* New York: Harper & Row.

Emig, J. (1977). Writing as a mode of learning. *College Composition and Communication, 28,* 122-128.

Enterprise Foundation. (1991). *Words for life: A report on a community-based adult literacy program.* Columbia, MD.

Ferrell, S. T., & Howley, A. (1991). Adult literacy in rural areas. *Journal of Reading, 34,* 368-372.

Fingeret, H.A., & Danin, S.T. (1991). *"They really put a hurtin' on my brain": Learning in Literacy Volunteers of New York City.* New York: Literacy Volunteers of New York City.

Gueron, J. M., & Pauly, E. (1991). *From welfare to work.* New York: Russell Sage Foundation.

Heath, S. B. (1988). Protean shapes in literacy events: Ever shifting oral and literate traditions. In E. R. Kintgen, B. M. Kroll, & M. Rose (Eds.), *Perspectives on literacy* (pp. 348-370). Carbondale, IL: Southern Illinois University Press.

Horowitz, R., & Samuels, S. J. (1987). Comprehending oral and written language: Critical contrasts for literacy and schooling. In R. Horowitz & S. J. Samuels (Eds.), *Comprehending oral and written language* (pp. 1-52). New York: Academic Press.

Hurley, M. E. (1991). Empowering adult learners. *Adult Learning, 2*(4), 1-23, 27.

Jackson, G. B. (1989). *ACBE evaluations of community-based literacy programs (1988-1989).* Washington, DC: The Association for Con. nunity Based Education.

Johnston, W. B., & Packer, A. H. (1987). *Workforce 2000: Work and workers for the 21st century.* Indianapolis, IN: Hudson Institute.

Kahn, A. J., & Kamerman, S. B. (1992). *Integrating service integration: An overview of initiatives, issues, and policies.* New York: National Center for Children in Poverty, Columbia University.

Kirsch, I. S., & Jungeblut, A. (1986). *Literacy: Profiles of America's young adults.* Princeton, NJ: Educational Testing Service, National Assessment of Education Progress.

Kirsch, I. S., & Jungeblut, A. (1992). *Profiling the literacy proficiencies of JTPA and ES/UI populations: Final report to the Department of Labor.* Princeton, NJ: Educational Testing Service.

Kutner, M., Sherman. R., & Webb, L. (1991). *A review of the national workplace literacy program.* Washington, DC: U.S. Department of Education, Office of Planning, Budget, and Evaluation.

Lave, J. (1988). *Cognition in practice.* Cambridge, England: Cambridge University Press.

Learning behind bars: Selected educational programs from juvenile, jail, and prison facilities. (1989). Pittsburgh, PA: QED Communications, Inc.

Lerche, R. S. (1985). *Effective adult literacy programs: A practitioners' guide.* New York: Cambridge Book Company.

Merrifield, J., Norris, L., & White, L. (1991). *I'm not a quitter!: Job training and basic education for women textile workers.* Knoxville, TN: Center for Literacy Studies.

Mikulecky, L., & Drew, R. (1991). Basic literacy skills in the workplace. In R. Barr, M. L. Kamil, P. Mosenthal, & P. D. Pearson (Eds.), *Handbook of Reading Research*, Vol. 2 (pp. 669-689). New York: Longman.

Mikulecky, L. & Ehlinger, J. (1986). The influence of metacognitive aspects of literacy on job performance of electronics technicians. *Journal of Reading Behavior, 18*, 41-62.

Moore, M. G., Thompson, M. M., Quigley, B. A., Clark, G. C., & Goff, G. C. (1990). *The effects of distance learning: A summary of literature* (ACSDE Research Monograph Number 2). University Park, PA: American Center for the Study of Distance Education, The Pennsylvania State University.

Nickerson, R. S. (1985). Adult literacy and technology. *Visible Language, 19* (3), 311-355.

Nickse, R. S. (1990). *Family and intergenerational literacy programs: An update of the "Noises of literacy."* Columbus, OH: ERIC Clearinghouse on Adult, Career, and Vocational Education.

Packer, A. H. (1988). *Retooling the American workforce: The role of technology in improving adult literacy during the 1990s.* Southport, CT: The Southport Institute for Policy Analysis.

Palincsar, A. S., & Brown, A. (1984). Reciprocal teaching of comprehension-fostering and comprehension-monitoring activities. *Cognition and Instruction, 1*, 26-29.

Philippi, J. W. (1992). *How do you know if it's working? Evaluating the effectiveness of workplace literacy programs.* Washington, DC: U.S. Department of Education.

Popp, R. J. (1991). *Past and present educational experiences of parents who enrolled in Kenan Trust family literacy programs.* Louisville, KY: National Center for Family Literacy.

Quezada, S., & Nickse, R. S. (1992). *Community collaborations for family literacy handbook.* Boston, MA: Massachusetts Board of Library Commissioners.

Quigley, B. A. (1992). *Understanding and overcoming resistance to literacy education* (Monograph). University Park, PA: Institute for the Study of Adult Literacy, The Pennsylvania State University.

Richardson, J., & Thistlethwaite, L. (1991). A framework for teaching adult beginning readers. In A. M. Frager (Ed.), *Teaching adult beginning readers: To reach them my hand* (pp. 1-16), Oxford, OH: College Reading Association.

Ross, J. M. (1987). *Learning and coping strategies used by learning disabled students participating in adult basic education and literacy programs* (Final report). University Park, PA: Institute for the Study of Adult Literacy, The Pennsylvania State University.

Ross-Gordon, J. M. (1989). *Adults with learning disabilities: An overview for the adult educator.* Columbus, OH: ERIC Clearinghouse on Adult, Career, and Vocational Education.

Ross-Gordon, J. M., Martin, L. G., & Briscoe, D. B. (Eds.). (1990). *Serving culturally diverse populations.* San Francisco: Jossey-Bass.

Rush, R. T., Moe, A. J., & Storlie, R. L. (1986). *Occupational literacy eaucation.* Newark, DE: International Reading Association.

Scardamalia, M., & Bereiter, C. (1986). Writing. In R. F. Dillon & R. J. Sternberg (Eds.), *Cognition and instruction* (pp. 59-81). New York: Academic Press.

Scribner, S. (1984). Studying working intelligence. In B. Rogoff & J. Lave (Eds.), *Everyday cognition* (pp. 9-40). Cambridge, MA: Harvard University Press.

Singley, M. K., & Anderson, J. R. (1989). *The transfer of cognitive skill.* Cambridge, MA: Harvard University Press.

Sticht, T. G. (1987). *Functional context education: Workshop resource notebook.* University Park, PA: Institute for the Study of Adult Literacy, The Pennsylvania State University.

U.S. Department of Labor, Secretary's Commission on Achieving Necessary Skills (SCANS). (1991, June). *What work requires of schools: A SCANS report for America 2000.* Washington, DC.

Wood, K. D. (1992). Fostering collaborative reading and writing experiences in mathematics. *Journal of Reading, 36,* 96-103.

Wrigley, H. S., & Guth, G. J. A. (1992). *Adult ESL literacy: State of the art 1990.* San Mateo, CA: Aguirre International.

Hurdles In Evaluating Adult Literacy Programs ... A Few Answers

Barbara Van Horn, Emory J. Brown

A recent report on the National Workplace Literacy Program states that difficulties are common in conducting successful evaluations of workplace litera cy programs (Evaluation Research, 1992). Procedures and instruments traditionally used in the classroom often do not work. Expectations of collecting data from participants are often not fulfilled to the extent desired. For example, in evaluating a school-based program, the evaluator can expect to collect pre- and posttest data from the majority of students participating in the project. In a workplace literacy program, this is not always possible. Workplace literacy programs are often voluntary; therefore, participants may leave at any time and are no longer available for posttesting or exit interviews. Disagreements may also arise among the stakeholders (workers, instructors, employers, and unions) concerning access to and use of the collected data.

In addition, many existing instruments are not appropriate to the goals of the program, the workers, or the organization. Traditional evaluation questions do not always deal with the concerns of the workplace, the teacher, or the students. In a workplace literacy program, the organization and workers are more interested in increasing skills and competencies that will contribute to improvements in job performance than to increases in generic reading and writing skills or grade equivalents. The work organization asks about cost effectiveness so that the relationship between skills learned and job performance becomes important. Evaluation in the workplace context requires adjustments and new approaches for successful evaluation.

Program evaluation should provide information that improves various aspects of a program, including program design, development, implementation, and operation (Sticht, 1991). It should also provide information to identify indicators of program effectiveness, measure changes in terms of the indicators, and work toward establishing program standards (Condelli, 1992). In addition, Philippi (1992) concludes that:

> Evaluation of workplace literacy programs needs to measure program effectiveness independently, i.e., by comparing each actual program to its own stated goals, rather than comparing it to other programs. This is because each workplace literacy program designed in response to company and worker needs is unique; no two organizations have exactly the same set of critical job tasks to be addressed by instruction (p. 8).

Alternative Approaches to Assessing Student Learning in a Workplace Literacy Program

One indicator of program effectiveness is the assessment of adult learning. Whether student assessment takes place in a traditional adult basic education program or a workplace setting, it is a topic of much discussion and disagreement. State and federal governments, for example, mandate the use of standardized, norm-referenced tests to determine changes in basic skills levels. This information is then used to compare student progress across programs (Sticht, 1990). While these tests are of some value in comparing state or national data, they are of limited value to the teacher or to the adult learner in a particular adult basic education or workplace literacy program. Adult educators are generally dissatisfied with the quality of information derived from standardized, norm-referenced tests and with the effects of these tests on both teaching and learning (Ehringhaus, 1991; Lytle, 1988). Other critics of the use of standardized testing cite the lack of correlation between the test scores and meaningful student performance, inability of the test scores to substantively inform teaching practices and curricula, inability to assess problem-solving and critical thinking skills, and lack of relevance to adult tasks (Auerbach, 1990; Herman, Aschbacher & Winters, 1992; Metz, 1990). Additionally, both information from workplace literacy program directors (Condelli, 1992) and research literature (Sticht & Mikulecky, 1984; Sarmiento & Kay, 1990) are concerned about the appropriateness of using standardized, norm-referenced tests to measure participant literacy levels in workplace literacy programs.

Alternative assessments are seen by many researchers and practitioners as a possible solution to their concerns about the use of

standardized tests. Condelli (1992) recommends the development of instruments to assess participant literacy levels that are geared for the workplace. Philippi (1992) also suggests the collection of representative samples of participants' work to demonstrate progress toward instructional goals and use of competency-based tests which are correlated to program goals and instructional content to determine the progress of participants toward mastery of the instructional content. These examples illustrate the growing interest in the use of alternative assessments, such as criterion-referenced, competency-based, and curriculum-based assessments which more clearly assess the learner's progress against specific indicators or against the curriculum being used in the program.

Alternative assessments focus on the ability of "students to actively accomplish complex and significant tasks, while bringing to bear prior knowledge, recent learning, and relevant skills to solve realistic or authentic problems" (Herman et al., 1992, p. 2).   Auerbach (1990) characterizes alternative assessments as contextualized and relevant to adults' lives; qualitative and involving reflection on the learning process; supportive and collaborative; process rather than product oriented; and context-specific, varying with the needs of the group and the program. Many adult educators see these characteristics as essential components in assessing an adult learner's progress in developing critical literacy skills in particular contexts, such as the workplace, as well as providing usable information for adjusting the curriculum to meet the learner's needs.

Portfolio assessment is a type of performance assessment that has promise as an effective approach to tracking changes in literacy skills for adult learners. Meyr, Schuman, and Angello (1990) define portfolios as a purposeful collection of student work, exhibiting to the student and others the student's efforts, progress or achievement in selected areas and including, at a minimum: (a) student participation in selection of portfolio content; (b) the criteria for selection; (c) the criteria for judging merit; and (d) evidence of student self-reflection. Portfolios can provide a framework for collecting and evaluating the results of various alternative assessments (such as observations, self-ratings, writing samples, and cloze tests) to make instructional decisions and track progress toward both individual and programming goals. Key to the successful use of portfolio assessments is the active involvement of the learner through each step of the process—from determining portfolio contents through deciding procedures for evaluating these collections. Figure 1 illustrates a framework instructors can use in setting goals with participants and suggests the types of materials the students and instructors may wish to collect for evaluation.

Figure 1

Sample of Goal-setting in a Workplace Literacy Portfolio

Individual Goals for _____

Work-related basic skills I would like to work on are:

[keep in portfolio - examples from classroom activities, e.g., writing samples, list and/or examples of readings, classwork completed, list of computer-assisted instructional (CAI) packages used, print out of CAI work/assessments completed, checklists from simulated and role play exercises]

The job skills (performance) I would like to work on are:

[keep in portfolio - examples of work-related activities completed by participant outside of classroom, new or expanded activities that will have an impact on individual's job performance, e.g. active participation in work-related meetings, teamwork - assisting other employees, reading manuals, writing memos]

The literacy-related skills I would like to work on outside of work are:

[keep in portfolio - activities outside of work, e.g. reading to children, registering to vote, active participation in community or civic organizations]

Scores on standardized norm-referenced and/or criterion-referenced tests:

Personal Responses

[Each week participant should write in journal (or tape record or dictate to instructor) ideas and thoughts about the instructional program, about basic skills and job goals--what the participant likes or doesn't like about the program, if they see progress, if they see goals to be changed, etc.

Advantages and Disadvantages of Using Portfolios

Researchers and practitioners report various advantages and disadvantages to using portfolio assessment with both children and young adults (Brewer, 1991; Buell, 1991; Valencia, 1989). While few documents exist concerning the use of portfolios with adult learners, it is

assumed that similar advantages and disadvantages exist for this population as well.

Portfolios may be a particularly effective assessment approach for adults for several reasons:

1. Portfolio assessment requires active and ongoing participation by the learner in evaluating the contents of his/her portfolio. Condelli (1992) reports that employee involvement is critical to the success of workplace literacy programs. In addition, adult learning theory indicates that active involvement in the learning process is essential in developing self-esteem and skills necessary for self-directed learning.

2. Successful portfolio assessment depends on the ongoing communication between the instructor and the learner in evaluating the portfolio contents. This communication also fosters a climate of mutual inquiry and encourages participants to take responsibility for their own learning.

3. Portfolio assessments are useful in illustrating relatively minor changes in literacy skills. This is particularly important in working with adults reading at the lowest levels and those with limited English proficiency.

Portfolios can be an effective way to assess adult learning; however, instructors should be aware of several drawbacks to using portfolios. This type of assessment does not replace a program's use of norm-referenced tests since the portfolio contents are unique to the individual and programs are usually required by funding agents to collect standardized test data for accountability purposes. In addition, while instructors need to outline benchmarks that can be used to evaluate portfolio contents, it is not likely that the instructors will find "canned" benchmark examples to serve their learners' specific needs or the requirements of the instructional program. Instructors will have to construct reliable examples that illusrate various levels of achievement. Finally, portfolio assessment is time-consuming. Instructors must make time to work with learners to determine what is to be included in the portfolio and how the contents will be evaluated. They also must make time to meet with each learner on a regular basis to review and evaluate the portfolio.

Potential Use of Portfolio Assessment in Workplace Literacy Programs

While portfolio assessment has been used fairly extensively in elementary and secondary classrooms, the approach has not been used until very recently with adult learners enrolled in literacy programs. In

70

programs experimenting with portfolios, evidence of effectiveness is primarily anecdotal and descriptive. Research on the use of this alternative approach to assessment is in its infancy. The use of portfolio assessment in workplace literacy programs, however, may provide a solution to some of the issues and concerns common to these programs. Researchers and practitioners must develop effective procedures for providing staff development in the use of portfolios and materials to assist instructors in evaluating portfolio contents. Research is also needed to determine the effectiveness of portfolios as well as other alternative assessments in determining adult student's progress and informing instruction.

While much research is needed in this area, it is expected that alternative assessments can provide practical solutions to some of the difficulties in evaluating workplace literacy programs. The use of portfolios may not, for example, eliminate the problem of transient students--those who are present at the beginning of the program but disappear before completing the program and taking posttests. It is possible, however, that portfolio assessment, which depends largely on student participation in the process, may encourage students to remain in the program for longer periods of time. Secondly, disagreements arising among stakeholders concerning access to and use of the collected data may also be more easily resolved by using portfolios (or other alternative assessments) in which decisions on the development of the portfolio are decided at the beginning of the program and include input from all stakeholders. Portfolio assessment may also provide a more meaningful approach to assessing changes in work-related literacy skills since the curriculum--and, therefore, the contents of the portfolio--will reflect work-related tasks and the literacy skills necessary to performing them. Evaluation of work-related tasks and literacy skills can then serve the needs of both the organization and workers.

Conclusion

Difficulties are common in conducting successful evaluations of workplace literacy programs, and traditional procedures and instruments are often not effective. Assessment of adult learning, a critical component in program evaluation, is a topic of much discussion. It is increasingly evident that adult educators are dissatisfied with the use of standardized, norm-referenced tests to determine changes in basic skills levels. Educators cite the lack of relevance to their adult students and to their own teaching as well as the lack of correlation between the test scores and meaningful student performance. These adult educators are turning to alternative assessments as a possible solution to their concerns about the use of standardized tests.

71

The use of portfolios can support the development of independent and involved learners. They promote active involvement by the learner in evaluating his/her work, potentially developing self-esteem and self-directed learning; stress ongoing communication between the instructor and learner; and are capable of revealing relatively minor changes in literacy skills, allowing even adults reading at the lowest levels an opportunity to see improvement.

Adult educators must carefully document the current uses of portfolio assessment in adult literacy programs; this information will assist other programs who are interested in designing and implementing alternative assessments to determine learner gains. Researchers and practitioners must begin to systematically study the use of portfolios with adults to determine the effectiveness of this assessment approach with adult learners. Only then can the promise of portfolio assessment become a viable solution to the problems of evaluating adult literacy programs.

References

Auerbach, E. (1990). *Making meaning, making change. A guide to participatory curriculum development for adult ESL and family literacy.* Boston: University of Massachusetts.

Brewer, R. (1991). *Vermont's assessment program.* Montpelier, VT: Vermont Department of Education.

Buell, N. (1991). *An overview of six portfolio assessment projects in the state of Alaska.* Juneau, AK: Alaska State Department of Education.

Condelli, L. (1992, March). *Quality indicators, measures, and performance standards.* U.S. Department of Education, Office of Vocational and Adult Education.

Ehringhaus, C. (1991, Spring). Testing in adult basic education. *Adult Basic Education,* 1(1), 12-26.

Evaluation Research. (1992, November). *Workplace education: Voices from the field.* Proceedings National Workplace Literacy Program Project Directors Conference, September 1991. Newton Highlands, MA.

Herman, J. L., Aschbacher, P. R., and Winters, L. (1992). *A practical guide to alternative assessment.* Alexandria, VA: Association for Supervision and Curriculum Development.

Lytle, S. L. (1988, Fall). From the outside in: Reinventing assessment. *Focus on Basics,* 2(1), 1-4.

Metz, E. (1990, March). Issues in adult literacy assessment. *Journal of Reading,* 33(6), 468-469.

Meyer, C., Schuman, S., & Angello, N. (1990). *NWEA white paper on aggregating portfolio data, 1990.* Lake Oswego, OR: Northwest Evaluation Association.

Philippi, J. (1992, May). *How do you know if it's working? Evaluating the effectiveness of workplace literacy programs.* U.S. Department of Education, Office of Vocational and Adult Education.

Sarmiento, A. R. & Kay, A. (1990). *Worker-centered learning: A union guide to workplace literacy.* Washington, DC: AFL-CIO Human Resources Development Institute.

Sticht, T. (1990, January). *Testing and assessment in adult basic education and English as a Second Language programs.* San Diego: Applied Behavioral and Cognitive Sciences, Inc.

Sticht, T. (1991, April). *Evaluating National Workplace Literacy Programs.* U.S. Department of Education, Office of Vocational and Adult Education.

Sticht., T. & Mikulecky, L. (1984). *Job-related basic skills: Cases and conclusions.* Columbus, OH: ERIC Clearinghouse on Adult, Career, and Vocational Education.

Valencia, S. (1989). *Assessing reading and writing: Building a more complete picture.* Seattle, WA: University of Washington.

Comparison of a Skills-Based and Natural Text-Based College Developmental Reading Program

Carolsue Clery, Norman A. Stahl, William A. Henk

College developmental reading programs have typically focused on the development of knowledge, strategy, or skills such as vocabulary, main idea identification, inferential comprehension, and the use of text structures (Heinrichs & LaBranche, 1986; Maring & Shea, 1982; McGlinn, 1988; Stahl, Simpson, & Hayes, 1992; Swafford, 1990). Textbooks that reflect this focus, such as *College Reading* (Lenier & Maker, 1991), *Reading Enhancement and Development* (Atkinson & Longman, 1992), *Reading Skills Handbook* (Weiner & Bazerman, 1991) and *Efficient Reading* (Brown & Fishco, 1992), are frequently used in these programs. Often these texts contain reading passages to be used for the teaching and practice of selected reading skills. The Weiner and Bazerman text, for example, contains 24 reading selections used in teaching vocabulary, comprehension, interpretation and evaluation, and study skills.

At the same time, college developmental reading programs have been influenced recently by the whole language emphasis on using natural text and integrating the language arts, especially reading and writing. Bartholomae and Petrosky (Bartholomae, 1979; Bartholomae & Petrosky, 1986; Petrosky & Bartholomae, 1986) expressed concern that a skills-based approach to college reading gives students the wrong idea about reading. They state, "When reading is defined as something other than the activity of working one's way through a long, complex text and imposing order and meaning on the information

acquired from the text, it is easy to see literacy as the sum of constituent skills" (Bartholomae & Petrosky, 1986, p. 12). As one way to avoid the workbook format and short, fragmented readings, McGlinn (1988) suggested using the reading-for-writer's texts published for college composition courses in developmental reading classes. These texts usually provide sets of readings that revolve around a theme so that the readings, even though they may still be excerpts from longer works, are related. Bartholomae and Petrosky (1986) used natural text, trade books read in their entirety, and interrelated reading and writing activities as the foundation for basic reading and basic writing courses. They focused on the learner as the constructor of meaning and structure much as Moffett (1968/1983) suggests in *Teaching the Universe of Discourse*. Stahl, Simpson, and Hayes (1992) also suggest using writing as one part of the curriculum for high-risk college students. They suggest "teaching reading and learning as holistic, complex processes, not as discrete, simplistic skills" (p. 8).

Other indications of a move in this direction are found in dissertation titles such as *Whole Language: A Promising Approach to Teaching Reading to Underprepared Community College Students* (Solon, 1991). Solon developed a basic reading course that incorporated reading, vocabulary, writing, speaking, and listening activities that often formed the basis for collaborative group work. Textbook titles such as *College Reading: A Themed, Natural-Text Approach* (Clery & Smith, 1992) also suggest a holistic approach. This text is a companion text used with trade books in a college developmental reading program. Strategies for effective reading are introduced within the context of whole reading. Valeri-Gold and Olson (1991) described research-based whole language instructional strategies for use in college developmental reading courses, and Morrison (1990) wrote about a whole language approach using novels, essays, and short stories. Morrison described the enthusiastic student support of this holistic approach as students indicated that they enjoyed reading for the first time. It is interesting to note that the use of a whole language label, however, does not necessarily mean that a program incorporates the use of whole books.

Although the research base for the effectiveness of teaching various reading comprehension skills and strategies for college developmental reading students is somewhat sparse (Swafford, 1990; Swafford & Alvermann, 1989), it does seem to exist. Yet even a sparse research base for using whole language principles, especially that of using natural text, in college developmental reading programs does not seem to be available. Gender differences in response to these different teaching emphases are also of interest, but, again, little information is found in the literature. Gender differences in general reading abilities at the high

school and beyond levels do not seem to be supported by research (Hogrebe, Nist, & Newman, 1985) although gender differences in learning styles do receive some support (Dunn & Reddix, 1990; Magolda, 1989). A change from using a skills-based approach to a natural text-based approach in a college reading program might well require students to learn differently.

Ideally, changes in focus in college developmental reading programs should result in improved programs that provide the most reading improvement for the greatest number of students. The purpose of this study is to assess the results of such a change in focus.

Method

This study was designed to investigate reading achievement of underprepared college freshmen who completed either a skills-based or a natural text-based reading program. The study was conducted over a two year period in a comprehensive, midwestern university. Students in the first year, identified as cohort 1, participated in a skills-based program and students in the second year, identified as cohort 2, participated in a natural-text based approach.

The Students

The students in both cohort groups were special admission freshmen in the university. The following parameters were used to identify the students for both groups: *American College Test* (ACT) scores below 19, low class standing in high school (bottom half), and low scores on special admission tests in reading (below the 50th percentile). Cohort 1 included 96 students, 41 males and 55 females, and cohort 2 included 122 students, 43 males and 79 females, for a total of 218 students. Since there is some modest evidence that males and females might learn differently and under different conditions (Dunn & Reddix, 1990; Magolda, 1989), data were also examined with gender in mind.

The Programs

In both groups students were scheduled for a two-semester sequence of reading and study skills course work. The present study was conducted during the first semester for each cohort group.

The first year program (cohort 1) was skills-based and used the text *College Reading and Study Skills* (McWhorter, 1986). This text has 23 chapters each reflecting a group of skills or strategies, and it is presented in a workbook format. Short reading passages, composed primarily of quotes from various college textbooks, are included for practice throughout the text and a sample of a complete textbook chapter

appears in the appendix. The text was used for the whole year with selected chapters used during the first semester. These chapters and the order in which they were presented included: chapter 1, "How to Succeed;" chapter 2, "Managing Your Time;" chapter 19, "Expanding Your Vocabulary;" chapter 20, "Using Context and Word Parts;" chapter 4, "Improving Your Concentration;" chapter 5, "Prereading;" chapter 6, "Strategies for Active Reading;" chapter 7, "Understanding Sentences;" chapter 8, "Understanding Paragraphs;" and chapter 9, "Following thought Patterns." A weekly news magazine, *Time*, was also used to provide additional text material for practice and discussion.

