



REVIEW

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The Early Years

ASSOCIATION FOR SUPERVISION AND CURRICULUM DEVELOPMENT

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The Publications Committee seeks articles and letters that provide useful information on the teaching/learning process. Manuscripts should show the author's name