The program for cohort 2, in the second year of the study, was based on the use of natural-text with reading strategies and skills introduced within the context of reading whole books for meaning. Reading, writing, and discussion activities for the course revolved around the theme of "Personal Courage." The books used were read in the following order: *Kaffir Boy* (Mathabane, 1986), *Brothers* (Monroe & Goldman, 1988), and *One Flew Over the Cuckoo's Nest* (Kesey, 1962). Students were also asked to choose a fourth book that related to the theme, and they wrote a text composed of their essays about the theme. This student-authored text of 110 typed pages was used as one of the texts for the course and was treated in the same manner as the other required books. A different weekly news magazine, *Newsweek*, was used to provide additional reading related to the theme and to expand background knowledge. Regularly scheduled course activities included developing vocabulary study cards from self-selected vocabulary, writing in reader-response journals, and writing about and discussing books, especially in relation to the course theme. Vocabulary and comprehension strategies were presented within the reading context and students were expected to use these strategies in meaningful situations, such as participating in group discussions, writing assignments, and taking essay exams. The course design reflected the philosophy presented by Bartholomae and Petrosky (1986). That is, students in this cohort group were asked to construct meaning from the text, interact with the text by activating prior knowledge while relating that knowledge to the text, and use writing as a way to interact with and learn from the text.

Research Design

The two cohort groups were compared using a basic non-equivalent control group format. This design allowed for a comparison of the skills-based and natural text-based programs for two similar groups of students. Data collected for each group included the *ACT* composite

test scores, final course grades, and pre- and post-testing for reading comprehension using the *Degrees of Reading Power (DRP)*, Forms PA-2 and PB-2 (1985). The *DRP* is an untimed test of reading comprehension designed with a modified cloze format. Students read passages of 5 or 6 paragraphs each and fill in a blank by choosing the correct word from 5 choices. The *DRP* is widely used to place students in college developmental reading programs.

A two-way analysis of covariance (ANCOVA) was performed using *ACT* scores, final course grades, and the *DRP* pre-test as covariates. Type of program (skills versus natural) and gender (male versus female) served as the independent variables. The *DRP* (Form PB-2) post-test score was the dependent variable.

Results

The results of the ANCOVA indicated no significant main effects ($p>.05$); however, a significant two-way interaction occurred between program type and gender, $F(6, 311) = 6.311, p = .013$. The cell means adjusted for multiple covariation (Figure 1) were compared for differences using the Newman-Keuls post-hoc test. Harmonic means were used in this computation to account for differences in cell sizes.

The analysis of the data revealed that male students in cohort 1 (65.15) obtained a significantly higher mean score ($p < .01$) than males in cohort 2 (62.42) and females in cohort 1 (62.31). There were no significant differences between cohort 1 males and cohort 2 females ($p > .05$), and the three lowest means, cohort 1 females, cohort 2 males and cohort 2 females (63.65), were not significantly different from one another ($p > .05$).

Although there appeared to be no real differences in post-test scores after either program for most students, males in the skills-based program seemed to perform better than males in the natural text program.

Discussion

Males in this study did statistically better in a skills-based developmental reading program, although, there is little existing evidence in the literature to support differences in male and female general reading achievement. An analysis of the High School and Beyond national survey data by Hogrebe, Nist, and Newman (1985) revealed that the variance in reading achievement accounted for by gender was less than 1%. The authors caution, however, that the findings apply to vocabulary and short passage comprehension and do not answer questions about processing complex text. This may account for the difference supported by the current study; the males who were asked to practice

reading in a holistic approach using complex text experienced some difficulty. Perhaps male students deal better with skills-based reading instruction and shorter, expository passages, like those used with cohort 1, because of their high school reading experiences. Male students might be exposed more often to expository texts while female students might prefer narrative texts because of the courses they choose to take. More males than females are often scheduled for remedial programs in high schools, as well, and these programs often use a skills approach to reading and writing. Hence, the question that might be asked is: Based on experience and familiarity are males more likely to be comfortable with a skills-based approach and females with a natural text-based approach that depends a great deal on narrative text?

On the other hand, there is some evidence that there are specific differences in cognitive structures and on the concrete-abstract dimension of learning orientation for males and females (Magolda, 1989). Magolda reports that one difference was reflected in the female pattern of listening and collaborating with others and placing importance on relationships, such as reflected in the narratives used with cohort 2. Perhaps the males who experienced difficulty in the current study were not as adept at using holistic strategies, such as collaborative group discussion and peer responses to writing, that were an important part of the natural text-based program.

A study in which differences in cognitive style were measured using electroencephalographic activity also indicated that there may be real gender differences in cognitive processes (Dunn & Reddix, 1990). The authors suggested that the most important conclusion to draw from their study, however, was that a universal instructional approach applied to all students may not be appropriate. It seems that the same conclusion might apply to the present study. Yet, Hogrebe, Nist, and Newman (1985) concluded their study of gender differences in the High School and Beyond data by saying, "it seems appropriate for reading research to continue its focus on successful reading processes and strategies that can be found and taught to either gender" (p. 723).

Indeed, the current study was limited to a specific population and used a small number of subjects making the results tentative. Current college reading models that appear to be working should probably not be scrapped, as the importance of "looking before leaping" is obvious. The results point the way to collecting more data relating to the effects of skills-based and natural-text based reading programs for college developmental reading students and examining possible gender differences more closely. One necessary step is collecting more data about the effects of natural text-based developmental reading programs on the achievement of college freshman. Although there is some indica-

tion that interest in this approach is building, little research support is available. In investigating natural text-based college developmental reading programs it will be necessary to differentiate the programs that profess to use a whole language approach but might not be using whole books as reading material. Another question that needs to be asked is what approach works best with college freshmen, of either gender, who often admit to not having ever read a whole book? It would also be important to know which approach transfers best to other university courses taken by underprepared college freshmen.

A final concern raised by the current study relates to assessment. Perhaps it is not appropriate to assess students in a natural text-based program using many of the current standardized reading comprehension tests. These tests most often ask students to read a short passage and answer a few multiple-choice questions about the text which is not at all like the reading material and written responses used in a holistic, contextual approach to reading. Would a more process-based assessment provide different results because it meshes better with the curriculum? The DRP used in the present study falls somewhere between the two ends of the continuum. An important direction for future research with similar programs, however, concerns appropriate assessment.

As stated earlier, it is important that the results of programming decisions in college reading programs be studied before moving too quickly in any new direction. Pilot programs using various methods and orientations might provide some answers before making large-scale changes. This study is just one small step in that direction. As the interest in whole language grows it is important to evaluate its effectiveness at the college level. It should at least be as effective as a skills approach on some type of standardized measure. A reasonable expectation might be that students in a holistic program that emphasizes the reading-writing connection might outperform students in a skills-based program on measures of writing, attitude, and interest. Ideally, any program changes made should provide the most reading improvement for the greatest number of students.

References

American College Test. (1989). Iowa City, IA: ACT Corporation.

Atkinson, R. H., & Longman, D. G. (1992). *Reading enhancement and development* (4th ed.). New York: West Publishing Company.

Bartholomae, D. (1979). Teaching basic writing: An alternative to basic skills. *Journal of Basic Writing, 2*(2), 85-109.

Bartholomae, D., & Petrosky, A. (1986). *Facts, artifacts, and counterfacts: Theory and method for a reading and writing course.* Portsmouth, NH: Heinemann.

Brown, J. I., & Fishco, V. V. (1992). *Efficient Reading*. Lexington, MA: D. C. Heath.

Clery, C., & Smith, A., (1992). *College reading: A themed, natural-text approach*. DuBuque, IA: Kendall/Hunt.

Degrees of Reading Power. (1985). New York: The College Board.

Dunn, B. R., & Reddix, M. D. (1990). *Electrophysiological determinants of cognitive style: Implications for educational and psychological research*. (Report No. CS 009 674). Boston, MA: Ann ual Meeting of the American Educational Research Association (ERIC Document Reproduction Service No. ED 326 548).

Heinrichs, A., & LaBranche, S. (1986) Content analysis of 47 college learning skills textbooks. *Reading Research and Instruction, 25*(4), 277-287.

Hogrebe, M., Nist, S. L., & Newman, I. (1985). Are there gender differences in reading achievement? An investigation using the high school and beyond data. *Journal of Educational Psychology, 77*(6), 716-724.

Kesey, K. (1962). *One flew over the cuckoo's nest*. New York: Signet.

Lenier, M., & Maker, J. (1991). *College reading* (3rd ed.). Belmont, CA: Wadsworth Publishing Company.

Magolda, M. B. (1989). Gender differences in cognitive development: An analysis of cognitive complexity and learning styles. *Journal of College Student Development, 30*, 213-220.

Maring, G. H., & Shea, M. A. (1982). Skills are not enough in college developmental reading. *Journal of Reading, 26*, 786-790.

Mathabane, M. (1986). *Kaffir Boy*. New York: Signet.

McGlinn, J. E. (1988). Essential education in the reading class. *Journal of Developmental Education, 12*(2), 20-25.

McWhorter, K. (1986). *College reading and study skills* (3rd ed.). Boston, MA: Little, Brown and Company.

Moffett, J. (1983). *Teaching the universe of discourse*. Portsmouth, NH: Boynton/Cook. (Original work published 1968).

Monroe, S., & Goldman, P. (1988). *Brothers*. New York: Ballantine.

Morrison, C. (1990). A literary, whole language college reading program. *Journal of Developmental Education, 14*(2), 8-19.

Petrosky, A., & Bartholomae, D. (1986). *The teaching of writing: Eighty-fifth yearbook of the National Society for the Study of Education*. Chicago, IL: NSSE.

Solon, C. L., (1991). A promising approach to teaching reading to underprepared community college students (Doctoral dissertation, Columbia University Teachers College). *Dissertation Abstracts International, 52*, 2090-A.

Stahl, N. A., Simpson, M. L., & Hayes, C. G. (1992). Ten recommendations from research for teaching high-risk college students. *Journal of Developmental Education, 16*(1), 2-10.

Swafford, J. (1990). Comprehensive strategies research and college developmental studies students. *Forum for Reading 22*(1), 6-14.

Swafford, J., & Alvermann, D. E. (1989). Postsecondary research base for content reading strategies, *Journal of Reading, 33,* 164-169.

Valeri-Gold, M., & Olson, J. (1991). Using research-based whole language strategies to empower at-risk college readers. *Research and Teaching in Developmental Education, 7*(2), 81-91.

Weiner, H. S. & Bazerman, C. (1991). *Reading skills handbook* (5th ed.). Boston: Houghton Mifflin.

Common Aspects of Recommended Young Adult Literature: An Historical Perspective

Margaret A. Johnson

Choosing young adult literature can be a formidable task, especially when one considers the multitude of offerings in today's broad market. Furthermore, separating the wheat from the chaff, the superb from the mediocre, can complicate the selection process. It is important for professionals and parents to be aware of those titles that are recommended reading, titles that can positively enhance and encourage the psychological, social, and educational maturation of adolescent readers. McReynolds (1971) brings to light Pilgrim and McAllister's (1968) belief in the need for optimistic, enlightening books that inspire young readers to develop positive philosophies and attitudes. While the tendency has been to include more sensational, shocking materials in the recommended lists, materials considered unwholesome by some opponents of adolescent literature, but deemed necessary developmental tools by some of its proponents, the end remains the same--to encourage the positive growth of adolescents.

Early contention centered on defining adolescent literature. McReynolds (1971) cited Burton (1970, 1951) who distinguished between *literature for adolescents* and *adolescent literature*. By 1985 critics equated adolescent literature with *young adult literature*. Nilsen and Donelson (1985) simply defined young adult literature as that reading material chosen by readers aged twelve to twenty. Appleby (1969, 1968) asserted that this type of literature could be material written expressly for young adults or simply literature available for their use.

The genre has now come of age, its identity settled. The more positive term young adult literature is synonymous with the labels adolescent literature or literature for the adolescent and has, over the years, softened the earlier tags' negative implications. Literature currently appearing on many, if not most, recommended lists, reflects this new identification.

A number of professional organizations provide recommended lists based on systematic reviews of content, style, and worth. These lists, such as the National Council of Teachers of English's *Books for You*, The American Library Association's "Best Books for Young Adults," and the *School Library Journal*'s "Best Books," are accessible and up-to-date, reflecting changes in intellectual, social, and political thought. Despite the changing cultural atmosphere in America, and despite the evolution of adolescent literature, professionals continue to exert a constant, albeit indirect, control over the reading of young adults. Professional recommendations influence curricular choices as well as the ultimate reception of the genre. While these professional recommendations do not necessarily reflect adolescent preferences, the lists do mirror authoritative choices for young adults.

Historical characterizations trace the genre from its modest and subtle beginnings through a sometimes shocking and rebellious youth. Despite the labeling adjustment to encourage better reception, the genre remains aloof and isolated from the mainstream of traditional literature. Today, as the parameters that establish young adult literature begin to unravel, the measures used to determine its nature and quality are increasingly influential; marketing and censorship also play powerful, but indirect, roles in its explication. Young adult literature advocates continually point out its merits and its place in the world of *real literature* while opponents attempt to detract from the value of adolescent literature by assailing its quality and purpose. Recommended adolescent literature acts as a stabilizing agent that lends respectability and worth to the genre.

What, then, are the common characteristics of recommended young adult literature and how have these characteristics changed over the previous two decades? Just what is the big picture concerning recommended adolescent literature?

Several studies ascertain what literary aspects are common to the recommended literature for adolescents (Johnson, 1990; Johnson, 1983; and McReynolds, 1971). One particular replication (Johnson, 1990) further outlines the apparent changes in some of these characteristics over the twenty-year period. All the books selected for these studies are drawn from professional lists which recommend literature for adoles-

cents. The lists do not necessarily reflect popular young adult reading interest, nor are all the years from 1966 through 1987 equally represented by the randomly selected titles. However, similar instruments are utilized to determine the common aspects of the recommended literature and an overall sense of the commonalties and change is evident.

Literary Mode

McReynolds (1971) presents the theory of Tovatt and De Vries (1971) who contend that adolescent readers prefer nonfiction. Ellis (1985) believes that young readers prefer romance. And Fuchs (1988), Walker (1988), Reed (1985), and Egoff (1981) cite a rising interest in science fiction and fantasy. Walker (1988) acknowledges that books help young readers to face problems that plague them, but asserts that the problem novel is not necessarily a favored mode among young people.

Fiction remains the dominant mode throughout the twenty-year span covered by the studies. Nonfiction has declined since the McReynolds s, dy, possibly as a result of the increase in recc nmended fiction, but it remains somewhat stable since the mid-70s as the second most recommended mode. It is obvious that poetry is still the least recommended mode of young adult literature. Types of fiction recommended for adolescents include the graphic novel (a recent addition), science fiction, problem novels, and fantasy. Ellis (1985) suggest that the popularity of the problem novel which deals with weighty issues is declining and she foresees the increasing popularity of the romance as a reaction to the heavy realism of the problem novel. Romance novels and drama do not appear in the recommended literature sample.

A categorization of the recommended nonfiction reveals that recently recommended nonfiction selections, like the majority of the McReynolds samples, are historical. No science and art nonfiction recommendations appear and the overall tendency to recommend these modes has declined over the twenty-year period. Biographical and autobiographical recommendations show a sharp increase during the year 1976-1980, but stabilize during the period of the last study.

Table 1

Fiction, NonFiction, and Poetry

Literary Mode	1966-1970		1976-1981		1984-1987	
	n	%	n	%	n	%
Fiction	47	58	22	75	22	71
Non-Fiction	30	37	6	20	8	26
Poetry	4	5	1	5	1	3
Total	81	100	29	100	31*	100

*Nine of these selections are specifically designated as adult literature for adolescents.

Youthful Characters

The utilization of young adult characters, particularly as protagonists, increases topic relevance and captures the young readers' interest. The importance of the adolescent character to the genre is evident in the increasing number of young adult characters portrayed in the recommended literature. Adolescent characters even appear in the adult literature recommended to young adult readers. Readers of all ages glean wisdom from the struggles of these characters. While the earlier studies do not attend to gender representation, the 1990 Johnson study points to a balanced use of male and female characters in the literature surveyed.

Table 2

Fiction Books with an Adolescent Among the Principal Characters

Principal Characters	1966-1970		1976-1981		1984-1987	
	n	%	n	%	n	%
Adolescent (20 years or under)	36	77	20	91	20*	91
No Adolescent (20 years or under)	11	23	2	9	2	9
Total	47	100	22	100	22	100

*Four of these characters are minority youth.

Social Taboos and Issues

As society changes, so too does the literature that reflects its culture. Likewise, adolescent literature has similarly evolved, mirroring the values, issues, and themes of young Americans. When times are conservative, the literature for young adults is conservative (Ellis, 1985). This tendency is also true of recommended adolescent literature. The counter-culture movement of the late 60s and early 70s, particularly the propensity of that period's youthful culture to let it all hang out, is subsequently reflected in the literature, and, to a lesser extent, the recommended adolescent literature. As times tighten up, as in the early to mid-80s, the recommended literature reflects the more conservative thought of the adults who seek to teach and protect the young. Censorship has recently taken a firmer hold in many areas, and while the recommended literature is not censored, the times do influence professional choice.

McReynolds offers the opinions of Hentoff (1967, 1968) and Woods (1966) who support the inclusion of real life situations, characters, and themes that speak directly to adolescents. McReynolds also refers to Appleby (1969), Beatty (1969), and Davis (1967) who contend that taboo subjects (profanity and references to sexual activity) do appear in adolescent literature. While Carlsen and Sherill (1988) classify literature with this type of focus as subliterature, the fact remains that references to taboo issues are characteristic of young adult literature— even that literature recommended by professionals.

Profanity and sexual references are more commonly found in the recommended fiction than in nonfiction, but overall these aspects do not dominate the literature surveyed. A comparison of the data shows that the use of profanity and sexual references has declined since the less restrictive 70s. This decline supports Ellis's (1985) views.

Table 3

Literature Containing Profanity and Sexual References

Use of	1966-1970		1976-1981		1984-1987	
	n	%	n	%	n	%
Profanity						
Fiction	5	6	11	38	5	16
Non-Fiction	5	6	5	17	3	10
Sex						
Fiction	3	4	10	35	9*	29
Non-Fiction	3	4	6	21	5*	16

*Three of these selections are specifically designated as adult literature read by adolescents.

The literature recommended for adolescents addresses a wide variety of social concerns. This representation supports numerous theories in the field that literature that presents real problems can help adolescents cope with and adjust to the real world. Religion, warfare, violence, parental conflict, racial strife, and poverty are the concerns most frequently addressed by the recommended literature. Death, suicide, and incest are additional social concerns evident in the most recent sample.

The inclusion of sensitive social concerns has increased over the two decades surveyed. Egoff (1981) explains that death is a recurring theme used in young adult literature to express rites of passage, a journey all adolescents must face. The inclusion of social issues reflects the concerns of a youthful society, assists in problem solving, and encour-

ages the development of values (Auten, 1984; Cline and McBride, 1983).
Recommended young adult literature no longer merely extends a
simple, moral lesson to innocent adolescents, but seeks instead to
present, through vicarious experience, a possible pathway for today's
more experienced youth toward self-discovery and eventual maturity.

Table 4

Social Issue*	1966-1970		1976-1981		1984-1987	
	n	%	n	%	n	%
War/military	10	13	3	4	10	12
Racial strife	15	20	5	7	9	11
Poverty	3	4	6	8	9	11
Ecology	2	2	1	1	3	4
Space	0	0	0	0	1	1
Dropouts	0	0	2	3	2	2
Drugs	0	0	9	12	5	6
Teen pregnancy	1	1	9	12	3	4
Religion	0	0	9	12	12	14
Violence	4	5	9	12	10	12
Parental conflict	3	4	12	16	10	12
Homosexuality	1	1	7	10	2	2
Communism	1	1	0	0	3	4
No issues	37	48	2	3	4	5

*Themes occurring in recommended young adult literature.

Social Class Representation

While our nation struggles with the dissolving middle class, the previous decades remain true to the middle class ideal. The recommended adolescent literature surveyed focuses almost exclusively on the middle class white. Rarely are other classes represented in the literature recommended. Minority characters are beginning to find a place in the recommended adolescent literature, however, and Native Americans such as the Eskimo and American Indian are represented within their respective cultural situations.

Family Structure

Teenage pregnancy, divorce, and drug abuse are problems that plague young adults from all walks of life, from all types of families. The portrayal of the family in the midst of the boiling issues of contemporary society is an aspect common to most of the recommended young adult literature. While the middle class, white, nuclear family continues to dominate the literature recommended for adolescents, a shift in family portrayal is notable. Overall family representation has increased and single-parent families are more evident. The representation of the family unit is perhaps yet another example of realism's influence on the literature.

Table 5

Family Structure Representation in Recommended Adolescent Literature

Family Structure	1966-1970		1976-1981		1984-1987	
	n	%	n	%	n	%
Both parents	14	28	16	55	12	39
Father absent	10	20	5	17	11	35
Mother absent	4	8	1	3	6	19
Foster parents	6	12	1	3	0	0
Sibling parents	2	4	0	0	0	0
Grandparents	1	2	1	3	1	3
No parents mentioned	13	26	5	17	1	3

Conclusions

The twenty-year span of the study reveals that young adult literature has expanded to include a variety of fictional modes. Taboo subjects are present in the literature, but emphasis is shifting away from profanity and sex toward relevant social issues. Multiculturalism is only a glimmer in the eye of the writers during the periods scrutinized here, but the increased attention to minority characters and issues will undoubtedly produce more literature that will be highly recommended along these lines. As the literature continues to evolve and reflect the times, we are certain to find a return to family values reflected in the recommended literature, even though the family unit may more and more reflect the single parent's dilemma.

The tendency to guard the reading of adolescents continues. While the romance enjoys a growing popularity in the book stores (and sometimes the shelves of school and public libraries), it is not a popular item on the recommended lists. There is a concern that adolescents be presented with factual material that is relevant and accurate, and nonfiction as well as fiction selections deal with warfare, human rights, sexual abuse, and AIDS. The tendency to recommend academically sound literature instead of enjoyable literature appears to have subsided somewhat. Most of the selections are enjoyable (some easy) reading that also maintain practical content in an effort to aid the young reader's growth in many areas.

The popular appeal of the selections is questionable. Few of the recent books recommended appear on the list compiled by the *English Journal* (Conner, Tessmer, Fetz, Tolorie, 1984), the list with the most input from adolescents. Hence, it is important for educators, librarians, and parents to determine the purpose of using a particular recommended book list so as not to be misled. A reliance on several sources, as determined by McReynolds (1971) seems best in order to produce a well-rounded list.

References

Abrahamson, R., & Carter, B. (1988). *Books for you*. Urbana, IL: National Council of Teachers of English.

Appleby, B. (1969, June and 1968, August). Recent developments in literature for adolescents. Paper presented at Tampa, Florida and Baton Rouge, Louisiana.

Auten, A. (1984). All about adolescent literature: Pro and con. *Journal of Reading, 28*, 76-78.

Beatty, J. (1969, June). Trade winds. *Saturday Review*, pp. II.

Burton, D. (1951). The novel for the adolescent. *English Journal, 40*, 363-69.

Burton, D. (1970). *Literature study in the high schools.* (2nd ed.). New York: Holt, Rinehart, and Winston.

Carlsen, G. & Sherrill, A. (1988). *Voices of readers.* Urbana, IL: National Council of Teachers of English.

Cline, R. & McBride, W. (1983). *A guide to literature for young adults: Background, selection. and use.* Glenview, IL: Scott, Foresman and Company.

Conner, J., Tessmer, K., Fetz, N. & Tolorie, A. (1984). 1984 books for young adults poll. *English Journal, 73*, 64-68.

Conner, J. (1989, April). Iowa books for young adults pool. *English Journal, 78*, 86-89.

Davis, J. (1967). Recent trends in fiction for adolescents. *English Journal, 56*, 720-24.

Egoff, S. (1981). *Thursday's child: Trends and patterns in contemporary children's literature.* Chicago: American Library Association.

Ellis, W. (1985). Adolescent literature: Changes, cycles, and constancy. *English Journal, 74*, 94-98.

Fuchs, L. (1988). *Serving adolescents' reading interests through young adult literature.* Bloomington, IN: Phi Delta Kappan Educational Foundation.

Hentoff, N. (1967, May). Tell it as it is. *New York Times Book Review*, p. 3.

Hentoff, N. (1968, November). Fiction for teen-agers. *Wilson Library Journal, 43*, 264.

Johnson, A. (1983). *A study of common aspects found in selected literature for adolescents 1976 to 1981.* Unpublished master's thesis, Southern Illinois University, Carbondale, Illinois.

Johnson, M. (1990). *A study of common aspects found in selected literature for adolescents 1984 to 1987.* Unpublished master's thesis, Southern Illinois University, Carbondale, Illinois.

Jones, T., et. al. (1984-1988). Best books. *School Library Journal.*

McReynolds, J. (1971). A study of common aspects found in selected literature for adolescents 1966 to 1970. Unpublished doctoral dissertation, Southern Illinois University, Carbondale, Illinois.

Nilsen, A. & Donelson, K. (1985). *Literature for today's young adults* (2nd ed.). Glenview, IL: Scott, Foresman and Company.

Pilgrim, G. & McAllister, M. (1968). *Books, young people, and reading guidance* (2nd ed.). New York: Harper & Row.

Reed, A. (1985). *Reaching adolescents: The young adult book and the school.* New York: Holt, Rinehart and Winston.

Tovatt, A. & DeVries, T. (1971). This world of English. *English Journal*, 60, 510.

Walker, E. (1988). *Book bait*. Chicago, IL: American Library Association.

Woods, G. (1966). Screening books for review. *Wilson Library Bulletin*, 41, 168-72.

Youth Services Division. (1985-1989). Best books for young adults. Chicago, IL: American Library Association.

Seventy-one Years of Distinguished Books: An Analysis of the Newbery Award Winners 1922-1992

Ira E. Aaron, Nellie Hecker, Sylvia Hutchinson

One of the most prestigious awards for contributions to children's literature in the United States is the Newbery Medal. Under the sponsorship of the American Library Association, the award was first made in 1922 and is the oldest award for excellence in children's literature. The annual award, aimed toward encouraging writing for children, goes to the American author who writes the most distin- guished contribution to children's literature published during the previous year (See appendix for complete listing of Newbery Medal winners). A committee of 15 members makes the selection. That committee may also select one or more Honor Books. Winners are announced in January of each year at the midwinter meeting of the American Library Association.

Selected Facts about Newbery Medal Winners

Call it information about Newbery Medal winners--or call it trivia. A review of the 71 winners--from 1922 through 1992--reveals some interesting facts:

Genre

The 1992 winner, Van Loon's *The Story of Mankind*, is the only one of the 71 that can be classified as informational. Thirty-one winners have been realistic fiction, another 16 historical fiction, and 13 fantasy. Six were biography, and two were poetry. One each can be classified as folk tale and fable.

Birthplaces of Newbery Winners

Though a requirement for receiving the Newbery Medal is that the author must be a citizen or resident of the United States, persons born in other countries become eligible if they move to the United States. Eleven winning titles were written by people born in other countries: England (3); Holland (2); China (2); India (1); Canada (1); Hungary (1), and Poland (1). Of the first five winning titles, three were written by peresons born in countries other than the United States. Though two titles are listed as having been written by a person o. persons born in China, the writer--two-time winner Katherine Paterson--was the daughter of American citizens living in China at the time of her birth.

New York was the birthplace of 14 of the Newbery Medal winners; Massachusetts of six; California of five; Illinois, Ohio, and Pennsylvania of three each; Michigan, Connecticut, North Carolina, New Jersey, and Virginia of two each. One writer was born in each of 12 states: Maryland, Montana, Idaho, Indiana, New Mexico, West Virginia, Utah, Oklahoma, Mississippi, Oregon, Wyoming, and Hawaii. One writer also was born in the District of Columbia. More than one-third (a total of 27) of the winners were born in the Northeastern part of the United States.

Repeat Winners

So far, three writers have won the Newbery Medal twice. Joseph Krumgold received the award in 1954 for ...*And Now Miquel* and again in 1960 for *Onion John*. Elizabeth George Speare received the Newbery Medal in 1959 for *The Witch of Blackbird Pond* and again in 1962 for *The Bronze Bow*. Katherine Paterson won the award in 1978 for *Bridge to Terabithia* and in 1981 for *Jacob Have I Loved*.

Changing Odds of Winning the Newbery Medal

More children's books are being published today than in 1922 when the award began. In 1920, 410 new children's books were published in the United States. By 1990, the number of new titles totaled 5,172. Obviously, the odds of a writer winning the Medal decrease with each year. The figures cited, taken from Bowker annuals, include *all* new titles--pi .ture books eligible for consideration for the Caldecott Medal as well as those eligible for consideration for the Newbery Medal.

Titles in Print and Best Sellers

With the exception of two, all winning titles are still in print. *Dobry*, the 1935 winning title, and *Daniel Boone*, the 1940 winner, are out of print.

According to an article in the October 27, 1989 issue of *Publishers Weekly*, seven winning titles are among the top 100 all-time best selling paperback children's books. The top 100 all-time best selling hardback books contain no winners. The seven best-selling paperback books were: *The Witch of Blackbird Pond* (2,445,000); *A Wrinkle in Time* (2,246,000); *Johnny Tremain* (2,242,000); *Island of the Blue Dolphins* (1,876,000); *From the Mixed-Up Files of Mrs. Basil E. Frankweiler* (1,335,000); *Roll of Thunder, Hear My Cry* (1,262,000); and *Sounder* (1,197,206). Interestingly, *Charlotte's Web*, not a winner but an Honor Book, sold 4,607,131 paperback and 1,828,019 hardback copies.

Copyright Changes Made in Reprinting of Newbery Medal Books

Until 1976, the copyright law of the United States registered a new work for 28 years, and that work could be registered for an additional 47 years, making a total of 75 years. The current law registers a work for the life of the author plus 50 years. Winning Newbery titles published before 1948 have all been recopyrighted with, in most instances, no changes in the text. The following provides a brief look at some of the changes.

The 1922 winning title—*The Story of Mankind*—has been revised twice adding chapters to bring the history up to date, updated first in 1967 and a second time in 1984. The changes represent additions. In contrast, the introduction to the revised edition of the 1923 winner—*The Voyages of Doctor Dolittle*—states that slight changes were made to remove offensive matter. Some illustrations were also changed from the original.

The 1971 revision of *The Dark Frigate*, the 1924 winning title, added an introduction by Lloyd Alexander while deleting nine full-page pictures as well as small illustrations. The text itself remained unaltered.

In the revision of the 1925 winner—*Tales from Silver Lands*, each chapter a short story, shifts a few chapters. and two full-page pictures, originally in color, were reprinted in black and white.

An interesting change occurred also in *Caddie Woodlawn*, the 1936 winner. Kate Seredy provided the original illustrations, whereas the revision included illustrations by Trina Shart Hyman. Kurt Wiese originally illustrated the 1933 winner—*Young Fu of the Upper Yangtze*. Ed Young illustrated the 1973 version. In that reprint Pearl Buck wrote the introduction.

Minor changes were noted in comparing later editions with the earlier editions of some titles. These usually were changes in illustra-

tions, such as a full page illustration made into a part-page illustration, or the reverse. Occasionally, a color illustration was changed to black and white. Of course, paperback reprints almost always had smaller pages with changes in front and back pages. In most cases, the text remained the same.

Themes and Characters in Books Published before 1960

Growing up, overcoming fear, searching for acceptance became easy-to-identify themes in the early award winning books. Illustrated in several titles are the times of trial and courage associated with the Depression (*Thimble Summer*), the Civil War (*Rifles for Waite*), and the Revolutionary War (*Johnny Tremain; Amos Fortune, Free Man*). Slavery, freedom, religious intolerance, and women's rights are addressed in a number of books where realistic characters and conflicts reflect the time period (*Miss Hickory; Amos Fortune, Free Man; The Witch of Blackbird Pond*).

Although several titles published before 1960 depict characters with respectful attitudes toward the elderly, the handicapped, and the Indian, a number of selections show bias toward minorities. *Roller Skates* and *Matchlock Gun* present the reader with unacceptable stereotypes, Indians are called "savages" and girls can't expect to be president in *Caddie Woodlawn*, patronizing discussions of slavery appear in *Amos Fortune, Free Man*, and *Johnny Tremain* minimizes the women's importance.

Themes and Characters in Books Published After 1960

Books published and honored after 1960 reflect societal realism when confronting issues for young people and minority groups. Unlike earlier publications, post-1960 selections introduce young readers to the complexities of an adult world filled with controversy and conflict (Peterson & Solt, 1982). They include characters making significant and difficult decisions relating to love, violence, courage, abuse, handicaps, race, and death, among others.

Changes in the adult world did not immediately translate into changes in books published for young people. It wasn't until 1969, for example, that the Newbery winner *Sounder*, depicted the inhumanity of the Black sharecropper's world; in 1976 Mildred Taylor, the African American writer, author of *Roll of Thunder, Hear My Cry*, portrayed the impact of the civil rights movement and the indifference of the white world toward Blacks. To date, none of the Newbery winning titles deals with the controversial Vietnam War.

97

Award winning titles published in the last thirty years present characters in non-conventional relationships and/or characters that resist, with good reason, convention and established rules (*A Wrinkle in Time; Shadow of a Bull; From the Mixed-up Files of Mrs. Basil E. Frankweiler; The Slave Dancer; Sarah, Plain and Tall; Number the Stars; Shiloh*; among others). Several books depict characters accepting those who are different (*Up a Road Slowly; Summer of the Swans; Dicey's Song*) or characters dealing with death or impending death (*Island of the Blue Dolphins; The Bronze Bow; Sounder; Bridge to Terabithia*). Several writers present characters taking positive action to overcome great difficulties (*Island of the Blue Dolphins; A Wrinkle in Time; Julie of the Wolves; Lincoln: A Photobiography; Number the Stars; Shiloh*).

Several honored selections address issues of slavery, prejudice, and race relations (*I, Juan de Pareja; Sounder; The Slave Dancer; Roll of Thunder, Hear My Cry; Maniac Magee*). A number of outstanding books focus on living in harmony with the environment and acceptance of the personal environment (*Island of the Blue Dolphins; It's Like This, Cat; Mrs. Frisby and the Rats of NIMH; Julie of the Wolves; Bridge to Terabithia; A Gathering of Days: A New England Girl's Journal, 1930-32; Jacob Have I Loved; Dicey's Song; Dear Mr. Henshaw; Sarah, Plain and Tall; Maniac Magee; Shiloh*).

A Concluding Note

The Newbery Medal honors distinguished writers of children's literature published in the United States. A review of the books so honored indicates that the winners, for the most part, wrote realistic fiction; other types of literature, however, were represented among the medalists. Three authors received the Newbery Medal twice, however, the odds of a writer receiving the award decrease as the number of new children's literature titles published each year increases. Numbers have increased more than twelve times since 1920.

Award winning books add to children's appreciation of people and the problems that they face. The issues and themes in books most recently published reflect, more so than the early honorees, the concerns of society in general and the belief that young people can sort through the complexities of the adult world.

John Newbery Medal (1922-92)

Alexander, L. (1969). *The High King*. Holt

Armer, L. A. (1932). *Waterless Mountain*. Longmans.

Armstrong, W. H. (1970). *Sounder*. Harper and Row.

Bailey, C. S. (1947). *Miss Hickory*. Viking.

Blos. J. (1980). *A Gathering of Days: A New England Girl's Journal. 1830-32.* Scribner's.

Borton de Trevino, E. (1966). *I, Juan de Pareja*. Farrar, Stratus and Giroux.

Brink, C. R. (1936) *Caddie Woodlawn*. Macmillan.

Byars, B. (1971). *Summer of the Swans*. Viking.

Chrisman, A. B. (1926). *Shen of the Sea*. Dutton.

Clark, A. N. (1953). *Secret of the Andes*. Viking.

Cleary, B. (1984). *Dear Mr. Henshaw*. Morrow.

Coatsworth, E. (1931). *The Cat Who Went to Heaven*. McMillan.

Cooper, S. (1976). *The Grey King*. Atheneum.

Daughtery, J. (1940). *Daniel Boone*. Viking.

de Angeli, M. (1950). *The Door in the Wall*. Doubleday.

DeJong, M. (1955). *The Wheel on the School*. Harper and Row.

du Bois, W. P. (1948). *The Twenty-one Balloons*. Viking.

Edmonds, W. D. (1943). *The Matchlock Gun*. Dodd.

Enright, E. (1939). *Thimble Summer*. Rinehart.

Estes, E. (1952). *Ginger Pye*. Harcourt Brace.

Field, R. (1930). *Hitty, Her First Hundred Years*. Macmillan.

Finger, C. (1925). *Tales from Silver Lands*. Doubleday.

Fleischman, S. (1987). *The Whipping Boy*. Greenwillow.

Fleischman, P. (1989). *Joyful Noise: Poems for Two Voices*. Harper and Row.

Forbes, E. (1944). *Johnny Tremain*. Houghton Mifflin.

Fox, P. (1974). *The Slave Dancer*. Bradbury.

Freedman, R. (1988). *Lincoln: A Photobiography*. Clarion.

George, J. C. (1973). *Julie of the Wolves*. Harper and Row.

Gray, E. J. (1943). *Adam of the Road*. Viking.

Hamilton, V. (1975). *M.C. Higgins, The Great*. Macmillan.

Hawes, C. (1924). *The Dark Frigate*. Little, Brown.

Henry, M. (1949). *King of the Wind*. Rand.

Hunt, I. (1967). *Up a Road Slowly*. Follett.

James, W. (1927). *Smoky, the Cowhorse*. Scribner's.

Keith, H. (1958). *Rifles for Waite*. Crowell.

Kelly, E. P. (1929). *The Trumpeter of Krakow*. Macmillan.

Konigsburg, E. L. (1968). *From the Mixed-up Files of Mrs. Basil E. Frankweiler*. Atheneum.

Krumgold, J. (1954). *...And Now Miguel*. Crowell.

Krumgold, J. (1960). *Onion John*. Crowell.

Latham, J. L. (1956). *Carry on, Mr. Bowditch*. Houghton Mifflin.

Lawson, R. (1945). *Rabbit Hill*. Viking.

L'Engle, M. (1963). *A Wrinkle in Time*. Farrar, Straus and Giroux.

Lenski, L. (1946). *Strawberry Girl*. Lippincott.

Lewis, E. F. (1933). *Young Fu of the Upper Yangtze*. Winston.

Lofting, H. (1923). *The Voyages of Doctor Dolittle*. Lippincott.

Lowry, L. (1990). *Number the Stars*. Houghton Mifflin.

MacLachlan, P. (1986). *Sarah, Plain and Tall*. Harper and Row.

McKinley, R. (1985). *The Hero and the Crown*. Greenwillow.

Meigs, C. (1934). *Invincible Louisa*. Little, Brown.

Mukerji, D. G. (1928). *Gayneck, the Story of a Pigeon*. Dutton.

Naylor, P. R. (1992). *Shiloh*. Atheneum.

Neville, E. C. (1964). *It's Like This, Cat*. Harper and Row.

O'Brien, R. C. (1972). *Mrs. Frisby and the Rats of NIMH*. Atheneum.

O'Dell, S. (1961). *Island of the Blue Dolphins*. Houghton Mifflin.

Paterson, K. (1978). *Bridge to Terabithia*. Crowell.

Paterson, K. (1981). *Jacob Have I Loved*. Crowell.

Paterson, L. K. and Solt, M. L. (1982). *Newbery and Caldecott Medal and Honor Books: An Annotated Bibliography*. G. K. Hall.

Raskin, E. (1979). *The Westing Game*. Dutton.

Sawyer, R. (1937). *Roller Skates*. Viking.

Seredy, K. (1938). *The White Stag*. Viking.

Shannon, M. (1935). *Dobry.* Viking.

Sorensen, V. (1957). *Miracles on Maple Hill.* Harcourt Brace.

Speare, E. G. (1959). *The Witch of Blackbird Pond.* Houghton Mifflin.

Sperry, A. (1941). *Call It Courage.* Macmillan.

Spinelli, J. (1991). *Maniac Magee.* Little, Brown.

Taylor, M. D. (1977). *Roll of Thunder, Hear My Cry.* Dial.

van Loon, H. W. (1922). *The Story of Mankind.* Liveright.

Voight, C. (1983). *Dicey's Song.* Atheneum.

Willard, N. (1982). *A Visit to William Blake's Inn: Poems for Innocent and Experienced Travelers.* Harcourt Brace Jovanovich.

Wojciechowsky, M. (1965). *Shadow of a Bull.* Atheneum.

Yates, E. (1951). *Amos Fortune, Free Man.* Aladdin.

Gender Roles in the Newbery Medal Winners

Janet Powell, Cindy Gillespie,
Becky Swearingen, Nancy Clements

Sutherland and Arbuthnot (1991) report that, "In response to the feminist movement and a rising protest against sexism in children's books [there are now more children's books] that realistically parallel today's society and less depiction of stereotypical sex roles for both males and females, young or old" (p. 13). Gender roles in children's literature gained considerable attention during the 1970s and 1980s (Nilsen, 1971, 1978; Segel, 1982). Feminists on Children's Literature (1971) concluded that many of the Newbery winners, one of the most respected awards in children's literature, contained sexist language and negative portrayals of females.

An update of the 1971 Feminist study on the Newbery's was conducted by Kinman and Henderson (1985) examining the 1977 to 1984 winners. This study found that the number of books with females as the main characters had increased and that the majority portrayed positive images of females. While these two studies did an admirable job of assessing the portrayal of females, neither one took into account how males were portrayed. Several researchers have concluded that non-sexist literature is essential (Flux, Fidler & Rogers, 1976; Madsen & Wickersham, 1980). Children need stories about families and situations that are not unlike their own. Fewer children live in two parent homes and more children live in homes where the mother works outside the home. Children need role models that fit with society's expectations. In today's society, men are expected to be more involved

102

with child care and the home while women are still fighting for equal jobs and equal pay (O'Kelley & Carney, 1986).

The purpose of this investigation is to provide a complete review of the Newbery Medal winners from 1922-1992 to determine which are progressive or traditional in terms of gender roles and to identify trends in the numbers of male and female main characters. This study will assist teachers and parents in providing a variety of books in terms of gender roles and in determining if Sutherland and Arbuthnot's (1991) assertions regarding stereotypical sex roles hold true with the Newbery winners. The labels traditional and progressive for this investigation are defined as follows:

> **Traditional Females** - primary caretaker of children and home, sensitive, comforting, dependent, physically weak, jobs such as secretarial and clerical work or nursing;

> **Traditional Males** - primary provider, physically strong, brave, adventurous, independent, jobs such as law, business, and medicine;

> **Progressive Females** - married women working outside the home, physically strong, brave, independent, in male dominated jobs such as law and medicine;

> **Progressive Males** - caretakers of children and involved with duties at home, sensitive, working in female dominated jobs such as secretarial, clerical, and nursing.

When a book was borderline, that is, containing both progressive and traditional portrayal of gender, the time period in which the book was published was taken into account in assigning its label as well as the overall outcome of the story. For example, a few stories about females contained sexist language, but the story was about a female who overcame gender related obstacles. Books with no stereotyping by gender were also considered progressive.

Following are the Newbery winners, and the labels they were assigned with a brief rationale.

1922   *The Story of Mankind*   Traditional

This story of mankind explains that prehistoric man ". . . prowled about looking for things to eat. When night came, he hid his wife and his children in a hollow tree or behind heavy boulders" (p. 10). In Greek cities, "The lady of the house rarely left her domain. Whenever the women left their home they were as inconspicuous as possible" (p. 69).

1923   *The Voyages of Dr. Dolittle*   Traditional

Dolittle describes Dab Dab, a female duck, as "a perfect treasure of a housekeeper" (p. 30). Tommy, Dolittle's companion, says, "I found Dab Dab a very nice, old, motherly bird" (p. 75). Chee Chee, a male monkey who returns from Africa dressed as a girl, observes, "You've no idea how I grew to hate that hat and skirt. I've never been so uncomfortable in my life. . . . What on earth do women wear those things for?" (p. 82).

1924   *The Dark Frigate*   Traditional

Males, mostly sailors described as fighters and drunkards, are the major characters. Three minor women characters are described as "rough." One is described as a "vixen at heart" (p. 6). Another learned to cook because she believed: ". . .what can a woman do when her beauty's gone but hold a man by the food she sets before him" (p. 66).

1925   *Tales from Silver Lands*   Traditional

This assortment of short stories is predominantly traditional. In A Tale of Three Tails two brothers are told by an iguana, "I must do what I can, is the thought of a man" (p. 8). In Na-Ha the Fighter, Na-Ha is described as a boy who smiled at danger, was as strong as a wild wind, with muscles knotted like oak branches.

1926   *Shen of the Sea*   Traditional

This book is a collection of Chinese tales. In Chop Sticks, two old bachelors' lives are changed when they marry: "It [marriage] promotes the fortunes of some men. Other men go from bad to worse" (p. 55). In Many Wives, Wong marries several women, then asks an artist to paint portraits of all his wives so he could select the prettiest to be his true bride.

1927   *Smoky, The Cowhorse*   Traditional

Smoky (a horse) and his owner, Clint, are the main characters. Clint is described as the "All-American cowboy" who "...had broken nearly 80 horses, even though he had been injured many times." (p. 83).

1928   *Gayneck: The Story of a Pigeon*   Progressive

Male and female pigeons are portrayed progressively: "Among the swifts, women are not so emancipated as among the pigeons. Our women enjoy equal rights with men, but the female swift has always the larger part of the work to do...Mr. Swift never sets on the eggs; he lets his wife do it. Occasionally he brings her food during the day, but otherwise he spends all his waking hours visiting male swifts whose

104

wives are similarly occupied. I told my friend Swift he ought to copy the pigeons and give more freedom to his wife, but he seemed to think this a pet joke of mine" (pp. 83-84).

| 1929 | *The Trumpeter of Krakow* | Traditional |

The major characters are males. Jan is described as an educated man who loved learning for its own sake. At one point a male character says to a female: "Truly, I know not why you should not read as do men, but I know of no women who ever entered the university" (p. 107).

| 1930 | *Hitty, Her First Hundred Years* | Traditional |

Hitty, a doll, was sold to the Prebles by an old peddler who "Worked when...the weather was not too cold for farmers' wives and daughters to stand on their doorsteps as he spread his wares" (p. 4). Captain Preble, a sailor, says, "They all say a vessel's no place for women folks..." (p. 36). One sailor reminded the others "We got ladies aboard...We'll have to mind our P's and Q's" (p. 38).

| 1931 | *The Cat Who Went to Heaven* | Traditional |

A young male artist displays displeasure over a cat the housekeeper has brought home. When she begins to cry, he agrees to keep the cat. Even though the two have disagreements over the cat, the housekeeper "...did not contradict. She knew her place better than that" (p. 7).

| 1932 | *Waterless Mountain* | Traditional |

The focus of the story is a Navajo boy and his family. The father was a silversmith and cattle owner. The mother did her housework, spun and wove wool, and tended sheep. Several Navajo traditions and customs (the selection of mates, mothers-in-law of husbands never to be in their presence) are described.

| 1933 | *Young Fu* | Traditional |

When Fu's mother is asked if she can read, she replies, "No, I am but a stupid country woman...The village was too small to support a school, and if there had been one, no child could have been spared from the fields. Yes, girls perhaps might, but who would waste good money trying to educate girls" (p. 19). Foot binding is also discussed: "...even though deformed feet permitted a woman to work only around the house, they were important in getting a husband" (p. 40).

| 1934 | *Invincible Louisa* | Progressive |

Louisa May Alcott was not fond of housework; she was impatient and rebellious. "Much of the time, the older three were taken care of by

their father when their mother was too busy" (p. 38). Louisa began to teach because "Teaching was really considered to be the only fairly respectable pursuit for young ladies, and even that was looked down upon by those who thought, at that time, that leisure was more dignified than work" (p. 106). Eventually, she gave up teaching to become an author.

| 1935 | *Dobry* | Progressive |

Dobry, a young boy, wants to become an artist. He lives with his grandfather and his mother, Roda, who worked inside the house and outside tending her fields. Both men and women were expected to work in the fields while the girls and boys went to school.

| 1936 | *Caddie Woodlawn* | Progressive |

After the death of one of his daughters due to poor health, Caddie's father said to his wife, "I want you to let Caddie run wild with the boys. Don't keep her in the house learning to be a lady. I would rather see her learn to plow than make samplers if she can get her health by doing so" (p. 13). As Caddie starts to get older, her father says, "...I don't want you to be the silly, affected person with fine clothes and manners, whom folks sometimes call a lady.... I want you to be a woman with a wise and understanding heart, healthy in body and honest in mind" (pp. 239-40).

| 1937 | *Roller Skates* | Traditional |

Lucinda's tendency to speak out caused her uncle great concern: "You'll outgrow it. You've got to. Think of the young men who'll want to fall in love with you and can't because of that tongue!" (p. 77). When a male friend's fruit stand is knocked down by bullies,". . . the boy nearly cried. It told how much of a boy he was that he really didn't cry" (p. 36). Lucinda witnessed her friend's mother smoking; she ". . . never dreamed it even possible that a woman could smoke" (p. 100).

| 1938 | *The White Stag* | Traditional |

This story of Attila the Hun consists mainly of male characters. "Men tore boulders from the mountainside and rolled them to the altar. Women and children carried clay from the river in their hands" (p. 26).

| 1939 | *Thimble Summer* | Progressive |

Garnet, a young girl, shows courage and strong will when she leaves home and hitchhikes to town after becoming fed up with helping her mother cook for the threshers. Eventually she helps the males with the threshing, but does not receive a warm welcome: "'Well for Pete's

sake!' he said angrily. 'you certainly made a mess of it that time all right! Why don't you stay home and help mother? Threshing isn't anything for girls to be monkeying with anyway; home with a dish towel, that's where you belong!'" (p. 69).

| 1940 | *Daniel Boone* | Traditional |

Males are portrayed as strong and heroic; females, when they are mentioned, are portrayed traditionally: "The women put on their sunbonnets and shawls and climbed aboard and the men of the tribe of Boone loaded their rifles and mounted good horse-flesh" (p. 15).

| 1941 | *Call it Courage* | Traditional |

Mafatu, a young Polynesian boy, attempts to prove his manhood to the people in his village. Even though Mafatu proves himself a good spear maker, he is shunned by his people until he overcomes his fear: "They worshipped courage...There was only courage. A man who was afraid--what place had he in their midst? It was the sea that Mafatu feared" (pp.7-8).

| 1942 | *The Matchlock Gun* | Traditional |

A young boy, Edward, is credited with saving his family from Indians. However, it is really Edward's mother who plans the defense, and it is she who runs outside during the attack so that Edward can have a clear shot ' the Indians. Edward receives the credit in the end: "'Who shot them, Edward?' 'I did . . .,' said Edward" (p.50).

| 1943 | *Adam of the Road* | Traditional |

Adam, a young boy living in 1294, is portrayed as humble and brave. Females are mentioned in passing: "'It doesn't matter what she'd rather do,' said Hugh carelessly. 'She's only a girl. She's got to do what she's told'" (pp. 84-85).

| 1944 | *Johnny Tremain* | Traditional |

The males learn a trade while the women primarily cook and raise children: "His mother patiently sewing and sewing to keep life in her son's body. She wanted no more life for herself" (p. 233).

| 1945 | *Rabbit Hill* | Traditional |

The males are portrayed as daring, wise, and sometimes careless. The females are portrayed as weak and emotional: "You know women folks is funny like and particular about some things and your Maw is *extra* particular" (p. 68).

| 1946 | *Strawberry Girl* | Progressive |

The females are the major characters who resolve a family feud on which the story is based. Because of their strength and wisdom, the book is rated progressive. However, the roles that the males and females take are very traditional. The females cook, do dishes, care for the young, and assist the males in planting and tending the fields. The males generally care for the livestock and build fences (pp. 1, 21).

| 1947 | *Miss Hickory* | Progressive |

As Miss Hickory spends the winter without the care of her owner, she becomes more independent and at one point encourages all the Hen-Pheasants to unite when their husbands leave them for the winter: "'Hen...are there other hens in the same difficulty as you?' 'All of us. Our cocks refuse to nest with us in the winter. They live together in their club on the other side of the brush pile until spring.' 'Then,' Miss Hickory told her, 'you must do the same. . . . If you take a stand, no cock will dare drive you out. You must form a Ladies' Aid Society'" (pp. 43-44).

| 1948 | *The Twenty-one Balloons* | Traditional |

Females are only mentioned in passing: "Ladies revived the balloon fashions in dresses which had been popular in France a hundred years before. Fat ladies gave up their diets. Everybody talked about 'that round look'" (p. 19).

| 1949 | *King of the Wind* | Traditional |

All major characters are males in traditional roles. Females have very minor, almost incidental roles: "Under the kind mothering of Mistress Cockburn, Agba thrived too" (p. 30).

| 1950 | *The Door in the Wall* | Traditional |

The males are expected to be brave and fight the war: "Tears of vexation started to his eyes, but he held them back, for he remembered that a brave and 'gentile' knight does not cry" (p. 7). The females are strictly the caretakers of the children: "You, my dear wife, gather all the women and children into the keep..." (p. 78).

| 1951 | *Amos Fortune: Free Man* | Traditional |

"Roger learned the weaving trade, married and moved to Acton to establish himself there as a weaver. Roxanna grew to be as tall as her father, as skilled in the work of the house as her mother" (p. 43).

1952   *Ginger Pye*   Progressive

Although there are traditional references to gender, there are other references to gender that make this book progressive for its time, especially in relation to Rachel. She often dreams of nontraditional roles for herself, such as becoming a bird man like her father (p. 20) and a minister (p. 39). Rachel is treated as an equal to her brother Jerry.

1953   *Secret of the Andes*   Traditional

All of the major and minor characters are males and are caretakers of the llamas. They are portrayed as wise and strong. Females are only mentioned in passing.

1954   *... And Now Miguel*   Traditional

The men take care of the sheep and the women care for the home: "That's for Mama and the girls to figure out. Their worry. What we got to worry about is the flock" (p. 126).

1955   *The Wheel on the School*   Progressive

Of the six main characters, only Lina is female. She brings up the central question of the story as to why storks no longer live in the village. She is also the one who eventually finds the wagon wheel that the storks use to build their nest. In spite of many sexist remarks throughout the story, Lina was a strong character. She demonstrated courage by overcoming her fear of watchdogs (pp. 103, 127) and stood unpanicked on an overturned boat as the tide came n (pp. 179-80).

1956   *Carry on, Mr. Bowditch*   Traditional

The males go to sea while the women wait at home for their return. The main character, Nat, does break from traditional male roles when he admits to being cold at the risk of being called a "sissy" (p. 29). Overall, however, gender roles are very traditional.

1957   *Miracles on Maple Hill*   Traditional

When Marly and her family move into a new house: "Daddy and Joe went out to look at the old barn while Marly and Mother looked at things in the cupboard. 'First can I see the rest of the house?' Marly asked...'Of course,' Mother said, 'but Marly--this is the first place we women have to start to dig'" (p. 25).

1958   *Rifles for Waite*   Traditional

When the Missouri bushwhackers demand food at the Bussey home, "Without a word Jeff's mother and the girls stepped inside to prepare

the meal" (p. 10). One day when Jeff is hungry, he says to a woman, "You got any man's work needs to be done around here? Anything you want lifted, any fence to fix?" (p. 79).

1959	*The Witch of Blackbird Pond*	Progressive

Learning that Kit, the main character, can read, John exclaims, "Plays! Your grandfather allowed girls to read such things?" (p. 25). Kit defends herself: "If I am earning wages, . . . then perhaps you will all think I am of some use, even if I'm not a boy" (p. 8). Kit jumps overboard, and is accused of being a witch because women are not supposed to be able to swim. When Kit realizes that the men of the community are going to burn her friend's house, she goes against her uncle's wishes and races out in a storm to rescue Hannah.

1960	*Onion John*	Traditional

The friendship between Andrew and an immigrant odd-job man is the focus of this story. Andrew's father expects him to do better than to run a hardware store. A teacher confirms this, "You're in the seventh grade ar d you're going to major in mathematics. You're interested in science. And you're headed for the Massachusetts Institute of Technology...You're going into physics." (p. 130). When the community bands together to build Onion John a new house, the men do the hammering while the women serve sandwiches and coffee.

1961	*Island of the Blue Dolphins*	Progressive

After most of the men are killed, "The women...must take the place of the men and face the dangers which abound beyond the village" (p. 26). Krana recalls "The laws of Ghalas forbade the making of weapons by women of the tribe, so I went out in search for any that might have been left behind" (p. 51). "I crawled behind a big rock. . . . I then got to my feet and fitted an arrow to the bow. . . I suddenly remembered my father's warning that, because I was a woman, the bow would break" (p. 82).

1962	*The Bronze Bow*	Progressive

When Thacia, a young girl, asks Daniel, the main character, to tell her the story of some murders, he responds, "It's not a good story for a girl to hear" (p. 89). Yet Thacia doesn't give up: "'Why can't a girl serve Israel too? What about Deborah and Queen Esther? Let me swear it too, Joel? I promise to help you.' Joel explodes, 'No! This is a man's vow! It's not for a pretty child'" (p. 85). Thacia does take the vow, risks danger, and goes against her father's wishes.

1963   *A Wrinkle in Time*   Progressive

Meg's father, a scientist, is lost in a time warp. Meg and her brother join a friend to save him. When one of the boys at school calls her baby brother dumb, Meg ". . . threw the books on the side of the road and tackled him with every ounce of strength she had, and arrived home with her blouse torn and a big bruise under one eye" (p. 4).

1964   *It's Like this, Cat*   Traditional

Dave, a young man, is the main character. His mother is a housewife; his father, a lawyer. Dave meets a girl and they go to lunch. When she pays, Dave thinks, "I want to pay it. I suppose it's a silly thing to get sore about, but it sort of annoys me" (p. 137).

1965   *Shadow of a Bull*   Traditional

Manola believes he is a coward. He practices bullfighting in private: "He did all this alone and in secret, afraid of being discovered. He still knew that he was a coward, but he also knew that he was working at overcoming his cowardice" (p. 53). The mother plays a very minor role, but is subservient believing everything is "as it shall be" (p. 26).

1966   *I, Juan de Pareja*   Traditional

This historical novel takes the form of an autobiography of a slave, Juan. As a servant he was expected to ". . . walk just a step behind her, carrying her sweetmeat box, her rosary, and a little switch with feather tufts, to be used for frightening away mangy dogs or dirty street urchins who might press too close" (p. 7).

1967   *Up a Road Slowly*   Traditional

Aunt Cordelia, a teacher, takes in her niece, Julie. "Half of Aunt Cordelia's life had been spent in caring for her aged mother and two spinster aunts..." (p. 13).

1968   *From the Mixed-up Files*   Progressive
                     of Mrs. Basil E. Frankweiler

Twelve-year-old Claudia decides to run away, taking her nine-year-old brother, Jamie. Claudia's character shows ingenuity and resourcefulness. Claudia said, "Manhattan called for the courage of at least two Kincaids" (p. 27).

1969   *The High King*   Progressive

Set in a mythical land, Princess Eilonwy is a heroine who saves an all-male army. She is intelligent and physically strong. She "helped load carts with gear and provisions" (p. 114). At one point a comrade says

". . . And if I know the Princess, I wouldn't be surprised to see her galloping up at the head of her own army" (p. 179).

1970   *Sounder*   **Traditional**

"The father left the porch and went to the woodpile at the edge of the rim of light. The boy followed, and each gathered a chunk-stick for the cabin stove. . . Inside the cabin, the boy's mother was cutting wedge-shaped pieces of corn mush from an iron pot that stood on the back of the stove. She browned them in a skillet and put them on the tip topped table in the middle of the room" (p. 6).

1971   *Summer of the Swans*   **Traditional**

Sara and her brother are put into the care of Aunt Willie, who is a homemaker. She "came onto the porch drying her hands on a dish towel" (p. 24). When Sara must look for her lost brother she relies on a male friend to help her.

1972   *Mrs. Frisby and the Rats of NIMH*   **Progressive**

In search of medicine for her sick child, Mrs. Frisby consults with an owl who advises her to go to the rats under the Rosebush. There she learns of the rats' plan to become self-sufficient so they never need to steal again. The rats agree to help Mrs. Frisby, but she must slip a potion into Dragon's food. Mrs. Frisby accepts this challenge and becomes the heroine of the story.

1973   *Julie of the Wolves*   **Progressive**

Julie presents great insight into the Eskimo way of life through her struggle to survive alone in the Arctic slope. Julie refuses to accept her arranged marriage and attempts to go to San Francisco to find her pen pal. On her way, she meets up with a pack of wolves and gains acceptance into the pack.

1974   *The Slave Dancer*   **Traditional**

Jesse, a Creole, recalls the summer of 1840 when he was press-ganged aboard a slave ship bound for Africa. "My sister Betty, had once embroidered a piece of linen . . . I did not brood upon them much. . . When I did picture them, they moved silently about doing the things I had seen them do all my life, sewing and cleaning, washing and eating, going to market" (p. 46).

1976   *M. C. Higgins, the Great*   **Progressive**

One of the characters in this story is working her way across the country on her own. M. C.'s mother is very strong and appears to be ᵤie

major financial provider for the family. M. C.'s father is involved in traditional female roles. M. C. "... had to admire the way Jones could stand at the stove with Banina's apron pinned to his shirt just below the waist" (p. 185).

1976   *The Grey King*   **Traditional**

Will and Bran are two boys who must confront and overcome the powers of darkness. Women play very minor roles: "He slipped upstairs to his room to hide the harp, calling a greeting to Aunt Jen. She called back over her shoulder without turning, stirring a pot carefully at the stove" (p. 138).

1977   *Roll of Thunder, Hear my Cry*   **Progressive**

Mary, the mother, is a strong and independent character throughout the story. She loses her teaching job for teaching black history. When the father went to work on the railroad, "Mama would teach and run the farm; Big Ma [the grandmother] would work like a woman of twenty in the fields and keep the house" (p. 7).

1978   *Bridge to Terabithia*   **Progressive**

The deep friendship between Jess and Leslie was a source of concern for Jess' parents. "His father had seen Leslie only a few times and had nodded to show that he had noticed her, but his mother said that she was sure he was fretting that his only son did nothing but play with girls, and they both were worried about what would become of it" (p. 46).

1979   *The Westing Game*   **Progressive**

The main character, Turtle, is in conflict with her older sister, Angela, who is engaged to be married and is basically being cared for by her family and fiancee. However, by the end of the story, Angela is no longer engaged and has decided to pursue a medical degree of her own. Turtle "...had a master's degree in business administration, an advanced degree in corporate law, and had served two years as legal counsel to the Westing Paper Products Corporation. She had made one million dollars in the stock market, lost it all, then made five million more" (p. 182). Their mother operated a chain of nine restaurants.

1980   *A Gathering of Days*   **Traditional**

In this journal of Catherine's life, she discusses her competence in sewing through the making of a quilt. She also discusses such tasks as picking berries and sorting herbs.

1981   *Jacob Have I Loved*   Progressive

Louise's desire is to become a doctor, but her university advisor tells her she will never get into medical school. "He wished it were different, he said, but . . . the chances of a girl, 'even a bright girl like you' getting into medical school were practically nonexistent" (p. 166). She decides to ". . . become a nurse-midwife, spend a few years in the mountains where doctors were scarce, and then use my experience to persuade the government to send me to medical school on a public health scholarship" (p. 166).

1982   *A Visit to William Blake's Inn*   Traditional

In this book of poetry, most of the characters are male: William Blake, a sick child, the King of Cats, the man with the marmalade hat. The poetry itself does not give much information about gender roles; however, the pictures present males and females in traditional roles (pp. 15, 19, 21, 27, 31, 35, 42).

1983   *Dicey's Song*   Progressive

Dicey is in conflict with the school because she would rather take shop than home economics (p. 19). Dicey must make an apron for home economics and show it to the class. It is so poorly done that when Dicey shows it to the class everyone laughs. She then tells a friend, "I wanted to take mechanical drawing . . . if I were a boy, they'd have found room for me in that class" (p. 55).

1984   *Dear Mr. Henshaw*   Traditional

"Katy says all women . . . had to be good cooks" (p. 18). "All the boys in my class are writing weird stories full of monsters, lasers, and creatures from outer space. Girls seem to be writing mostly poems or stories about horses" (p. 85).

1985   *The Hero and the Crown*   Progressive

Aerin is looking for recognition in spite of the constraints on females in her society. "No women rode in Arlbeth's army. A few bolder wives might be permitted to go with their husbands...those who could be trusted to smile at Nyrlol . . . and curtsy to him as befitted his rank . . . and even dance with him if he should ask . . . no wife would go unless her husband asked her, and no husband would ask unless he had asked the king first" (pp. 7-8). Nevertheless, Aerin becomes a dragon slayer and finds the Hero's Crown which saves her kingdom.

1986   *Sarah, Plain and Tall*   Progressive

Sarah answers an ad for a bride and heads to the prairies to a family she has never met. She is a very strong woman who insists on wearing overalls, plowing fields, riding horses, and driving wagons. She writes to her future husband "I am strong and I work hard and I am willing to travel. But I am not mild mannered" (p. 9).

1987   *The Whipping Boy*   Progressive

Jemmy must take any whippings for Prince Brat when the prince misbehaves. Jemmy and Prince Brat are taken by outlaws and rescued by Betsy, the only female in the story. She is a bear trainer who shows no fear and plays a very nontraditional role as the boys' rescuer.

1988   *Lincoln: a Photobiography*   Traditional

Women are mentioned primarily in conjunction with Mary Todd Lincoln. "As was the custom in those proper Victorian days, Lincoln called his new bride Mary, while she addressed him as Mr. Lincoln. But this soon changed to Mother and Father" (p. 32).

1989   *Joyful Noise: Poems for Two Voices*   Progressive

There is very little gender stereotyping throughout this poetry book about insects. Instead of referring to the insects as "he" or "she," the term "it" is used. For this reason, the book has been labeled progressive.

1990   *Number the Stars*   Progressive

Ellen and her family are being "relocated" to a concentration camp. Annemarie's family helps them escape. Annemarie and her mother are brave and strong. When Ellen's family is taken to the boat, they leave a package behind. Annemarie must take it to them. Her mother warns, "If any soldiers see you, if they stop you, you must pretend to be nothing more than a ... silly, foolish emr ,-headed girl, taking lunch to a fisherman" (p. 105). Annemarie is stopped and follows her mother's advice. Because of Annemarie's actions, all arrive safely in Sweden.

1991   *Maniac Magee*   Progressive

Maniac is an orphan. Maniac "played with the little ones and read them stories and taught them things. He took Bow Wow out for runs and he did the dishes without anybody asking" (p. 45). Maniac takes care of Amanda's younger siblings and, to some extent, takes care of Grayson, an elderly man with whom Maniac lives until Grayson's death.

115

1992   *Shiloh*   Traditional

This is the story of a boy and his dog. The primary female characters are Marty's mother and sister. "It's Friday morning when I hear the sound. Dad's off on his mail route, Dara Lynn and Becky's watching cartoons on T.V., Ma's out on the back porch washing clothes in the old washing machine that don't work - only the wringer part works if you turn it by hand. I'm sitting at the table eating a piece of bread sp   ˀd with lard and jam..." (p. 40).

Conclusions

The Newbery Medal books have shown improvement in gender roles and the balance between male and female characters. As seen in Table 1, since 1972 the winners have shown more progressive gender roles and female main characters. Sutherland and Arbuthnot (1991) were correct in saying that there are more balanced books today, but are they as progressive as one might think?

Table 1

Percentages of Progressive and Traditional Gender Labels and Male and Female Main Characters in the Newbery Medals

Years	Traditional	Progressive	Male	Female
1922-1931	90%	10%	90%	10%
1932-1941	60	40	60	40
1942-1951	80	20	80	20
1952-1961	60	40	55	45
1962-1971	60	40	55	45
1972-1981	30	70	30	70
1982-1991	30	70	50	40
1992	100	0	100	0

While by today's standards one would expect a balance between the numbers of male and female main characters to be fair, the number of

traditional portrayals of males and females since the 1970s is disturbing. It is necessary to portray male and female characters according to the time period in which the story takes place. However, many good stories tell of strong women, overcoming obstacles set by society's standards in that time period. Good examples of this would be *Invincible Louisa* and *Island of the Blue Dolphins*. Other books with male main characters that are progressive such as *Bridge to Terabithia* and *Maniac Magee* are excellent examples of how males can be portrayed progressively. It would seem that given today's standards, more if not all, of the books should be labeled progressive.

We do not intend to give the impression that all of the books labeled as traditional should never be used in the classroom. Many of these books are excellent. We would like to suggest that teachers using these books should use a balance, perhaps having students compare the differences between gender roles between two books. Also, when an historical fiction book is used, students should be allowed to discuss the differences between the roles males and females took in those days and the more progressive views of today.

References

Flux, V. C., Fidler, D. S., & Rogers, R. W. (1976). Sex-role stereotypes: Developmental aspects and early intervention. *Child Development, 47*, 998-1007.

Feminists on children's literature. (1971). A feminist look at children's books. *School Library Journal, 17*, 19-24.

Kinman, J. R., & Henderson, D. L. (1985). An analysis of sexism in Newbery Medal Award books from 1977 to 1984. *The Reading Teacher, 38*, 885-89.

O'Kelley, C., & Carney, L. S. (1986). *Women and men in society* (2nd ed.). Belmont, CA: Wadsworth.

Madsen, J. M. & Wickersham, E. B. (1980). A look at young children's realistic fiction. *The Reading Teacher, 34*, 273-79.

Nilsen, A. P. (1978). Five factors contributing to the unequal treatment of females in children's picture books. *Top of the News, 34*, 255-59.

Nilsen, A. P. (1971). Women in children's literature. *College English, 32*, 918-26.

Segel, E. (1982). Picture-book sex roles revisited. *School Library Journal, 28*, 30-31.

Sutherland, Z., & Arbuthnot, M. H. (1991). *Children and Books* (8th ed.). New York: Harper Collins.

Newbery Medal Winners

Year	Title/Author/Publisher	Gender	Main Character
1922	*The Story of Mankind*, H. W. van Loon, Liveright	T	M
1923	*The Voyages of Dr. Dolittle*, H. Lofting, Lippincott	T	M
1924	*The Dark Frigate*, C. Hawes, Atlantic/Little	T	M
1925	*Tales from Silver Lands*, C. Finger, Doubleday	T	M
1926	*Shen of the Sea*, A. Bowie Chrisman, Dutton	T	M
1927	*Smoky, The Cowhorse*, W. James, Scribner's	T	M
1928	*Gayneck, The Story of a Pigeon*, D. G. Mukerji, Dutton	P	M
1929	*The Trumpeter of Krakow*, E. P. Kelly, Macmillan	T	M
1930	*Hitty; Her First Hundred Years*, R. Field, Macmillan	T	F
1931	*The Cat Who Went to Heaven*, E. Coatsworth, Macmillan	T	M
1932	*Waterless Mountain*, L. A. Armer, Longman	T	M
1933	*Young Fu*, E. F. Lewis, Winston	T	M
1934	*Invincible Louisa*, C. Meigs, Little	P	F
1935	*Dobry*, M. Shannon, Viking	P	M
1936	*Caddie Woodlawn*, C. R. Brink, Macmillan	P	F
1937	*Roller Skates*, R. Sawyer, Viking	T	F
1938	*The White Stag*, K. Seredy, Viking	T	M
1939	*Thimble Summer*, E. Enright, Holt, Rinehart and Winston	P	F
1940	*Daniel Boone*, J. Daughtery, Viking	T	M
1941	*Call it Courage*, A. Sperry, Macmillan	T	M
1942	*The Matchlock Gun*, W. D. Edmonds, G. P. Putmans's Sons	T	M
1943	*Adam of the Road*, E. J. Gray, Viking	T	M
1944	*Johnny Tremain*, E. Forbes, Houghton Mifflin	T	M
1945	*Rabbit Hill*, R. Lawson, Viking	T	M
1946	*Strawberry Girl*, L. Lenski, Harper Collins	P	F
1947	*Miss Hickory*, C. S. Bailey, Puffin Books	P	F

Year	Title/Author/Publisher	Gender	Main Character
1948	*The Twenty-one Balloons*, w. Pene Du Bois, Viking	T	M
1949	*King of the Wind: The Story of the Godolphin Arabian*, M. Henry, Checkerboard	T	M
1950	*The Door in the Wall*, M. De Angeli, Doubleday	T	M
1951	*Amos Fortune: Free Man*, E. Yates, Puffin Books	T	M
1952	*Ginger Pye*, E. Estes, Harcourt Brace Jovanovich	P	F
1953	*Secret of the Andes*, A. N. Clark, Puffin Books	T	M
1954	*. . . And Now Miguel*, J. Krumgold, Harper Collins	T	M
1955	*The Wheel on the School*, M. DeJong, Harper Collins	P	F/M
1956	*Carry on, Mr. Bowditch*, J. L. Latham, Houghton Mifflin	T	M
1957	*Miracles on Maple Hill*, V. Sorensen, Harcourt Brace Jovanovich	T	M
1958	*Rifles for Waite*, Harold Keith, Crowell	T	M
1959	*The Witch of Blackbird Pond*, E. G. Speare, Houghton Mifflin	P	F
1960	*Onion John*, J. Krumgold, Crowell	T	M
1961	*Island of the Blue Dolphins*, S. O'Dell, Houghton Mifflin	P	M
1962	*The Bronze Bow*, E. G. Speare, Houghton Mifflin	P	F/M
1963	*A Wrinkle in Time*, M. L'Engle, Farrar	P	F/M
1964	*It's Like This, Cat*, E. C. Neville, Harper	T	M
1965	*Shadow of a Bull*, M. Wojciechowska, Atheneum	T	M
1966	*I, Juan de Pareja*, E. B. de Trevino, Farrar	T	M
1967	*Up a Road Slowly*, I. Hunt, Follet	T	F
1968	*From the Mixed-up Files of Mrs. Basil E. Frankweiler*, E. L. Konigsburg, Atheneum	P	F
1969	*The High King*, L. Alexander, Holt, Rinehart and Winston	P	M
1970	*Sounder*, W. H. Armstrong, Harper	T	F
1971	*Summer of the Swans*, B. Byars, Viking	T	F

1972	*Mrs. Frisby and the Rats of NIMH*, R. C. O'Brien, Antheneum	P	F
1973	*Julie of the Wolves*, J. Craighead George, Harper	P	F
1974	*The Slave Dancer*, P. Fox, Bradbury	T	M
1975	*M. C. Higgins, the Great*, V. Hamilton, Macmillan	P	F
1976	*The Grey King*, S. Cooper, Atheneum/McEdlerry	T	M
1977	*Roll of Thunder, Hear My Cry*, M. D. Taylor, Puffin Books	P	F
1978	*Bridge to Terabithia*, K. Paterson, Crowell	P	M
1979	*The Westing Game*, E. Raskin, Dutton	P	F
1980	*A Gathering of Days: A New England Girl's Diary 1930-82*, J. W. Blos, Scribner	T	F
1981	*Jacob Have I Loved*, K. Paterson, Crowell	P	F
1982	*A Visit to William Blake's Inn*, N. Willard, Harcourt Brace Jovanovich	T	M
1983	*Dicey's Song*, C. Voight, Atheneum	P	F
1984	*Dear Mr. Henshaw*, B. Cleary, Morrow	T	M
1985	*The Hero and the Crown*, R. McKinley, Greenwillow	P	F
1986	*Sarah, Plain and Tall*, P. MacLachlan, Harper	P	F
1987	*The Whipping Boy*, S. Fleischman, Greenwillow	P	M
1988	*Lincoln: a Photobiography*, R. Freedman, Clarion/Houghton Mifflin	T	M
1989	*Joyful Noise: Poems for Two Voices*, P. Fleischman, Harper	P	NA
1990	*Number the Stars*, L. Lowry, Houghton Mifflin	P	F
1991	*Maniac Magee*, J. Spinelli, Little-Brown	P	M
1992	*Shiloh*, P. R. Naylor, Dell	T	M

T = Traditional   M = Male   NA = Not Applicable

P = Progressive   F = Female

The Relationship of Gender to Attitudes About Academic and Recreational Reading

Thomas Cloer, Jr., Beverly Pearman

As we approach the twenty-first century, traditional instruction and evaluation in reading are being challenged by more contextualized and "authentic" alternatives. One must say "whole language" and "portfolios" numerous times just to gain admittance to any important gathering of reading educators. Comparisons of any student with a norm group supposedly causes anxiety rather than serving as a veritable source of insight. This has led to a shortage of assessment instruments that have reliable and valid normative data.

There is one glaring exception. McKenna and Kear (1990) have helped ameliorate this problem. Jim Davis, creator of the Garfield cat, and United Features, the publisher of Garfield, have allowed McKenna and Kear to use Garfield in developing the Elementary Reading Attitude Survey. This assessment instrument, supported by numerous validity and reliability studies (McKenna and Kear, 1990), gives a recreational and academic reading attitude score for grades 1-6.

The objective of this study was to administer this instrument to many different teachers and students, grades 1-6, from several different schools and analyze the difference between the attitudes of boys versus girls in recreational and academic reading. We also wanted to examine whether teachers' attitudes in recreational and academic student reading differs significantly from the children's attitudes and whether teachers could predict student attitudes based on gender.

Review of Literature

The most recent results from the National Assessment of Educational Progress (NAEP) show that females at ages 9, 13, and 17 outperformed their male counterparts in each of the six NAEP reading assignments nducted from 1971 to 1990. These data (1991) also revealed that the reading proficiency of males still trailed that of females in 1990 at all five levels of difficulty. The gap between males and females was about the same in 1990 as in 1971. The national assessments have shown that across all age groups, students who frequently read for fun were likely to have the highest proficiency; those who never read recreationally had the lowest. One-tenth of the students in each age group reported that they never read for pleasure.

For writing proficiency, NAEP data show that females at all grade levels performed noticeably better than their male counterparts. NAEP (1991) reported that their results for males and females support numerous studies that have revealed gender differences favoring females in reading and writing.

Ostling (1992) reviewed the most recent report compiled by the Wellesley College for Research on Women. This Wellesley report synthesized hundreds of studies of girls' achievement from preschool through grade 12. There was much male-bashing for scoring higher on both the verbal and math portions of the SAT in 1991, for outperforming girls in math, physics, and biology, and for a larger percentage of boys than girls choosing calculus. The report concluded that boys do well by intimidating girls into silence, by monopolizing discussions, and by stealing an inordinate amount of the teacher's attention.

But even the Wellesley authors admit that girls do better than boys in reading and writing starting in the elementary years and continuing through high school. In that respect, the Wellesley report and the NAEP data from 1971-1990 agree that boys do worse in language arts than girls. But what about attitudinal differences?

Ross and Fletcher (1989) studied attitudes toward reading of 189 rural Tennessee children, 109 inner-city children, and 202 children from a school in a university town. These students were from grades three, four, and five. They discovered that rural children had the worst attitudes, followed by inner-city children. Students from the university town knew more about literature and had the best attitudes. Girls in all areas had better attitudes than boys.

Smith (1991) conducted a longitudinal investigation of reading attitude development from childhood to adulthood. Measures of reading attitudes were collected from 84 subjects when they were in

grades 1, 6, 9, and 12, and when they were five years beyond high school. Females had significantly higher positive attitude scores than did males.

Dwyer and Reed (1989) studied the effects of sustained silent reading on attitudes of males and females in secondary school. While girls' scores in the experimental group gained slightly on the post test, boys' scores dropped. Boys had significantly poorer attitudes toward reading.

Cloer and Pearman (1991) researched the relationship of teachers' attitudes and classroom behaviors to students' attitudes about recreational and academic reading. They found that students in the primary grades had better attitudes than the middle grade students in relation to recreational and academic reading. They also found to the utter dismay of many, that time spent directing the basal was significantly and positively related to students' recreational and academic attitudes. In fact, teachers' time spent directing the basal lessons in grades 4-6 and silent reading of teachers for their own pleasure accounted for 62.4% of the variance in students' attitudes toward academic reading. The teachers' attitudes toward reading were also significantly related to students' attitudes.

A question emerges after a review of literature regarding sex differences in reading. What is the degree of relationship between the attitudes of teachers and the attitudes of children toward different types of reading and reading related activities?

The research data do suggest rather convincingly that girls achieve better in language arts than boys and have better attitudes. This current study is an attempt to investigate if this is true, and if true, why? Are females superior to males in relation to variables predicting the reading process? Why do girls perform better at all grade levels in writing proficiency? What role does the teacher's attitude play? Do teachers' attitudes toward reading predict boys' attitudes? Is there a difference between boys' attitudes toward academic versus recreational reading? Is there a difference between teachers' attitudes toward academic versus recreational reading? Do attitudes change significantly in the intermediate grades (4-6) as opposed to primary grades?

There are a few of the questions that served as a catalyst for the current study.

Purpose

The current study attempted to determine the differences between males' and females' attitudes toward recreational and academic read-

ing. The study sought to analyze the differences between teachers' attitudes and the attitudes of male and female pupils. The study also examined similarities. The relationship between boys' and girls' attitudes for recreational and academic reading was analyzed. The relationship between the teachers' attitudes and the attitudes of male and female pupils was also analyzed.

Subjects

The subjects for this study were 280 pupils and 18 teachers in 18 classrooms from grades 1-3, and 315 pupils and 16 teachers in 16 classrooms from grades 4-6. Teachers volunteered to participate in the study. The study was conducted in the fall after teachers had been in their respective grades for at least a month. The teachers were guaranteed anonymity by selecting a number that only they knew, and by submitting student data with the correct corresponding number. Children were also guaranteed anonymity and simply identified their gender with a "B" or "G" at the top of their attitude survey.

The study analyzed 18 classrooms, grades 1-3, and 16 classrooms, grades 4-6. There were 15 different schools and 34 different teachers. The findings of the primary grades were compared to the findings of the middle grades.

Procedure

The classroom means for students' recreational reading attitude, academic reading attitude, and total reading attitude as measured by McKenna and Kear's (1990) Elementary Reading Attitude Survey were computed. Classroom means for students were then compared to their teachers' scores.

The anonymous teachers marked a "T" by their number to distinguish their survey from the students. Teachers simply answered the same attitude instrument as the children with the explanation by the researchers that all items should be answered in relation to the teachers' attitudes. For example, consider the questions "How do you feel about going to a bookstore?" "How do you feel about spending free time reading?" or "How do you feel about reading during summer vacation?" These questions are as attitudinally appropriate for teachers to answer as for children.

Results

Table 1 gives the means and standard deviations for all variables in relation to grades 1-3. The teachers had a higher mean score than the boys or girls on recreational reading. But, surprisingly, the teachers'

attitudes toward academic reading was not 'igher than the girls nor significantly higher than the boys.

Table 1

Means and Standard Deviations, Grades 1-3

	Recreational Reading		Academic Reading		Total	
	M	SD	M	SD	M	SD
Boys	29.870	2.940	29.217	2.455	59.199	5.004
Girls	31.412	2.903	30.506	2.836	62.609	6.219
Teachers	35.280	4.400	30.390	5.280	64.330	8.280

N = 18 classrooms

Table 2 gives the means and standard deviations for the different scores in grades 4-6. Note that the mean attitudinal score for boys has dropped significantly for both recreational and academic reading, and that girls' attitude toward academic reading has dropped significantly.

Table 2

Means and Standard Deviations, Grades 4-6

	Recreational Reading		Academic Reading		Total	
	M	SD	M	SD	M	SD
Boys	26.230	2.490*	25.860	3.310*	52.710	6.300*
Girls	30.982	3.428	27.928	3.059**	58.910	5.688
Teachers	38.060	2.490	30.733	3.918	69.199	5.294

N = 16 classrooms
*Significantly lower than grades 1-3, p = <.001
**Significantly lower than grades 1-3, p = <.02

Table 3 gives t test results for different variables in grades 1-3. When looking for gender differences, there is not a significant difference between the recreational reading attitudes nor the academic reading attitudes of boys versus girls in grades 1-3. Neither is there a significant difference between the academic reading attitudes of boys and girls. Teachers do have a significantly higher attitude toward recreational reading than boys and girls, but not a significantly higher attitude toward academic reading. The teachers' academic reading attitude is significantly lower than the teachers' attitude toward recreational reading.

Table 3

t-Test Results, Grades 1-3

Variable X	Mean	Variable Y	Mean	t
Boys Rec.	29.870	Girls Rec.	31.412	-1.580
Boys Acad.	29.217	Girls Acad.	30.506	-1.460
Tchrs. Rec.	35.280	Tchrs. Acad.	30.390	3.020*
Tchrs. Rec.	35.280	Boys Rec.	29.870	4.330*
Tchrs. Rec.	35.280	Girls Rec .	31.412	3.110*
Tchrs. Acad.	30.390	Boys Acad.	29.217	.85
Tchrs. Acad.	30.390	Girls. Acad.	30.506	-.080
Girls Rec.	31.412	Girls Acad.	30.506	.95
Boys Rec.	29.870	Boys Acad.	29.217	.72

N = 18 classrooms
DF = 34
*p = <.001

Table 4 gives t test results for different attitudinal variables in grades 4-6. As to gender differences, there is now a statistically significant difference between the recreational reading attitudes of boys and girls. Boys' attitudes in grades 4-6 toward recreational reading dropped significantly. There is not, however, a significant difference between the academic attitudes of boys versus girls. Both boys and girls in grades 4-6 have poorer academic reading attitudes than boys and girls in grades 1-3. In grades 4-6, the teachers' academic attitudes are still significantly lower than their attitudes toward recreational reading, but teachers have higher recreational and academic attitudes than the

pupils they teach. While girls' recreational reading attitudes in grades
1-3 are not significantly higher than their academic reading attitudes,
this is not the case in grades 4-6. The attitude of girls toward academic
reading in grades 4-6 is now significantly lower than their attitude
toward recreational reading. Boys, however, in grades 4-6 have dropped
significantly in both recreational and academic reading and have
significantly lower attitude scores than the boys in grades 1-3.

Table 4

t-Test Results, Grades 4-6

Variable X	Mean	Variable Y	Mean	t	df
Boys Rec.	26.230	Girls Rec.	30.980	-4.220*	29
Boys Acad.	25.860	Girls Acad.	27.928	-1.800	29
Tchrs. Rec.	38.060	Tchrs. Acad.	30.733	6.540*	30
Tchrs. Rec.	38.060	Boys Rec.	26.230	12.55*	30
Tchrs. Rec.	38.060	Girls Rec .	30.980	7.340*	28
Tchrs. Acad.	30.733	Boys Acad.	25.860	3.770*	30
Tchrs. Acad.	30.733	Girls. Acad.	27.930	2.190**	30
Girls Rec.	30.980	Girls Acad.	27.930	2.570*	28
Boys Rec.	26.230	Boys Acad.	25.860	.34	30

N = 16 classrooms
*p = <.001
**p = .04

The writers also looked at similarities. Table 5 gives Pearson product
moment correlation coefficients for the different attitudinal variables.
There were no significant relationships between boys and girls on any
of the attitudinal variables for grades 1-3 or for grades 4-6. The teachers'
total attitudinal score was significantly related to the girls' recreational
reading score in grades 1-3, but not in 4-6. The teachers' recreational
and academic reading attitudes were not significantly related in grades
1-3. The teachers' academic reading attitude was significantly related
to the boys' low academic reading attitude in grades 4-6.

Table 5

Correlation Coefficients for Attitudinal Variables

Grade	Variable X	Variable Y	r	r^2
1-3	Tchr. Tot.	Girls Rec.	.458*	.2104
1-3	Boys Rec.	Boys Acad.	.785**	.6171
1-3	Boys Acad.	Boys Tot.	.932**	.8686
1-3	Girls Rec.	Girls Acad.	.733**	.5385
1-3	Girls Rec.	Girls Tot.	.840**	.7056
1-3	Tchrs. Rec.	Tchrs. Acad.	.134	
1-3	Tchrs. Tot.	Boys Tot.	.121	
1-3	Tchrs. Tot.	Girls Tot.	.320	
1-3	Boys Tot.	Girls Tot.	.247	
4-6	Tchr. Acad.	Boys. Acad.	.520***	.2704
4-6	Boys Rec.	Boys Acad.	.745**	.5563
4-6	Boys Acad.	Boys Tot.	.827**	.6839
4-6	Girls Rec.	Girls Acad.	.536*	.2872
4-6	Girls Acad.	Girls Tot.	.861**	.7413
4-6	Tchrs. Rec.	Tchrs. Acad.	.575*	.3306
4-6	Tchrs. Tot.	Boys Tot.	.183	
4-6	Tchrs. Tot.	Girls Tot.	.119	
4-6	Boys Tot.	Girls Tot.	.333	

*p =<.05   Grades 1-3   N = 18 classes
**p = <.001   Grades 4-6   N = 16 classes
***p = <.03

Discussion

The findings of this study about negative attitudes toward academic reading provoke interesting discussion concerning basals. The academic portion of the survey used in this study has questions related to basal-type activities.

Cloer and Pearman (1991) found that time spent directing basal lessons was significantly and positively related to students' recreation-

al and academic attitudes. Time spent directing the basal was positive-
ly related to students' academic reading attitudes and accounted for
52.8% of the variance. Multiple regression demonstrated that in grades
4-6, time spent directing the basal and the teachers' silent reading for
pleasure accounted for 62.4% of the variance in students' attitudes
toward reading.

The teachers' mean attitudinal scores for academic versus recre-
ational reading in the current study were significantly lower. There
was also a significant relationship between the teachers' academic
attitude and the boys' academic attitude at grades 4-6.

In an age of restructuring, are the academic attitudes of boys and
girls positively or negatively affected by basal lessons? If so, how does
one account for this significant difference between recreational and
academic attitude?

The academic portion of the elementary Reading Attitude Survey
focuses on pupils' attitudes when answering questions about what
they read, how pupils feel about workbook pages and worksheets, and
how they feel about reading aloud in class. It also has questions about
using a dictionary, reading "your school books," and taking reading
tests. All reading educators are familiar with the mind-numbing,
interest-killing, and clock-watching activities related to each of these in
reading classes when used inappropriately. The academic portion of
the test tends to include the different activities that can be used, and
frequently are used, incorrectly by many schools in an attempt to
develop basic skills. If basal readers are absent from a classroom, is it
possible that some teachers will do poorly and have even more mind-
numbing activities?

A perceived discrepancy between Cloer and Pearman's (1991) earli-
er study that found a significantly positive relationship between time
in basal and attitudes, and the current study showing negative academ-
ic attitudes may not be a discrepancy at all. We are all familiar with
classrooms void of basals that are imaginative, literature-based, and
thematically organized with integrated curricula. But some of the
teachers in the earlier study may have known how to use the basal
correctly. The teachers may have used literature and writing in
conjunction with the basal in a manner that fostered positive attitudes.
The negative attitudes of students and teachers toward inappropriate
and unsuccessful academic reading activities do not automatically, *ipso
facto*, refer to users of basils. We are all familiar with basal classrooms
that fail to produce positive attitudes toward reading. But the simple
point the writers wish to make after analyzing these data is that basal
classrooms may be accompanied by either positive or negative atti-

tudes. In today's emotionally-charged evangelical revivalism of basal burning, we suggest this truth most timidly. The fact remains, however, that boys, girls, and teachers all have significantly lower academic reading attitudes than recreational reading attitudes.

It is disquieting to observe the decline in boys' attitude toward recreational and academic reading as they pass through the grades. The mind-numbing activities also affect the girls, but their recreational reading attitude remains relatively high through sixth grade. Boys don't seem to differ significantly from the girls in the primary grades.

Teacher's low academic attitude seems to relate more to boys than girls. Is it because more females have higher proficiency in reading and read more recreationally for pleasure? Girls simply may have discovered the magic of literature more so than boys. This may serve to insulate girls from more negative attitudes.

The relatively poor reading achievement of boys may be related to their more negative attitudes toward recreational and academic reading. It was gratifying to see that teachers, their low academic attitudes notwithstanding, had more positive attitudes than the students they taught. The difference may be that teachers are getting paid and students aren't.

Downing (1973) wrote about males in Germany and in several other countries achieving more highly in reading than girls. He doubted, therefore, that the differences in the scholastic achievement of boys and girls were caused by innate constitutional factors related to the physiological differences between the sexes.

Downing (1973) sought a cultural explanation and suggested that in America boys are encouraged to spend more time and effort on "muscle" activities. Sedentary behavior has been more appropriate for American females. Downing suggested that girls are expected to use better language than boys and that the language of females is more apt to be represented in reading books. Downing presented one very compelling conclusion: Even if innate constitutional differences between the sexes exist, these differences can be outweighed by other factors as they were in Germany.

More research needs to be conducted on pupil and teacher attitudes as we approach the 21st century. We need to analyze whether or not attitudes are affected negatively or positively by different aspects of restructuring. As we attempt to focus on portfolio assessment, we must include more about attitudes in the developmental collection of students' reading and writing exploits. Heretofore, little has been said about portfolio assessment or self-assessment including a good, valid,

and reliable measure of attitude. While many of us disagree about what cognitive tests will be appropriate in the 21st century, few, if any, totally discount attitude assessment. We encourage others to assist us in generating research for further discussion and guidance.

Reference

Cloer, C. T., Jr., & Pearman, B. C. (in press). The relationship of teachers' attitudes and classroom behaviors to students' attitudes about academia and recreational reading. *Journal of Reading Education.*

Downing, J. (1973) Cultural expectations. In J. Downing (Ed.), *Comparative reading: Cross-national studies of behavior and processes in reading and writing* (pp 105-127). New York: The Macmillan Co.

Dwyer, E. J., & Reed, V. (1989, Summer). Effects of sustained silent reading on attitudes toward reading. *Reading Horizons, 29,* 283-293.

McKenna, M. C., & Kear, D. A. (1990). Measuring attitudes toward reading: A new tool for teachers. *The Reading Teacher, 43,* (9), 626-639.

Ostling, R. N. (1992, February). Is school unfair to girls? *Time,* 62.

Ross, E. P., & Fletcher, R. K. (1989). Responses to children's literature by environment, grade level, and sex. *Reading Instruction Journal, 32* (2), 22-28.

Smith, M. C. (1990, March-April). A longitudinal investigation of reading attitude development from childhood to adulthood. *Journal of Educational Research, 83,* 215-219.

National Center for Education Statistics (1991, November). *Trends in Academic Progress.* (Report No. 21-T-01). Washington, DC: Office of Educational Research and Improvement.

Using Literature to Learn about Math and Science in Primary Classrooms

Marino C. Alvarez, Marty Stewart,
Judy Vaughn

Studies have been conducted investigating literature, science, and math in the primary grades (e.g., Morrow, O'Connor, & Smith, 1990; Good, Grouws, Mason, Slavings, & Cramer, 1990). However, most of these studies have focused on these subject areas as discrete units rather than integrated bodies of knowledge that can be related to one's life experiences (Alvarez & Vaughn, 1992; Donham, 1949; Erickson, 1984; Eylon & Linn, 1988; Giroux & Simon, 1989; Sarason, 1990). When subject areas are treated as compartmentalized units, students often resort to memorizing these facts and ideas for later retrieval to be either asked by the teacher or performed through an examination (Whitehead, 1929; Potts, St. John, & Kirson, 1989). This type of presentation results in students mistakenly believing that success in school is equated with "knowing" a given body of knowledge of a subject rather than "learning" how this new knowledge can be related to their experiences and other subject disciplines both in-and-out-of-school (Alvarez, 1993; Alvarez, Binkley, Bivens, Highers, Poole, & Walker, 1991).

In order for novice readers to appreciate literature and subsequently develop into lifelong readers, teachers need to respect their students' current level of intelligence by allowing them to share their daily experiences with those encountered in the classroom. Often these out-of-school experiences are shunned in favor of a literacy curriculum that consists of a structured schedule of books to be read and a set of

questions to be answered. In these instances, efforts are concentrated on *analysis* (separating) of a poem or story, but not on the aspects of *synthesis*. In contrast, a classroom that is constantly providing literacy contexts that focus on the logical processes (e.g., joining, selecting, discarding, implying, and entailing) of ideas gives students a learning context that they have helped to create and are aware of for themselves (Henry, 1974). Reading demands thinking through the combining of analysis and synthesis to form conceptual development.

Efforts have been made to engage primary grade students in synthesizing literature and relating this information to their present experiences (Alvarez & Vaughn, 1992). In this theme-based integrated model, students' world experience is an important consideration as are efforts by the classroom teacher to provide literacy contexts that focus on the logical processes (e.g., joining, selecting, discarding, implying, and entailing) of ideas that gives students a learning context that they have helped to create and are aware of for themselves. These preliminary findings indicate that kindergartners can synthesize literature by discovering relations among facts and ideas, and then create a structure that incorporates these facts and ideas into extended relations by generating new stories.

This paper demonstrates how literature can be used to learn about math and science concepts in kindergarten, first, and second grade classrooms. The objectives of this paper are to : (a) demonstrate how literature can be used to learn about math and science; (b) demonstrate how analysis and synthesis of fables can lead to concept development in reading and writing; and (c) discuss how critical thinking can lead to incorporated knowledge that can be retrieved and applied to other settings. The research question that guided our action research study was "Can kindergartner's, first, and second graders be taught to incorporate literature, mathematics, and science concepts in a meaningful context?"

Method

Subjects

A total of 43 kindergarten (n = 24), first (n = 9), and second grade (n = 10) students received instruction from their regularly assigned teachers. The first and second grade students were in the same class (split first and second grade) taught by the same teacher. The study took place in March, and lasted for three weeks.

Students in kindergarten, first, and second grades used the fable *The Crow and the Pitcher* as a base from which to first analyze and then

synthesize events and characters and learn mathematic and science concepts. Like other folk narratives, fables have certain characteristics that appeal to a child's sense of imagination, feelings, and intellect. Fables tell a story that is short and to the point. By virtue of being a story a fable shares the basic components of a short story: an introduction, a body, and a conclusion. Fables have animals that speak and act like humans, and leave the reader or listener with a lesson or moral.

Kindergartners' Use of Folk Tales and Fables to Learn about Math and Science

These 24 kindergartners were the same students who participated and demonstrated their ability to analyze and synthesize folk takes earlier in the fall (see Alvarez & Vaughn, 1992). Like the previous lesson that occurred in the fall of the year with folk tales, the fable, *The Crow and the Pitcher*, was analyzed by using a visual story map. This story map included the initiating event, problem, attempts, outcomes, and moral of this fable (see Figure 1).
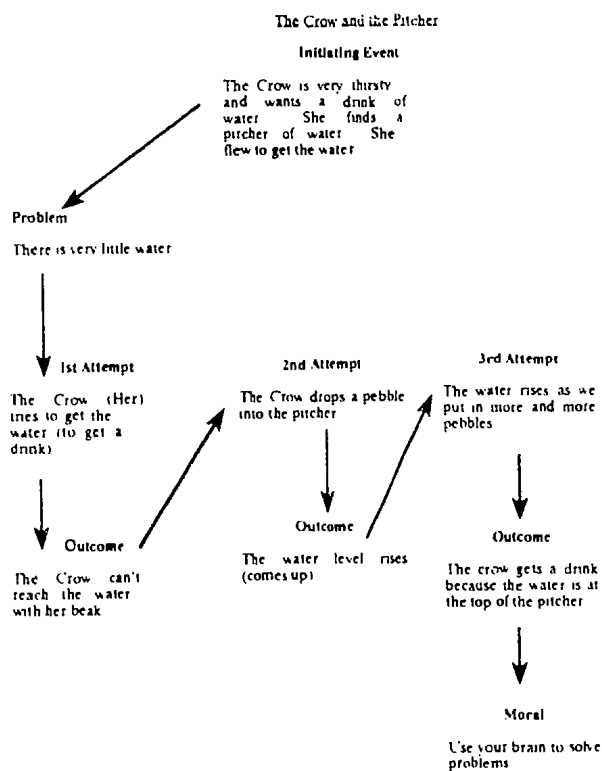

Figure 1. Story map developed by kindergartners.

The children then applied mathematical principles and scientific reasoning in problem solving formats. To illustrate, Aesop's *The Crow and the Pitcher* was read and analyzed, the students then read a comr 't-ible fable, *The City Mouse and the Country Mouse*, that had a related moral. Students synthesized the two fables pointing out likenesses and differences of the events and characters of each fable. Then they engaged in an experiment to determine how many pebbles were needed to make the water rise so that a crow could drink the water. The teacher (the third author) asked her students to predict how many pebbles it would take to make the water rise to the top. The predictions made by the students are presented in Table 1.

Table 1.

Kindergartners predictions of the number of pebbles needed to displace water.

Prediction Chart	
Student	Number of Pebbles
01	22
02	105
03	1 zillion
04	<u>502</u>*
05	639
06	50
07	20
08	10
09	63
10	1000
11	5
12	95
13	159
14	242
15	1 million
16	32
17	100
18	300
19	99

*Number of pebbles needed to displace water to the brim of the pitcher = 462.

Students were required to measure and mark the water level, weigh each pebble, and drop it into the pitcher. These students charted how much each pebble weighed and calculated how many pebbles were placed into the pitcher to make the water rise to the top (the concept of displacement).

First and Second Graders Learn about Math and Science

As part of a year-long discussion of the types of literature, with emphasis on fables, folk tales, legends, myths, and fairy tales, the split class consisting of first and second grade students was introduced to two versions of the fable, *The Crow and the Pitcher*, by their teacher (the second author). After reading and discussing both versions of this fable, students compared and contrasted the two discourses (analysis and synthesis). Each student also decided which version they liked best and why.

Nex , the teacher and students discussed the lesson or moral of the fable and determined the statement which best encompassed the moral of the fable was "use your brain to solve problems." The students were then given another fable, *The City Mouse and the Country Mouse*, and were asked to analyze and synthesize this fable with that of *The Crow and the Pitcher*. Students then mapped a plan for writing their own individual fables using the same moral. After the students wrote their fables they shared them with the class.

A first grader's response to the "lesson" learned in the fable, *The Crow and the Pitcher*, was "Allwse think be for you do some ing." When asked to write a fable of his own about "Using your brain to solve problems" he wrote:

Figure 2. A fable written by a first grader.

His story reveals that the aforementioned "lesson" or moral of the fable could be applied to another setting in which a rat sets the clock at a time that will allow ample time to be on board the ship before it sails. However, sea sickness results in an unforeseen circumstance.

Ryan, a second grade writes a fable about a mouse who has to problem solve a situation that requires getting past a cat to get a piece of cheese (see Figure 3).
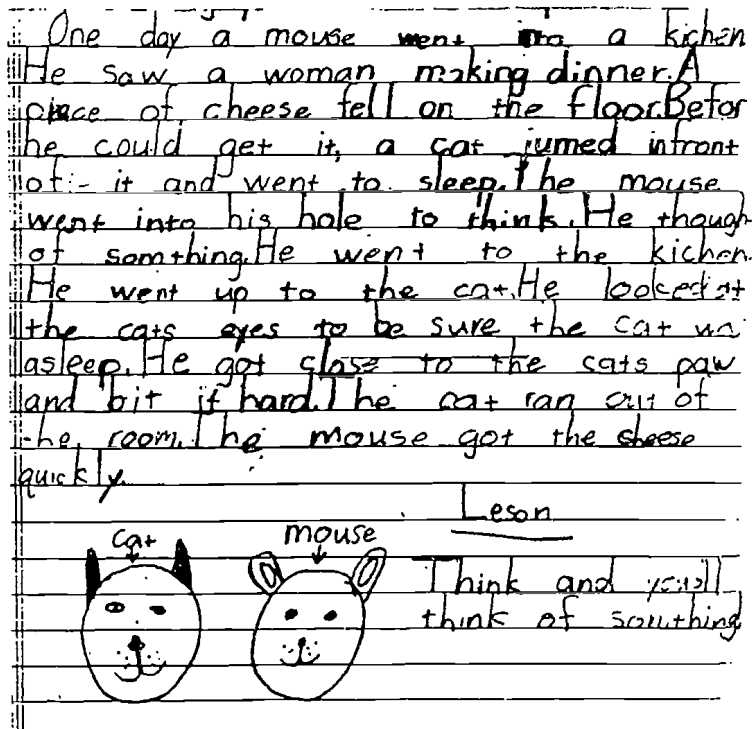

Figure 3. A second grader's fable.

The moral of his story, "Think and you'll think of something!" is a provocative statement. It alerts classmates and other readers of his fable of the need to analyze a problem situation by using one's prior knowledge, experience, and imagination for its resolution.

To integrate science and mathematics with this literature lesson using the concept of displacement, the teacher assigned students to five cooperative groups that were matched based on her judgement of their reasoning and problem solving abilities. There were four students in Groups 1, 2, and 3, and three students in Group 4. Each member of the group, with the exception of Group 4, had a leader, a recorder, a checker, and a teller/presenter. The role of the leader was that of a facilitator, the recorder noted the events that were transpiring, the

checker supervised the experiment's progress, and the teller/presenter was responsible for reporting the results of the group's investigation. Group 4 had three students who were designated as a leader, recorder, and teller/presenter. Social interactions among the group members and the teacher were ongoing.

In the first experiment, using pebbles to displace water, each student had their individual science/mathematics log prepared by the teacher that contained questions and illustrations to guide the inquiry. The apparatus consisted of a glass pitcher, pebbles, ruler, spring scale, crayon, and water. Each group had a pitcher that the teacher had pre-marked with different levels on each. The leaders filled their respective pitchers with water to the prescribed level. They used a ruler to measure the height of the water—the recorder noted it in inches in their groups science/mathematics log.

The students took turns adding pebbles to the water to bring the level to the top. The recorder kept a tally of the number of pebbles placed into the pitcher. Some groups counted the pebbles one at time, some by 2's, and some by 5's.

The students and the teacher discussed the number of pebbles each group used. They also discussed *why* the water displacement level rose when pebbles were added. Each group counted the number of pebbles it took to displace and raise the water level. Each of the five groups had a pitcher of unequal volume and an initial water level different from the others.

After displacing the water to its capacity, the students then added more pebbles to their pitchers until the water "bulged" above the top without overflowing. The teacher and the students discussed *why* the bulge occurred and how many more pebbles were used to create this state. Bulge was explained in terms of how molecules of water stick to each other, and form an "invisible skin" that hold the water together. A question arose, "What if more pebbles were added to the container?"

The students tested this question by adding more pebbles until the "skin" broke and the water overflowed and discussed *why* and how many more pebbles were used to make the phenomena occur. The number of additional pebbles needed to break the "skin" was added to their total number of pebbles. The water was poured out and the pebbles were weighed using a spring scale. Mathematical concepts of greater than and less than were evaluated and discussed as it related to each respective group's number of pebbles and weight.

The second experiment with the concept of displacement involved the use of apples. The apparatus consisted of two apples of different

sizes and shapes (a smaller red apple and a larger green apple), a glass bowl, water, and a crayon. Predictions were made by students as to which of the two apples would displace the most water. Students were then asked to submerge the red apple in a bowl of water. A mark v ith a crayon was made on the inside of the bowl indicating the water le vel. The red apple was then removed and replaced with the larger green apple. Again the students were asked to mark the water level. The second apple was then removed. Students were asked to check their predictions as a way to confirm, alter, or reject their hypotheses. The students compared the crayon marks and indicated which one was higher.

Class discussion revealed that the bigger the apple the higher the water level. Students were asked to think about why this occurs. Students then formulated a scientific explanation that stated that the bigger apple displaced more water. It pushes more water up and out of the way and takes its place. One student associated the concept of water displacement with a person getting into a bathtub and having the water level rise. Another student applied this same concept to water rising in a swimming pool when a diver plunges into the water.

Findings

The kindergartners needed 462 pebbles to displace the water in order to make it rise to the top of the pitcher. They compared this number to the prediction chart and found that the closest person had speculated that it would take 402 pebbles to displace the water. The students then emptied the water from the pitcher, removed the pebbles, and began counting and sorting them by 10s.

The first and second graders' experiments are represented in Table 2. The number and weight of each group's pebbles varied depending on the level of water at the outset and the number of pebbles needed to displace the water to break the "invisible skin."

Table 2.

Grade, gender, number and weight of pebbles for each group.

Group	Grade 1st	Grade 2nd	Male / Female		Pebbles	Weight (lbs)
1	1	3	4	0	830	3.8
2	1	3	0	4	1600	3.0
3	3	1	0	4	900	3.8
4	2	1	2	1	1000	2.0
5	2	2	1	3	1900	3.8

N = 19

In the second experiment, these first and second graders found that the bigger apple displaced more water than the smaller one. A principle for water displacement was formulated that stated, "The larger an object the more water it pushes up and out of the way as it takes its place."

Discussion

Kindergartners, first, and second grade students were taught to incorporate literature, mathematics, and science concepts in a meaningful context. These students were able to demonstrate critical thinking skills by combining analysis and synthesis of two fables and then writing a fable of their own creation. Furthermore, mathematical and scientific reasoning skills were used in tandem when they conducted an experiment depicted in the literature passage.

These learning contexts became meaningful when new information was linked to students' existing concepts, and became incorporated (integrated and related tc other knowledge sources in memory) rather than remained compartmentalized (isolated due to lack of world knowledge and experience or due to rote memorization). Problem-solving lessons, using literature to learn about math and science concepts, provided learners with opportunities to engage in critical and imaginative thought and allowed meaning to be constructed in social contexts.

The role of imaginative literature is a powerful influence in students' intellectual development (Coles, 1989; Eanet, 1991). Learners need to

be provided with reading materials and lessons that stir their imagination and stimulate critical thinking in problem-solving contexts. In this investigation, literature contributed to science learning and reasoning ability in mathematics. Ideas were exchanged and social constructions emerged in the forms of verbal and written discourse, physical manipulations of apparatus and substances, and reasoning skills used by students that involved mathematical and scientific principles.

References

Alvarez, M. C. (1993). Imaginative uses of self-selected cases. *Reading Research and Instruction, 32,*(2), 1-18.

Alvarez, M. C. (1990). Preschoolers emerging mental models with literacy. In B. L. Hayes & K. Camperell (Eds.), *Achieving excellence in reading* (pp. 67-96). *American Reading Forum. Vol. 10.* Logan, UT: Utah State University.

Alvarez, M. C., & Vaughn, J. (1992). Kindergartner's use of theme-based integrated texts. In B. L. Hayes & K. Camperell (Eds.), *Developing lifelong readers: Policies, procedures, and programs* (pp. 127-136). *American Reading Forum, Vol. 12.* Logan, UT: Utah State University.

Coles, R. (1989). *The call of stories: Teaching and the moral imagination.* Boston: Houghton Mifflin.

Eanet, M. G. (1991). Expanding literacy by the use of imaginative literature in the teaching education classroom. In B. L. Hayes & K. Camperell (Eds.), *Literacy: International, national, state. and local.* (pp. 57-66) *American Reading Forum, Vol. II.* Logan, UT: Utah State University.

Eylon, B., & Linn, M. C. (1988). Learning and instruction: An examination of four research perspectives in science education. *Review of Educational Research, 58,* 251-301.

Giroux, H. A., & Simon, R. I. (1989). *Popular culture, schooling, and everyday life.* Westport, CT: Bergin and Garvey.

Good, T. L., Grouws, D. A., Mason, D. A., Slavings, R. L., & Cramer, K. (1990). An observational study of small-group mathematics instruction in elementary schools. *American Educational Research Journal, 27,* 755-782.

Henry, G. H. (1974). *Teaching reading as concept development: Emphasis on affective thinking.* Newark, DE: International Reading Association.

Morrow, L. M., O'Connor, E.M., & Smith, J. K. (1990). Effects of a story reading program on the literacy development of at risk kindergarten children. *Journal of Reading Behavior, 22,* 255-275.

Sarason, S. B. (1990). *The predictable failure of educational reform.* San Francisco: Jossey-Bass Publishers.

Reaction to Alvarez, Stewart, and Vaughn

Don Lumpkin

Using literature to learn about math and science in primary class-rooms involves elements of integration of curriculum areas plus inten-sifying interest and response to relatedness for young learners. Marino Alvarez is noted for bringing novel and innovative concepts and resources to share at meetings of American Reading Forum. Delightful bearers of ideas came to present at this session in the form of Judy Vaughn and Marty Stewart from Westmeade School in Nashville, TN.

Vaughn described responses of a kindergarten class to a fable that involved (a) estimating, (b) counting, (c) planning and carrying out provisional trials. This seems to provide a more focused application of the "Theme-based Integrated Texts" which were developed in their 1991 presentation at American Reading Forum. Their premise that "Learning contexts become meaningful when new information is linked to existing concepts and becomes incorporated (integrated and related to other knowledge sources in memory) rather than compartmental-ized (isolated due to roted memorization)" would support the interdis-ciplinary approach to literature, math, and science (Alvarez & Vaughn, 1992, p. 128).

Stewart added evidence from use of integrated approaches in grades one and two. Young learners at these levels not only read but also wrote their own fables. Urged to use their brains to solve problems they analyzed differences and similarities, recorded information using tally marks, and counted by twos and fives. This group made predictions and carried out experiments on displacement of water. The water project was followed up by moving on to the study of wind and sun.

The potential of using literature as a vehicle for learning math and science at these early school levels appears very promising. Alvarez, Stewart, and Vaughn are urged to bring additional data to support this integrated approach to teaching. As convincing evidence of effectiveness is gathered, they could be asked to help with a blueprint for introducing this strategy to teachers in schools across the nation.

Reference

Alvarez, M. C. & Vaughn, J. (1992). Kindergartners' use of theme-based integrated texts. In B. L. Hayes & K. Camperell (Eds.) *Developing Lifelong Readers: Policies, Procedures, and Programs* (pp. 127-136). *American Reading Forum, Vol. 12.* Logan, UT: Utah State University.

Integrating the Curriculum: Re-Examination of a Near Truism

Marv Klein

> The special office of education is to widen one's view of life, to deepen insight into relationships, and to counteract the provincialism of customary existence—in short, to engender an integrated outlook. (Phenix, 1964).

It seems an oddity, if not an irony, that Philip Phenix should use the term "integrated" in the above quote taken from his classic work of 1964 on curriculum, since his thesis in *Realms of Meaning* is that curriculum integrity is derived directly from the content fields of instruction. Actually, Phenix proposed four principles for the selection and organization of curriculum for assuring optimum growth in meaning for learners. Those four principles are:

1. "That content of instruction should be drawn entirely from the fields of disciplined inquiry."

2. "That from the large resources of material in any given discipline, those items should be chosen that are particularly representative of the field as a whole,"

3. "That content should be chosen so as to exemplify the methods of inquiry and the modes of understanding in the disciplines studied."

4. "That the materials chosen should be such as to arouse imagination." (Phenix, 1964, pp. 10-12).

He also asserts quite strongly, "Ordinary life-situations and the solving of everyday problems should not be the basis for curriculum content (Ibid., p.12)."

Phenix was not alone in his argument for the centrality of subject matter in the curriculum. Bruner's concept-centered model was designed to elaborate conceptual relationships in a variety of areas, but its natural fit to the structures of knowledge in the academic disciplines was conspicuous, and Bruner's model dominated curriculum content from the 1960's on in many content areas and still plays an important role in several today, e.g. social studies and science.

Both Gilbert Ryle (1949) and Robert Gagne (1977) elaborated network models which have been particularly effective in mapping out declarative and procedural knowledge relationships in the subject matter areas. And, Ausubel's work found its widest application in specific fields of the social and physical sciences.

None of these curricular scholars and theorists knew how problems in society were going to change and grow during the next quarter of a century. Even more significantly from a curriculum theory standpoint, they could not project how those social problems would alter the role of schools and their shifting responsibilities. For example, would Phenix perceive sex education, drug and alcohol abuse, child abuse, gun control, etc. as substantial content for curriculum or as "ordinary life-situations" or "everyday problems?"

However, the wide range of social problems besetting the schools and begetting additional "ordinary life-situations curriculum" represents only one curriculum issue facing contemporary educators. In addition to this new curriculum content for the schools, other curriculum changes are being proposed and being instituted. And, in some respects at least, they are more challenging, for they are not rooted in what is a fairly straightforward assumption--add new content to address critical social issues/problems. Instead, they derive from questions about the basic assumptions governing curriculum for decades. Curriculum theories are afoot once more; theories which in some ways are more disconcerting than the addition of "everyday problems curriculum" to the school day.

Of particular interest is a new (renewed?) call for "Integrated Curriculum." In fact, in many educational circles it appears to be an orthodox assumption that integrating the curriculum is what educators should be about.

Most contemporary professional journals regularly include articles advocating integrated curriculum. For example, the October, 1991,

issue of *Educational Leadership* is devoted to the theme of "Integrating the Curriculum." In many respects the articles appearing in this issue are typical of those which abound in the journals of many of the professional organizations of education, both those aimed at classroom teachers and those intended primarily for administrators.

In the *Educational Leadership* issue few of the authors give more than passing attention to providing a rationale or argument for why curriculum should be integrated. The closest that any of the articles in this issue of the journal gets to promoting a rationale for integrated curriculum is to present arguments against curriculum based on subject matter fields. For example,

> To students, the typical curriculum presents an endless array of facts and skills that are unconnected, fragmented, and disjointed. That they might be connected or lead toward some whole picture is a matter that must be taken on faith by young people or, more precisely, on the word of adult authority. Like working the jigsaw puzzle without a picture, one can only trust that the pieces do make one, that they do fit together, and that there are just the right number and combination of pieces. (Beane, 1991, p. 9).

Another author asserts that "life's multitude of experiences" are currently "being taught in the typical splintered, over-departmentalized school curriculum" (Vars, 1991, p. 14).

In all of these instances th argument seems to be that teachers who teach content from subject matter fields do so in a fragmented fashion: the content divorced from life experiences and needs; and, facts and skills taught in isolation with no regard for contemporary relevance to students. Whether or not these stereotypes are accurate is left to personal interpretation. They certainly question the competence and, possibly the integrity, of many teachers, elementary and secondary, who happen to believe that subject matter can be taught in a nonfragmented and relevant fashion. And, that such instruction need not require the content of history, geography, science, etc. to be integrated in one fashion or another with or into some other instructional construct.

Most articles about integrated curriculum lack two things: First, a substantiated or well articulated argument against a subject matter field approach to curriculum and instruction. Stereotyped terms such as *isolated, irrelevant, fragmented, fact or skill centered,* are used with little support other than authors assuming a body of accepted tacit beliefs about such curriculum and instruction. Second, no well-articulated rationale explains why an integrated approach should be used. Perhaps again educators believe, for whatever reasons that integrated

curriculum is best, and all that is lacking is the vehicle for bringing this curriculum about. In short, no one offers well-substantiated arguments against subject matter based curriculum or proposes articulated rationales for integrated curriculum.

The array of contemporary articles lack definitional clarity when presenting various "models" for integrating the curriculum. What does "curriculum integration" mean? Operational definitions remain hidden in many of the arguments for integration. Not atypical is the assumption by an author that "integrated curriculum" and "interdisciplinary curriculum" are synonymous, e.g.,

> We were three men and three women, strangers to each other, selected from across the province to develop interdisciplinary curriculums funded by the Ontario Curriculum Superintendents' Cooperative...

Then, a few lines later,

> We spent nine days together over the cou; ie of a year developing integrated curriculums." (Drake, 1991, p.20).

The assumption seems to be that integrated curriculum and interdisciplinary curriculum are synonymous. Yet, one could develop an interdisciplinary curriculum according to one definition that would not integrate subject matter content but instead coordinate it where like goals existed for both or all, depending upon the number of fields involved. On the other hand, one might opt to team teach a unit on American History with an English teacher where they are addressing the political, economic and social history of Post-reconstruction 19th century U.S. They teach the political and economic history and then teach novels from the period. The novels provide substantial insight into the social conditions of the time. The content and structure of history is taught. American literature is taught. Each supplements and supports the other. Each provides unique perspectives on the other.

This would seem to be an interdisciplinary unit although there is not an attempt to integrate history and literature in ways that make each dependent upon the other.

An interdisciplinary unit with no attempt to integrate history and literature in ways that make each dependent upon the other works.

Whether or not one agrees with the above examples, some attempt to articulate the character of "integration" and "interdisciplinary", including overlap is necessary for understanding proposed curriculum models of either or both.

Definitional problems also exist in many of the weaknesses suggested in subject-based curriculum. For example, terms such as *relevance, fragmented, isolated facts and details* commonly used to identify faults in content curriculum bear as much on instructional strategy and technique as upon curriculum per se. Suggesting that science, history, art or mathematics are not relevant in today's society appears naive at best. The skill to relate curriculum to the needs of learners and to the needs of our society is determined by our teaching ability. Imaginative, creative, responsible teachers can make a variety of curricula relevant to learners. Instruction determines student perception of relevance as much as, if not more, than does curriculum.

Also to suggest that subject-based curriculum encourages fragmentation of learning and that leads students to perceive content as accumulations of isolated facts and bits of information with little relation to their own needs or experiences seems particularly strange. For, one of the primary features of academic subject areas is their internal organization; their **structures of knowledge** if you will. "Human beings are essentially creatures who have the power to experience 'meanings.'" Distinctively human existence consists in a pattern of meanings. Furthermore, general education is the process of engendering essential meanings" (Phenix, 1964, p. 5).

Millions of bits of data barrage human beings every minute of the day, far more than we can cope with if we attempt assimilation. Learning theorists and psychologists established that one of the primary activities of the mind is to attempt to categorize this collage of data into pattern and structure groups enabling us to have a manageable sense of reality (Ryle, 1949; Gagne, 1977; Collins & Quillian, 1969.) Curriculum theorists and practitioners strive for models which enable learners to conceptualize reality according to structures and patterns compatible with cognitive operations (Ausubel, 1963; Bruner, 1960; Tyler, 1950).

Yet, rather than credit academic disciplines with having coherent internal structures of knowledge, curriculum integrationists prefer to associate holistic ideas with integrated curriculum (Vars, 1991, p. 14; Drake, 1991, p. 20) arguing that integrated curriculum enables learners to see the whole more effectively and thus not perceive learning as the accrual of bits and pieces of isolated facts and information. Tangentially associated research provides some support for their argument. For example, we know that children acquire and develop language and language using abilities in a global fashion. Children learn to speak their language from "the top down." They do not work through the elements of language phonology, morphology, syntax, semantics and

148

discourse pragmatics in some sort of sequenced and cumulative fashion. They integrate all of these critical elements in a holistic fashion; establish overall language structure patterns and language use patterns; they gradually fine tune the smaller constituent elements (Brown, 1973; Tough, 1977; Sulsby & Teale, 1986). With a meaningful and encouraging learning environment, caring adults, and good teachers, they become facile, articulate language users.

However, an important difference exists between acquiring the skills and processes of linguistic literacy and the acquisition and mastery of the content of cultural literacy, the structures of knowledge that define our physical and mental worlds through the academic disciplines. As an unknown language philosopher once observed, language is the house in which we live. It is part of us, inseparable from our personalities, our senses. Other facts, concepts, ideas, information, skills which define the "stuff" to be learned in education are basically *mental constructs.* Even science, which we often see as quite physical (e.g. laboratories, microscopes, chemicals) represents an abstract structure of knowledge. A core bound in concepts and relationships, mastered cognitively and articulated through the second leve. abstraction of language. Mental constructs tied to frameworks and contents of learning are not innate to us but acquired through long term study and immersion in them. Not an encyclopedic collection of facts to be memorized but rather an active effort to make sense out of some portion of the world or of life (Ford & Pugno, 1964. p.4).

Models negating opportunities to learn within established structures of knowledge and substituting instead approaches can contribute to the notion that reality is a hodge-podge of facts, events and relationships.

The curriculum models typically suggested by integrationists tend to fall into one of two categories. One type purports to be "child-centered" or "student driven": The learner involved in identifying important (to him or her we assume) experiences.

> . . .that starting point involves three critical concepts. The first is that the middle school ought to be a general education school in which the curriculum focuses on widely shared concerns of early adolescents and the larger world rather than increasing specialization and differentiation among separate subjects. (Beane, 1991, p. 10)

or,

> Another feature of this vision of the curriculum is that it proceeds from a constructivist view. (p. 12).

149

In this latter instance, problems, issues and instructional focus determine evolving classroom and learner circumstances.

The second integrationist approach attempts to "draw in" content from various subject areas as benefits the central focus. For example, theme-centered curriculum is derived from such a model. Or, elementary teachers who use children's literature as the curriculum base drive their curriculum on this model, e.g., use historical biographies to teach history concepts or use *Goldilocks and the Three Bears* to teach math processes and/or skills, i.e., sequencing, size relationships.

Aside from the question of whether these are doable curriculum models, how can one argue that either logically or conceptually they facilitate a learner's understanding of some holistic character.

In the case of the first model, the "student driven" one, we run the risk of having "ordinary life-situations" dictate the content of instruction. Unless perceptions of relevancy are broad and liberally interpreted, academic content is selected and extracted from its inherent structure to suit the immediate reinforcement needs of students. With this model, everyday social situations and/or the ongoing challenges of developing adolescence dictate a subtle but distinct shift in the major role of the teacher. The classroom teacher moves from content instructor to general learning facilitator, to personal counselor. The content of curriculum moves toward everyday problems and personal need circumstances of students.

The second model employs selected traditional academic subject matter, divested of its internal structural cohesion to meet some theme-based need. The risk of arbitrarily searching for something in math or science or social studies to tie to the literature suggests an idiosyncratic character to the model that does anything but encourage learners to conceptualize some holistic construct or pattern.

In either model instance, we see the demise of academic content and learning with possible long term implications of major proportions regarding the role of schools and education in our society.

On the other hand, subject area disciplines organize structures of knowledge binding their own internal cohesive elements and relationships. For example, one learns not only a body of historical facts and events, but, hopefully, a working knowledge of how history is generated; how historians perceive the world; how the structures of historical knowledge adapt new developments which become a part of "history's story". One learns the importance of relating historical knowledge and processes.

When students go through our schools perceiving history, science, mathematics, English, art, etc. as accumulations of facts, bits of knowledge, isolated skills, sometimes useful, occasionally interesting, but more often than not, "stuff that is not relevant in my life"---they are cheated. They are robbed of the opportunity to experience and to continue experiencing life at a multitude of levels and deprived of the knowledge that makes human beings interesting and cultured. In short, a ˡ˗t less human than they have a right to be in our society.

And, interestingly enough, the fault lies not in the nature of the physical, natural or social science, nor of the fine arts or humanities, or lies in the curricula which have attempted to formulate the content and structures of these fields. The fault may well be in the instruction: (a) Either teachers themselves do not know enough about the fields of study to teach them effectively, interestingly, holistically, and relevantly, or (b) the teachers lack necessary pedagogical skills and abilities which would enable them to teach important content in an interesting and relevant fashion, or (c) the instructional support system is not up to the job of providing a teaching and learning environment.

This author's experiences in classrooms, both elementary and secondary, suggest that more often than not, problems exist in two of the three areas identified. One, the lack of background in academic subject matter remains a problem with many classroom teachers, especially in the elementary grades. Even though many new teachers in the elementary grades have academic majors in subject areas in addition to professional education courses in foundations and methods of teaching, we must realize that they are required to teach ALL subject areas in the course of the school day. Second, many of our teachers, both elementary and secondary, teach in less than desirable circumstances. Classes are too large. Materials are lacking or are seriously outdated. Support materials and resources, both human and material, are limited or nonexistent. Altering a curriculum model can impact very little on such conditions.

Most of our teachers are competent and hard-working. They teach energetically in environments not conducive to effective teaching. Curriculum and instruction are closely bound concepts. To assume that the problems of learning and the difficulties of society which have spilled over into the classrooms can be alleviated by integrating curriculum fails to recognize the close bonding between instruction and curriculum and the impact of our social condition on our schools.

Inservice experiences, workshops and summer institutes of various sorts focus increasingly on social issues, i.e., child abuse, drug education, AIDS education, rather than on new ideas in math or science or

other academic areas and how most effectively to teach them. And, topics not drawn primarily from such social problems or issues remain tangential to subject matter. For example, cooperative learning, assessment portfolios, higher level thinking skills, mainstreaming, classroom management and a variety of other nonacademic topics take up our professional attention and professional renewal time.

This is not to suggest that these are unimportant matters, nor is it to suggest that all teachers must be masters of all academic areas (or if they were that our curriculum and instruction problems would disappear). Nor, finally, is it to suggest that schools and schooling cannot or should not be sensitive to the major social problems which beset our young people.

Instead, I suggest that decisions (significant curriculum shifts or curriculum focus shifts) should be made only after careful consideration of what the problems are, how they came about and how the changes will alter things. And, perhaps these questions should be preceded by those which are even more fundamental than those associated with specific curriculum concerns. Questions regarding curriculum after all are premised upon certain assumptions we have about the roles and responsibilities of our schools. Joseph Schwab (1970) asserted that the field of curriculum is moribund. The death of the field of curriculum, he argued, was largely attributable to the fact that educators spend too much time focusing upon finding answers to relatively mundane questions. Instead, he proposed, the hope of curriculum was vested in the need for a concerted effort to generate new, more elegant and powerful questions. Perhaps the need for those kinds of questions still lives within us.

Meanwhile, the academic disciplines represent living bodies of knowledge that we have relied upon to give us a sense of what the world is and who we are as human beings.

References

Ausubel, D. P. (1963). *The Psychology of Meaningful Verbal Learning*. New York: Grune & Stratton.

Beane, J. (1991). The middle school: The natural home of integrated curriculum. *Educational Leadership, 49*, 9-13.

Brown, R. (1973). *A First Language: The Early Stages*. Cambridge, MA.: Harvard University Press.

Bruner, J. (1960). *The Process of Education*. Cambridge: MA.: Harvard University Press.

152

Collins, A. M. & Quillian, M. R. (1969). Retrieval time for semantic memory. *Journal of Verbal Learning and Verbal Behavior, 8*, 241.

Drake, S. (1991). How our team dissolved the boundaries. *Educational Leadership, 49*, 20-22.

Ford, G. W. & Pugno. L. (Eds.). (1964). *The Structure of Knowledge and the Curriculum.* Chicago: Rand McNally.

Gagne, R. M. (1977). *The Conditions of Learning and Theory of Instruction* (4th ed.). New York: Holt, Rinehart & Winston.

Phenix, P. (1964). *Realms of Meaning.* New York: McGraw-Hill Book Co.

Ryle, G. (1949). *The Concept of Mind.* London: Hutchinson's University Library.

Schwab, J. (1970). *The Practical: A Language for Curriculum.* Washington, DC: National Education Association Publishers.

Sulsby, E. & Teale, W. (1986). *Emergent Literacy: Writing and Reading.* Norwood, NJ: Ablex.

Tough, J. (1977). *The Development of Meaning.* New York: John Wiley.

Tyler, R.W. (1950). *Basic Principles of Curriculum and Instruction.* Chicago: University of Chicago Press.

Vars, G. (1991). Integrated curriculum in historical perspective. *Educational Leadership, 49*, 14-15.

An Exploration of the Impact of Personality Factors on Comprehension

Nancy Boraks, Mary Brittain, Fred Linder, Dave Bauer

Introduction

The relationship of personality factors to reading achievement has been accepted and explored. However, acceptance has often been based on intuition, experience and diverse, not conclusive research. Exploration has often been based on the need for additional strategies for diagnosing and developing reading abilities and reading appreciation. This study explores the relationship between specific personality factors and reading comprehension in order to offer new frameworks for instruction.

Background

The theoretical basis for relating comprehension and personality is drawn from writings on literary appreciation. Rosenblatt's (1978) reader response theory indicates that readers create or perceive meaning in terms of their own experiences. Beach and Hynds (1984) in an excellent review of factors influencing response to literature also suggest that readers' recreate literary works in accordance with their own psychological predispositions (p. 465). However, much of the research in this area has been done with high school and adult readers. The impact of personality factors on reading with younger children needs to be explored further.

Schmeck (1988) makes it clear that it is important and useful to identify "educationally relevant personal attributes," but reading researchers seem to be doing less and less in this area. For example, the yearly IRA *Annual Summary of Investigations Relating to Reading* annually includes up to 800 studies, but over the past five years has listed fewer than a dozen studies on the relationship of personal variables and general comprehension (Weintraub, 1988, 1989, 1990, 1991, 1992).

Our own initial research explored the relationship of personality to reading comprehension in an attempt to assess the impact of student responses to chosen versus required books (Boraks, Brittain, Linder, 1991, 1992). During the course of that research the Maslow need hierarchy emerged as an intriguing variable. Moreover, other personality variables seemed to play a controlling role in comprehension. This suggested the need to clarify the relationship between comprehension and personality variables.

Purposes of the study

This study explores the relationship between comprehension and three personality variables: locus of control, attitude, and Maslow's need hierarchy. The first purpose is to analyze the separateness or overlapping nature of these variables and the impact of each on reading comprehension. Personality variables selected offer frameworks for teacher questions and discussions which can develop and determine prerequisites to comprehension. Therefore, the second purpose is to clarify how personality variables can inform reading research and instruction.

This study is considered exploratory because: (a) statistical and conceptual analysis are *post hoc*, dictated by emerging patterns found in student responses and (b) a new instrument to measure one variable (need hierarchy) is utilized. A description and rationale for including each personality variable is presented below.

Locus of Control. Social learning theory and the locus of control construct have been used to explain the perceived relationship between behavior and its consequences (Rotter, 1966; Lefcourt, 1982, 1983). The locus of control construct stresses the idea that behaviors are determined simultaneously by the variables of expectancy and reinforcement. Internal control refers to the belief that reinforcement is contingent on one's own behavior, while external control refers to the belief that fate, luck, chance, or powerful others dominate outcomes. The relationship between locus of control and achievement has been well-documented: Internally controlled learners tend to be higher achievers (Lefcourt, 1982; Ames and Ames, 1984; Dweck & Elliott, 1983).

Attitude. Attitude here refers to how children feel about recreational and school reading. Teachers believe and reading theorists maintain that attitude affects reading achievement. That is, children who enjoy reading tend to be children who read better. There is ample empirical evidence to support this view (Anderson, Wilson, & Fielding, 1986; Greany, 1980; Morrow, 1983).

Need Hierarchy. Need hierarchy is considered here as a larger construct meant to tap reader's life experiences. This construct emerged in an earlier study as we attempted to do a content analysis of children's responses to the question: "What part of the book did you like best?" We had intended to use literary frameworks for analyzing responses until it became clear that children's responses fell rather neatly into Maslow's need hierarchy (Boraks, Brittain, Linder, 1992). Maslow's (1970) need hierarchy or theory of motivation posits two categories of needs: deficiency needs and being needs. Deficiency needs include the physiological (food, shelter), safety, love and belonging, and esteem. Being needs include the need to actualize one's potential and maintain openness to new knowledge/experiences. Positing a relationship between comprehension and needs is tenable. In fact, parallel to our own research, Heylighen (1992) conceptualized a cognitive component within the Maslow's hierarchy, noting that "many, if not most of the characteristics of self-actualization . . . are cognitive: accurate perception, creative problem solving, effective decision making, capacity for learning. . ." (p. 46).

There are conceptual overlaps between attitude, locus of control, and level of need. The increasing quality of independence and positiveness at successive stages of Maslow's need hierarchy suggest relationships with locus of control and attitude; locus of control, attitude, and level of need may simply be aspects of a single construct.

Method

Sample

All fourth and fifth grade students in a Southeastern urban school were involved in the study. The majority of the children were Black. The school was chosen because the administration and teachers (four) expressed a strong interest in learning as much about improving reading comprehension as possible. There were 52 fourth graders and 51 fifth graders involved in the study; 44 male students and 59 female students.

Measures

Comprehension. Comprehension measurement is a difficult and still emerging field. Cross and Paris (1987) state that reading comprehension is "a multifaceted construct influenced by a variety of cognitive, social and affective variables" (p 314). They suggest that selection of a comprehension test be based on matching purpose for testing with critical test properties. The comprehension measure used in this exploratory study, *Iowa Test of Basic Skills* (ITBS), has most of the required properties (Lane, 1992). This measure was a part of the regular school assessment program. A second measure of comprehension, teacher's perception of students' comprehension, was also used. Teacher's were also asked to rate student reading comprehension on a three point scale (low, middle, high).

Locus of control scale. Used extensively in research, *The Nowicki-Strickland Locus of Control Scale* (1973) (short form for grades 3-6) has had validity and reliability established (Robinson & Shaver, 1980). This is a 19 item scale, with a simple yes/no response format.

Attitude Scale. The manner in which attitude affects comprehension has not been clearly articulated and instruments to capture attitude are still considered exploratory. However, of several well-researched instruments, the McKenna and Kear (1990) *Elementary Reading Attitude Scale* was used because of strong construct validity and well-documented internal reliability (McKenna & Kear, 1990). The scale, attractive and appealing to children, uses Garfield (the comic strip cat) pictured as happy to unhappy on a four-point scale. There are 20 items, tapping attitude toward school and recreational reading.

Need Hierarchy Scale. No Maslow-type scale, relating need perception to reading comprehension or tapping aspects of children's needs was found in the literature. As Neher (1991) stated, Maslow is quoted extensively but his name "is seldom cited in research literature on motivation . . . which means his theory . . . lies outside the mainstream of testing and critical evaluation" (p. 90). This may be because Maslow wanted the need hierarchy considered as an integrated, interactive whole.

However, even critics of Maslow's need hierarchy find the "stages simple and consistent" . . . and capable of being measured objectively (Heyligher, 1992). The need hierarchy instrument developed for this exploratory study includes three scales. Two scales have open-ended questions: Scale I asks students to make three wishes (wish scale, items 1-3); Scale II asks students to identify the most positive experience in their lives (critical incident scale, item 4); Scale III explores the potential of students to identify motivation needs of characters in a story (literary

scale, items 5-7). The literary scale includes three multiple choice (closed) questions to tap preference for character need/motivation, problem and solution level. Item alternatives match each level of Maslow's hierarchy. Responses were coded on a 5 point scale: (1) physiological and safety, (2) love and belonging, (3) esteem, (4) self-actualization, and (5) need to know and understand (see Chart 1). The wish and critical incident format are frequently used to tap level of need.

Teacher Questionnaire. To determine the role of the teacher in the personality/comprehension relationship, we considered teacher stance. Teachers identified what characteristic they try to develop most in their students. We used personality characteristics capturing the main construct of each of the three personality scales to form optional responses: positive attitude, independence, awareness of others, responsibility to others. Teachers were also asked which of these characteristics they were most successful in developing in boys and which in girls.

Procedures

All students received the ITBS test in March, 1992, as part of their regular school testing program. We analyzed only the comprehension section of the ITBS. The personality scales were administered in November, 1992. Teachers read the locus of control, attitude, and Maslow's need hierarchy questionnaires to the children, thereby controlling for impact of reading ability. Prompted by initial analysis of children's data, the teacher questionnaire followed.
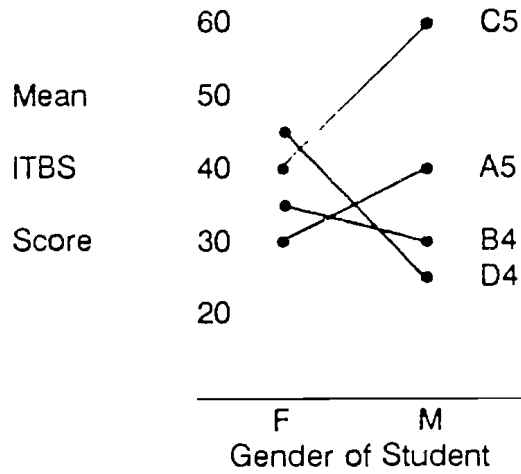
Results

Children's responses on the three personality instruments were analyzed to determine the impact of grade, gender, and comprehension (ITBS).

ITBS: Comprehension. ITBS scores range from 1-91; the grade four mean score was 34.5; grade 5 mean score was 41. There was an interaction of class x gender (see Figure 1 and Table I). Therefore, gender and grade level were controlled while exploring the data.

Locus of Control. Locus of control as measured by the Nowicki-Strickland scale was positively correlated to reading comprehension as measured by the ITBS ($r = .304, p = .0052$). There was a significant grade-gender interaction [$F (1,2) = 18.65, p = .0496$] for locus of control scores, with mean score about the same for girls in each of the four classes. Mean locus of control scores for fourth grade boys was below that of the girls; mean scores for fifth grade boys was above that of the girls (see

Figure 2 and Table 1). Fifth grade boys had the highest internal locus of control scores followed by fourth grade boys (see Figure 2).

```
            60                C5
Mean        50
ITBS        40      •           A5
Score       30                  B4
                                D4
            20

              _____
                F       M
             Gender of Student
```

A,B,C,D = Teachers

4,5 = Grade Level

Figure 1. Mean ITBS score by gender and teacher.

```
Mean        30
                                A5
Locus       29
                                C5
of          28
                                B4
Control     27
                                D4
Score       26
              _____
                F       M
```

Gender of Student
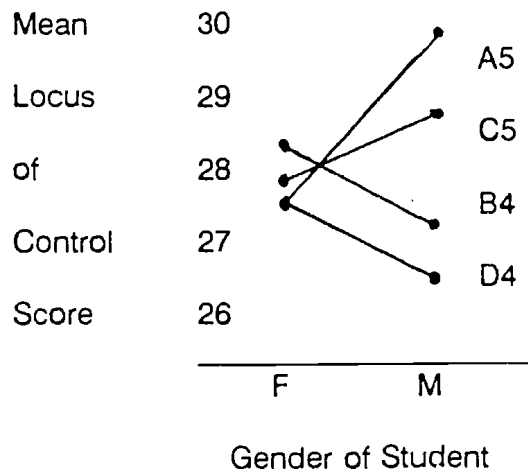
A,B,C,D = Teachers

4,5 = Grade Level

Figure 2. Mean locus of control score by gender and teacher.

Attitude. No differences in mean reading attitude scores for different grades or gender occurred (see Figure 3 and Table 1). There was, however, a teacher effect (F = 5.80, p= .004). The correlation between the *Elementary Reading Attitude Survey* and the ITBS was not significant nor were the correlations significant for gender or grade level when considered separately. Specific items did correlate with the ITBS. For example, item 5: ("How do you feel about spending free time reading?") was significant for grade four girls (r = .598, p = .0016). Several items were negatively correlated with comprehension. For example, item 7: ("How do you feel about reading during summer vacation?") was significant for fourth graders (r = -.439, p= .004) and item 16 ("How do you feel when its time for reading class?") was negatively related for fourth and fifth grade girls (r = -.324, p = .3145) at the fifth grade level.
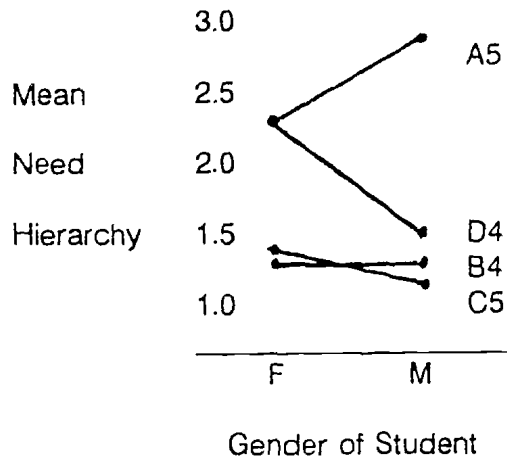
Teacher judgment and attitude were not significantly related in this exploratory study. We did find a relationship between ITBS score and teacher judgment (r = .64, p = .05 for grade 4; r = .79, p = .05 for grade 5).

Gender of Student
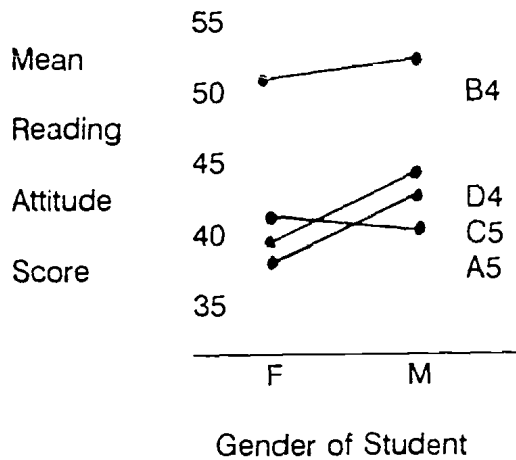
A,B,C,D = Teachers

4,5 = Grade Level

Figure 3. Mean reading attitude score by gender and teacher.

```
     3.0
                          •  A5
  Mean  2.5
                        /
  Need  2.0          /
                   /
  Hierarchy  1.5  •.        •  D4
                    •————————•  B4
     1.0                   •  C5

        ———————————————————
          F          M
```

Gender of Student

A,B,C,D = Teachers

4,5 = Grade Level

Figure 4. Mean need hierarchy score by gender and teacher.

Need hierarchy. The three scales of the need hierarchy instrument were not related and were considered as measuring different constructs here. On scale I, (wish scale) the mean level of students' wishes was 1.45. However, there was a tendency for the third wish to reach a higher level, mean 1.6. Most first and second wishes reflected need for food, shelter, and safety; many third wishes reflected the need for love and belonging (see Chart 1). The nonsignificant intercorrelations of the three wishes also suggest the evolving nature of needs in successive wishes. Diversity existed within and across children. To explore need the highest wish became the unit of analysis analyzed. For the highest level wish a teacher effect and a nearly significant gender x teacher interaction emerged (see Figure 4 and Table 1).

The correlation between the ITBS and need hierarchy puzzled us. The overall correlation between wish scale and ITBS for grade 4, was significant ($r = .422, p = .005$), but for grade 5 it was not ($r = -.233, p = .133$). The small negative correlation for this grade appeared to be largely due to the boys responses ($r = -.600, p = .009$) and this appeared to be due to a single teacher (see Figure 4).

Scale II, Critical incident scale: The open-ended critical incident scale drew a slightly higher mean response than the wish scale, however, the correlation between the ITBS and critical incident scale did not reach *statistical* significance.

Scale III, Preference in Literature: These objective items, (drawing on what level problem, action, or solution would be preferred in a book) drew the higher mean level of response (2.95-3.42) and suggested a desire to deal with esteem needs but these items also did not correlate significantly with the ITBS.

Table 1

Mean Scores by Teacher and Gender

Variable	Teacher A Female	Grade 5 Male	Teacher C Female	Grade 5 Male
Locus of Control	27.5	29.6	27.7	28.7
Reading Attitude	41.0	40.2	37.4	42.5
Needs Hierarchy	2.3	2.9	1.4	1.2
ITBS	30.7	39.9	40.1	60.5

Variable	Teacher B Female	Grade 4 Male	Teacher D Female	Grade 4 Male
Locus of Control	28.2	27.4	27.5	26.5
Reading Attitude	52.1	53.0	37.9	43.9
Needs Hierarchy	1.3	1.3	2.3	1.5
ITBS	35.4	27.8	41.9	27.4

Teacher Questionnaire. The teacher stance questionnaire clarified teacher impact on student responses to personality measures some- what. With ITBS as dependent variable, the teacher effect, as Figures 1- 4 show, indicate a strong interaction for each personality variable. One class, teacher B, had the highest attitude (grade 4), the class of teacher A had the highest need hierarchy and locus of control scores. A clear gender and teacher (teacher C, grade 5, boys) effect (see Figures 1-4) could be found.

Locus of control, attitude, and need hierarchy seemed conceptually related but no significant statistical intercorrelations among these instruments appeared. This led us to combine scales and relate these to the ITBS but did not increase the power of the relationship among personality variables and comprehension.

Discussion

Several interesting results materialized: The varied relationship between personality factors and comprehension, the apparent impe :t of teacher on measured personality variables and the potential of the Maslow need hierarchy instrument.

Results show a clear relationship of ITBS and locus of control consistent with current research (Ames & Ames, 1984; Dweck & Elliott, 1983). Attitude results remain puzzling and inconsistent. The norm groups for the McKenna & Kear *Elementary Reading Attitude Inventory* (1990) show a positive correlation between attitude and achievement. McKenna and Kear used teacher judgment as an indicator of achievement. We used ITBS and teaching judgment. Statistical analysis also differ. McKenna and Kear (1990) use categories (non-parametric analysis) and we used scores as continuous data. The puzzling relationships between teacher judgment of achievement, ITBS and attitude could be considered in several ways. Students had been in their class for two months when judgment was rendered. As noted earlier, administration of the ITBS occurred months prior to the attitude scale. The grade level and gender difference in the relationships between attitude and ITBS suggest the importance of teacher and student gender. It is also possible that the small number of teachers (4) may have highlighted idiosyncratic responses.

There were promising but not significant relationships among the need hierarchy scales (wish, critical incident, and literary). This may be due to the nature of the scales. The wish and critical incident scales were open-ended and the literary scale was closed (multiple choice). Also, the limited number of items (three wishes, one critical incident, three literary items) suggest that the scales must be extended to provide a range of scores and higher internal reliability.

The need hierarchy scales may tap three different aspects of needs: (a) what children say they need, (b) what they see as met needs, and (c) what needs they say they would like addressed in a book. These needs may not be interrelated or interdependent but each scale does seem to pull for a different level of need.

The impact of teacher stance on variables was the one consistent finding. Students in the class where the teacher rated independence

163

highest (and most important for boys) scored highest in locus of control (with boys scoring higher than girls). The same held true for ratings of attitude and need hierarchy. Keeping in mind that the ITBS was administered prior to the children entering these teachers' classes, we did *not* attribute ITBS scores to the teacher effect. We do suggest that teachers can impact personality variables, as measured here. As we continue to follow these classes, further suggestions on how teacher variables, personality factors, and comprehension interact may appear.

Measures of personality must be cautiously interpreted and limitations of this exploratory study demand even more caution. There is obviously a need to involve a larger population and control for teachers' view of critical personality characteristics. The needs hierarchy instrument must be extended and refined.

Limitations

This is an exploratory study and statistical analysis was *post hoc*. As discussed above, limited population and the teacher effect suggests the need for a larger teacher population. We also recognize, as Beach and Hynds (1984) point out, that on personality instruments "students providing one surface response may be intending another" (p. 456).

Implications for Research/Instruction

What potential do these findings have for guiding research and instruction? The consistent showing of teacher effect suggest a teacher may impact student personality variables. This suggests that teachers' stance should be examined and controlled in research related to student personality variables. The implications for instruction are less clear. It should *not* be concluded that teachers who draw children's attention to different need level or locus of control of characters will promote higher comprehension. However, future research might explore tapping stages of children's conceptual and psychological development to promote deeper awareness of character and motivation is indeed limited by a failure to understand that one would search beyond basic needs, then implications for teaching are clear.

Stages of development have been suggested as guides for identifying learners' potential interests and as guides for promoting deeper comprehension and appreciation. For example, teachers are encouraged to consider personality development in selecting children's books (Huck, Hepler, & Hickman, 1993). Milner (1979) taught Kohlberg's stages of moral development to successfully enhance understanding of theme and character. We need to explore further how the Maslow hierarchy and the concept of independence/dependence (locus of control) might lend themselves to use as frameworks for classroom

164

discussion and questions. The role of teacher stance and personality variables has only begun to yield insights into students' comprehension.

References

Ames, R., & Ames, C. (Eds.). (1984). *Research on motivation in education: Student motivation*. Vol 1. New York: Academic Press.

Anderson, R. C., Hiebert, E., Scott, T., & Wilkinson, F. (1985). *Becoming a nation of readers: The report of the commission on reading*. (Contract No. 400-83-0057). Washington, DC: The National Institute of Education.

Anderson, R.C., Wilson, P.T., and Fielding, L.G. (1986, December). *A new focus on free reading*. Symposium presentation at the National Reading Conference, San Diego, California.

Beach, R., and Hynds, S. (1984). Research on response to literature. In R. Barr et al. (Eds.) *Handbook of Reading Research*, Vol. 2, pp. 453-88. New York: Longman.

Boraks, N., Brittain, M., Linder, F. (1991). *Completing the cycle: The impact of policy on children's interaction with literature*. Paper presented at the annual meeting of the American Reading Forum, Sarasota, Florida.

Boraks, N., Brittain, M., Linder, F. (1992). *Children's interaction with literature: Impact of choice*. Paper presented at the annual meeting of the Eastern Educational Research As ociation, Hilton Head, South Carolina.

Cross, D., & Paris, S. (1987). Assessment of reading comprehension: Matching test purposes and properties. *Educational Psychologist, 22*, (3 & 4), 313-332.

Dweck, C., & Elliott, E. (1983). Achievement motivation. In P. Mussen (Ed.). *Handbook of Child Psychology*. New York: Wiley.

Greaney, V. (1980). Factors related to amount and type of leisure reading. *Reading Research Quarterly, 15*, 337-357.

Heylighen, F. (1992). A cognitive-systematic reconstruction of Maslow's theory of self-actualization. *Behavioral Sciences, 37*, 39-54.

Huck, C., Hepler, S., Hickman, J. (1993). *Children's literature in the elementary school*. New York: Harcourt, Brace and Jovanovich.

Lane, S. (1992). Review of Iowa Test of basic skills. In J. Kramer & J. Conoley, (Eds.). *Eleventh mental measurements yearbook*. Lincoln: University of Nebraska.

Lefcourt, H. M. (1982). *Locus of control: Current trends in theory and research*. Hillsdale, New Jersey: Erbaum.

Lefcourt, H. M. (1983). *Research with the locus of control construct*. New York: Academic Press.

Maslow, H. M. (1970). *Motivation and personality*. New York: Harper Row.

McKenna, M. & Kear, D. (1990). Measuring attitude toward reading: A tool for teachers. *The Reading Teacher, 43*(9), 626-639.

Milner, J. (1979, March). Kohlberg and the adolescent reader. *English Education, 68*(3), 74-6.

Morrow, L. M. (1983). Home and school correlates of early interest in literature. *Journal of Educational Research, 76,* 221-230.

Neher, A. (1991). Maslow's theory of motivation: A critique. *Journal of Humanistic Psychology, 31*(3), 89-112.

Norwicki, S., and Strickland, B. R. (1973). A locus of control scale for children. *Journal of Consulting Clinical Psychology, 40,* 148-154.

Robinson, J. P., and Shaver, P. R. (1980). *Measures of social psychological attitudes.* Ann Arbor: Institute for Social Research, University of Michigan.

Rosenblatt, L. (1978). *The reader, the text, the poem: The transactional theory of the literary work.* Carbondale, IL: Southern Illinois University Press.

Rotter, J. B. (1966). Generalized expectancies for internal versus external control of reinforcement. *Psychological Monographs, 80,* (1), 609.

Schmeck, R. R. (1988). Individual differences and learning strategies. In C. Weinstein, T. Goetz, P. A'exander, (Eds.). *Learning and study strategies: Issues in assessment* (pp. 191-99). New York: Academic Press.

Weintraub, S. (Ed.) (1988, 1989, 1990, 1991, 1992). *Annual Summary of Investigations Relating to Reading.* Delaware: International Reading Association.

Zimmerman (1992, Fall). Self-motivation for academic attainment: The role of self-efficacy beliefs and personal goal setting. *American Educational Research Journal, 29*(3), 663-676.

Chart 1

Sample Responses

Sample responses on the Needs Hierarchy Wish Scale included:

Physiological safety: I would like all the money in the world.
I want my own TV, nintendo, home, mall.

Love and belonging: I want to get married.
I want my friend to come play with me after school.

Esteem: I would like to boss my parents around.
I wish I had better grades.

Self-actualization: I wish everyone could like in peace and harmony.
i wish all the homeless would have a place to live.

*(interrater reliability = .70)

Teacher Reflection: Researching our own Practice

James R. Olson, Marti Singer

Introduction

Knowledge is based on the process of inquiry. The concepts of inquiry-oriented education and, more specifically, teacher reflection have been discussed in the literature for some time (Alvermann, 1990; Cochran-Smith & Lytle, 1990; Dewey, 1916, 1929; Roth, 1989; Schon, 1983, 1987; Smyth, 1989; Tom, 1985). The process of inquiry-oriented education is a problem-solving approach that addresses professional growth and instructional effectiveness by seeking to enhance the context of the learning situation. It personalizes the learning experience by employing the notion that learning is rooted in experience. Through reflection, teachers become responsible for improving their own practice by questioning and examining their practice in order to clarify certain beliefs and construct new options. Becoming a "reflective practitioner" enables teachers to explore past experiences and seek alternative solutions to their established practices. In addition, reflection allows teachers to contemplate problems of dissonance--what happens when new knowledge conflicts with existing beliefs (Festinger, 1957), and practical argument theory--arguments based on intuitive actions that teacher use to defend practice (Fenstermacher, 1986). Finally, reflection allows teachers to become part of the research process; research can be done with teachers and not on teachers.

Building a Theory

Summative assessment, conducted when an "expert" enters the classroom armed with a checklist of criteria to evaluate performance

according to some preconceived notions of excellence or success, may have its place in the process of teacher evaluation for effectiveness. However, it is limited by the lack of involvement and investment from the teacher. Formative assessment, on the other hand, is a process of reflection and of taking an active role in looking at what teachers do in the classroom as well as what they believe about learning and teaching that affects behavior, practice, and effectiveness. Cochran-Smith & Lytle (1990) have noted:

> What is missing from the knowledge base for teaching, therefore, are the voices of the teachers themselves, the questions teachers ask, the ways teachers use writing and intentional talk in their work lives, and the interpretive frames teachers use to understand and improve their own classroom practices. Limiting the official knowledge base for teaching to what academics have chosen to study and write about has contributed to a number of problems, including discontinuity between what is taught in universities and what is taught in classrooms, teachers' ambivalence about the claims of academic research and a general lack of information about classroom life (p. 8).

One way to begin reflection is to examine what we, as educators, believe. These belief systems can be described in a variety of ways. We can examine a teacher's basic approach and teaching style if only to catch a glimpse of the foundation for the practice we observe. Some teachers work from skill to concept--a "bottom-up" approach; some teach from concept to application--a "top-down" approach (Gove, 1983). Some teach as executives or managers of knowledge, some as therapists who work to stimulate student potential and enhance student growth, some as liberationists intent on making the world a better place by helping students develop into more productive human beings (Fenstermacher & Soltis, 1986). Whatever the beliefs that serve as a basis for practice, it is often the case that we, as teachers, are not very conscious of them. We are more conscious of our behaviors (and others are, too), but some educational psychologists content that we cannot make significant changes in behavior or in practice until we understand and become conscious of the underlying belief system or systems that drive our practice. We can teach the names and descriptions of various teacher belief systems, but only through self-reflection will teachers come to know about their own beliefs.

Furthermore, Fenstermacher & Soltis (1986) added that education is not so much supplying the knowledge or beliefs from one person (teacher) to another (student), much less supplying the isolated skills, but rather education is providing the means to gain access to and continue the construction and growth of knowledge. When we supply teachers with the "means to structure their experiences in ways that

continually enlarge their knowledge, reasons, beliefs, understanding, autonomy, authenticity, and sense of place... [and] assist teachers in framing the practical arguments undergirding their actions" (p.46), we can then teach them ways to critically analyze these beliefs toward reconsideration and behavioral change or improved pedagogy. Kenney (1991) further strengthened Fenstermacher's argument.

> I am convinced that a teacher's beliefs about learning are the very foundations of that teacher's true instructional program. In teacher research, the process of examining those beliefs is initiated and controlled by teachers. The change process becomes personal. The research question has arisen from a real need in the classroom. The teacher researcher is making decisions about instruction based on what he or she newly understands and believes about learning... These new beliefs are the result of critical observation of children in lear ing situations in the classroom. This examination, refining, restructuring, and reformulation of beliefs about learning theory leads to real change in instruction. The instructional decisions have a new kind of integrity (p. 22).

Classroom research that is teacher/student based, formative in nature, and grounded in belief systems that are becoming conscious, is necessarily reflective. Some things we can know before we do them; some we must learn about during the process and through reflection. It is time to respect personal knowledge as a means of enhancing classroom practice, both ours and that of those whom we prepare to become teachers. We must encourage and convince them that they are also learners and that learning about their own teaching is what makes them researchers as well.

Uses of the Model

We believe that authentic teacher reflection encourages self-assessment and allows for multiple ways of looking at ourselves as educators. The model discussed here (Valeri-Gold & Olson, 1992) was established with that idea in mind. Also, the model was designed not only within the theory of inquiry but also within the concept that self-reflection is imperative for effective change and improvement in the classroom. The ideas behind formative assessment, teacher beliefs, and teacher as researcher, further serve as foundation for the model. The model focuses on providing the means demanded by Fenstermacher (1989) for constructing knowledge. By employing this problem-solving model for reflective inquiry, a teacher can construct meaning through participant observation and interaction with others. We further believe that it is through interaction with others that we come to understand ourselves better. The model helps take the "fuzzy" and give it structure

so a teacher can view instruction in a new way. To demonstrate this, we present two scenarios employing the model and conclude with some implications for research and pedagogy.

The model was originally intended to be used within the context of a response journal (see Table 1). Through writing in a six-step, linear progression, teachers PRESENT a relevant issue for consideration, CLARIFY the issue in terms of previous experience to further enhance understanding, and EXAMINE the issue by posing investigative questions. Step Four asks the teachers to ANSWER the questions by consulting sources, colleagues, or expert opinion, ASSESS new understanding of the issue based on information gathered, and finally reconsider, refute, or reaffirm beliefs and practice in Step Six--FEED-BACK. We first employed the model to help us understand what happened in a developmental studies reading/composition class we were team-teaching when a lesson had failed to work as we had planned.

Table 1

Inquiry-Oriented Response Journal Model

Stage	Rationale	Procedure
PRESENT	To encourage the processes of self-reflection, decision making and problem solving by presenting relevant issues for discussion To activate teachers, prior knowledge and establish a base of understanding	State the issue and identify key words and concepts
CLARIFY	To visualize and question social, political, economic, and cultural implications of responses, decisions, and solutions to further clarify the issues	List external and internal factors affecting the issue
EXAMINE	To examine the issue by posing relevant questions	Propose questions investigating the issue

1 ˜ ()

ANSWER	To enhance the processes of inquiry and self-reflection by investigating relevant current research	Consult outside resources and cite expert opinions
ASSESS	To seek possible alternatives and further personalize the self-reflection process by thinking, probing, and qualifying personal responses	Formulate responses
FEEDBACK	To reconsider and reaffirm personal beliefs, practices and attitudes about teaching and learning To adapt or change currently held assumptions for which there is research to confirm or refute beliefs	Establish collegial dialogue

Application #1

The assignment instructed the students to answer selected questions about their first learning experiences, interview a classmate on the same topic, consider common themes that emerged from their own responses and those of the classmate, and write an essay comparing learning inventories. Within minutes, a third of the class had completed the assignment and were looking around for something to do while the rest were busily working. Those who had finished early had completed the task inadequately and were confused as to wh' others were still working so diligently. After class, one of us wrote the following entry in our journal:

I'm starting to ask myself some questions about this particular incident and, as I think back on the other times I have used this assignment or even this particular teaching technique (that is, give the assignment, explain it, allow students to complete in small groups), I have seen a similar situation. Some students finish early and don't seem to understand why they haven't really "completed" the assignment--do you know what I mean? Maybe I could organize the assignment differently or revise the directions. Do I need to be clearer in my expectations? More specific in what I want? How

much ، f a role do group dynamics play in this whole thing? Do I need to teach college students *how* to function in small groups? Do I have time to rethink all this?

After reading the journal entry, what one of us immediately realized was that this reflection about teaching had caused us to "enter" the model at Stage Three: EXAMINE, by posing questions. We were intrigued by how this might restructure the entire model, and we were just as interested in how this might influence the process of reflection. The reflective process appeared not to be linear, as first thought, but perhaps circular or even recursive. Teachers may "enter" at various stages and resolve issues in various progressions. We decided to backtrack to Step One and PRESENT the issue that was really confronting us. We said: **There are a variety of valid reasons students fail to adequately complete assigned tasks in a classroom situation.** We rethought what had happened in the classroom and tried to remember as many details as possible that lead to frustration, on our part as well as on the part of the students. Excerpts from the next journal entry read:

> Today we gave an assignment in class that I hoped would serve as a background exercise to activate some prior knowledge of students ... I thought I made the assignment clear ... Ten minutes later some students were completely through; I thought the entire process would take at least 20 minutes ... I found students who finished early had said they had answered the questions, but they had not really responded to them.

Together we moved to Stage Two: CLARIFY by remembering other times each of us had used this assignment or the technique. One of us wrote:

> The assignment was one I had done before with other classes and even with graduate classes. It seemed to work and I enjoyed the kinds of discussion generated from student responses. However, we have a couple of students in this group who don't seem to want to be there and pretty much attack any and every assignment in a cursory and distant way. They look at each assignment on the surface and do the minimum to complete the task ... In addition, the classroom isn't really conducive to small group work either; it's too small and there's no place to spread out.

Since we had begun our investigation at Stage Three: EXAMINE, we began to try and find answers to the questions initially posed. We tried to fine-tune our search and make the reflection process more valuable by continuing to ask additional questions. For instance, one journal read:

172

I really don't have the time to do a full scale investigation of this, but it does concern me and has for some time. Is it me or the students? And if it's me, what can I do differently? I know that it is part of my nature to explore concepts and ideas and to encourage my students to do the same. I guess I'll bring it up the next time we meet. What do you think? Any insights? Who else could we talk with? Are others having similar difficulties and haven't verbalized them? Maybe they'd be glad to know the problem isn't peculiar to their classes.

At Stage Five: ASSESS, we began to truly see teacher reflection at work. The journal read:

I've known for a long time that developmental studies students are naive, not unintelligent. They tend not to look at options and possibilities as they write. Maybe it's that they don't explore much. Not that they don't want to, but that they don't know the questions to ask themselves. They don't even seem to know that it's expected and they either ask a million questions or do a haphazard job fulfilling the task or assignment. This type of behavior happens whenever I give an assignment when I'm assuming and not explaining. But that fits my conceptual framework; I assume that what makes sense to me will make perfect sense to them, too. Many of our students are probably more specific learners and I need to be more sympathetic to those concrete, hands-on learners, who need the explicit task outlined. As I asked around the unit, I found that colleagues are concerned about the insufficient development of actual thought processes in many developmental studies students. Maybe we need to reevaluate what we envision of students in terms of entry and exit level expectations; what do we assume in terms of thought processes?

The final stage, FEEDBACK, allowed further reflection and the beginnings of a course of action. The journal said:

Being able to write about this in the journal has allowed me to think about the whole situation and actually put it into words. Before, I might have just mentioned to someone in the office, saying "Boy, those kids are driving me crazy!" They might have agreed and answered, "Me, too!" But in the journal I actually thought about why I was crazy and tried to figure it out. Cathartic, maybe? I am going to try something different next time--maybe it will work and maybe not. For some of the other assignments in this team-taught class you have picked up the pieces and re-explained the initial assignment in a way that made sense to those who needed the more specific approach. You have a unique way of imagining what others are

going through in trying to understand an assignment and are more natural at the sequential directions. Since you're not always there to do that for students, I need to learn to balance the two approaches in order to meet the needs of our diverse population of students.

By reconstructing the problem with the reflective model as a guide, we were able to review the situation, gather data, observe more systematically and carefully, and ask ourselves questions that would lead us to fuller and clearer reflection of the problem. Then we could move toward solutions, that is, toward effective change. Rather than abandon an effective method of teaching—one that was successful for many of the students—we were able to discover some of the issues and problems that contributed to the lack of success for a few. Now we can keep what "works" and revise the lesson toward greater effectiveness for more students.

Application #2

The process of reflection enhanced by the model is applicable not only for individual classroom teaching, but can also be utilized on a larger scale for assessment and research in the design and development of curriculum. We employed the six stages of the model to systematically reflect on the process of curricular change when we redesigned our team-taught class for developmental reading and writing.

PRESENT. We desire to redesign the present course and:

- conduct a naturalistic exploration as participant observers of an alternative context to enhance motivation and student learning,

- connect reading and writing through team teaching,

- pursue an interest in alternative assessment of student learning, and

- begin to corroborate various kinds of information gathered to assess student progress.

CLARIFY. The factors affecting this issue are:

- scheduling

- demands of the curriculum

- teaching philosophies/styles

- demands on our time

- student load/paper load

- heterogeneity of students

- student attitude and motivation
- course requirements
- nature of assessment
- methods of data collection
- anonymity of student data

EXAMINE. At Stage Three, we generated statements that would guide our design of the new course. We stated:

- college students lack the metacognitive strategies necessary for success in the learning environment;
- Teachers must help these students become more responsible for their own learning;
- Teachers must being to employ alternative methods of assessment to evaluate individual student needs:
- Certain alternative methods of assessment may be more effective than others for enhancing student motivation and attitudes toward learning.

The ANSWER stage served as an investigation into the appropriate literature that would add credence to what we intended to do. We divided up the task and met frequently to discuss what we had found, what we could possibly use, and what direction we should pursue next. We examined theories of how students learn, the notion of the new literacy of Willinsky (1990), the modes of instruction and roles of the teacher of Fenstermacher & Soltis (1986), the concept of authentic assessment through portfolios and negotiation, the qualitative research methods of phenomenology and symbolic interaction, and the writings of experts in the field of at-risk populations such as Chiseri-Strater (1991) and Rose (1989).

The ASSESS stage involved responding to what we had thought about or questioned so far. At this point and based on our readings and conversations, we were prepared to design a course outline and syllabus. We discussed the nature of the "voices" of student learners: what is "heard" through hard assessment data (e.g., test scores, grade point averages), what is "heard" through psychological profile data (e.g., self-report data on learning and study strategies inventories and personality-type indicators), and what is "heard" through metacognitive, self-reflective data (e.g., journals, interviews, conferences). As teacher/researchers, we agreed to keep dialogue journals and exchange them on a regular basis, generally at our weekly collaborative planning sessions. We recognized the need for continual reassessment during

175

the quarter as new information became known that would influence instruction and teaching.

During the FEEDBACk stage, which occurred at the end of the quarter, we reviewed the contents of the teacher journals by categorizing and making generalizations about what we had learned, understood in a new way, or found to be true or not true. We reviewed the student course evaluations for their perceptions, allowing student input to influence future planning We had conducted student interviews and conferences during the quarter and we reviewed those more "candid" comments. Finally, we refined our course objectives, materials, and procedures and addressed the idea of how the model had impacted our process of reflection.

The reflective model allowed us to systematically assess what we had constructed, implemented, and observed about ourselves as teachers, about the context of the course, its purpose and possible research implications, and about our students and their progress. It effectively enhanced our own pedagogy and classroom research.

Conclusion

Using the model in these ways has allowed us to think about implications of our own reflection as well as future uses of such a systematic paradigm. The process has shown us that we, as teachers, need to pay more productive attention to our own teaching processes and to the outcomes that are affected by these processes (i.e., change that is not only thoughtful, but change that is research-based, classroom-based, and personally based), with the teacher as an integral part of student learning. The opportunities to reflect allowed us to look at various pieces of one model for change and to analyze those pieces in which we are weak, strong, or unaware. We were able to explore possibilities and to see where this model might fit into teacher/researcher investigations or other kinds of collaborative research. We were able to compare teaching style and conceptual framework within the sequence of the model, to look at teacher differences, and to understand as how these differences function within the classroom and within the individual teacher. Finally, we began to understand how different kinds of pedagogical changes occurred as a result of this kind of reflection and we began to ask ourselves which parts of the model most influenced that pedagogy.

It is through teacher reflection and classroom research that we obtain insight and support for an inquiry-based model of teacher reflection. In our experiences, we examined teaching style, pedagogical process, and student learning through the process of reflection and worked together

176

to find answers to questions as well as direction for our instruction that would enhance our effectiveness as teachers. We concur with Applebee (1987) who has concluded:

> It is through the process of systematic reflection that teachers can most enrich the research process--reflection upon their own teaching, upon interpretations of data collected, and upon the implication for practice of the questions and directions highlighted in disciplined-based research. Based on their knowledge of the classroom, teachers can ask questions that help define new problems to study, provide evidence about what works and what does not, and give insight into the complex life of the school and the classroom. Research in education has at times ignored the teachers' professional knowledge, of course, and has inevitably suffered from it (p. 7).

References

Alvermann, D. (1990). Reading teacher education. In W. R. Houston, M. Haberman, & J. Sikulua (Eds.), *Handbook of research on teacher education* (pp. 687-704). New York: Macmillan.

Applebee, A. N. (1987). Musings...Teachers and the process of research. *Research in the Teaching of English, 21*(1), 5-7.

Chiseri-Strater, E. (1991). *Academic literacies: The public and private discourse of university students.* Portsmouth, NH: Heinemann.

Cochran-Smith, M. & Lytle, S. L. (1990). Research on teaching and teacher research: The issues that divide. *Educational Research, 19*(2), 2-11.

Dewey, J. (1916). *Democracy in education.* New York: Macmillan.

Dewey, J. (1929). *The sources of a science of education.* New York: Liveright.

Fenstermacher, G. D. (1986). Philosophy of research on teaching: Three aspects. In M. C. Wittrock (Ed.), *Handbook of research on teaching* (3rd ed., pp. 37-49). New York: Macmillan.

Fenstermacher, G. D. & Soltis, J. F. (1986). *Approaches to teaching.* New York: Teachers College Press.

Festinger, L. (1957). *A theory of cognitive dissonance.* Evanston, IL: Row, Peterson.

Gove, M. K. (1983). Clarifying teachers' beliefs about reading. *The Reading Teacher, 37,* 261-268.

Kenney, S. (February-March, 1991). Teacher research and the change process. *Reading Today, 8*(4), 22.

Rose, M. (1989). *Lives on the boundary: The struggles and achievements of America's underprepared.* New York: Free Press.

Roth, R. A. (1989). Preparing the reflective practitioner: Transforming the apprentice through the dialectic. *Journal of Teacher Education, 40*(2), 31-35.

Schon, D. (1983). *The reflective practitioner: How professionals think in action.* New York: Basic Books.

Schon, D. (1987). *Educating the reflective practitioner.* San Francisco: Jossey Bass.

Smyth, J. (1989). Developing and sustaining critical reflection in teaching education. *Journal of Teacher Education, 40*(2), 2-9.

Tom, A. R. (1985). Inquiring into inquiry-oriented teacher education. *Journal of Teacher Education, 36*(5), 35-44.

Valeri-Gold, M. T. & Olson, J. R. (1992). Using response journals to enhance inquiry-oriented reading teacher education. In A. M. Frager & J. Miller (Eds.), *Using inquiry in reading education* (pp. 59-67). College Reading Association.

Willinsky, J. (1990). *The new literacy.* New York: Routledge.

American Reading Forum

Members of the Board of Directors

Terry Bullock, Chair, (1993)
University of Cincinnati

Brenda Townsend (1993)
International Reading Association

Don Lumpkin (1993)
Ball State University

Gary Moorman (1994)
Appalachian State University

Sarah Dowhower (1994)
Miami University

Cindy Gillespie (1995)
Ball State University

David Gustafson (1995)
University of Wisconsin-LaCrosse

Past Members of the Board of Directors

Sylvia M. Carter (1983)
University of Georgia

Gordon Gray (1983)
Clemson University

Bob Jerrolds (1983)
North Georgia College

Alton Raygor (1983)
University of Minnesota

Anthony Manzo (1984)
University of Missouri - Kansas City

George Spache (1984)
Spache Educational Consultants, Inc.

Wayne Otto (1984)
University of Wisconsin - Madison

Byron Calloway (1985)
University of Georgia

Marion Tonjes (1985)
Western Washington University

Bernard L. Hayes (1986)
Utah State University

Eunice Askov (1986)
Pennsylvania State University

Martha Collins (1987)
Akron University

Chester Laine (1987)
University of Cincinnati

Peggy E. Ransom (1987)
Ball State University

Patricia Duncan (1988)
Virginia Commonwealth

Victoria J. Risko (1988)
Vanderbilt University

Marino C. Alvarez (1989)
Tennessee State University

Ruth Kurth (1989)
Concordia College

Joan B. Elliott (1990)
Indiana University at Pennsylvania

James A. Dinnan (1990)
University of Georgia

George McNinch (1990)
West Georgia College

Thomas A. Estes (1991)
University of Virginia

Sylvia M. Hutchinson (1991)
University of Georgia

Lawrence Erickson (1992)
Southern Illinois University

Kay Camperell (1992)
Utah State University

179

American Reading Forum
Membership Information

The American Reading Forum:

The American Reading Forum is a nonprofit, professional organization composed of individuals who share an interest in the improvement of reading. While the American Reading Forum is an organization that facilitates the dissemination of ideas and research, it places highest priority on providing its members opportunities for a critical discussion of ideas, issues, research, and paradigms.

The American Reading Forum's Goals:

The American Reading forum declares the following to be its reason for existence and the guidelines for its activities:

* To provide a true forum for reading education where new research can be generated, research in progress can be refined, completed research can be reported, and reported research can be evaluated.

* To provide for the translation of reading research, theory, and philosophical deliberations into sound practice, but with no research, discussion, or contemplation to be discarded because its implementation is not immediately apparent.

* To conduct a conference at which newly trained scholars and scholars in training can get to know and get assistance from established and distinguished scholars in the field, through a mutual exchange of ideas.

* To provide a yearbook through which scholars of all levels can share viewpoints, resources, and expertise.

* To ensure that in the field of reading no idea is too bold or new to be given a hearing, and none too old to be given reconsideration.

The American Reading Forum's Meeting:

To achieve its goals, ARF sponsors a meeting each year during early December. The program consists of the common conference session formats (e.g., paper sessions, major addresses, and symposia), as well as alternative formats to those generally employed by organizations in the field of reading. To enhance the opportunity for participant's interaction, the American Reading Forum encourages a variety of formats for its sessions. A "Topical Issues Forum," a "Continuous Dialogue Session," and "Mentorships Sessions" are a few of the formats that ARF considers as ways to allow issues and topics to be discussed in depth by those who attend the annual meeting.

Membership Form

Annual membership in the American Reading Forum begins in December of the year in which your application is received. All memberships include the annual YEARBOOK, which is received the following December.

Name: _____
                First   Initial   Last

Address: _____

_____

City/State or Province/Code: _____

Phone: Office (_____) _____   Home (_____) _____

Type of
Membership: Individual ($35) _____   Student ($17.50) _____

                Husband/Wife ($60) _____

Faculty Endorsement of Student Membership Application:

I verify that this applicant is a full-time student.

_____   _____
    Faculty Member's Signature   Name of Institution

Mail this application with your check, made payable to ARF, to

AMERICAN READING FORUM
Education Department
North Georgia College
Dahlonega, GA 30549

181

AMERICAN READING FORUM
309 Aderhold Hill
University of Georgia
Athens, GA 30602

182

BEST COPY AVAILABLE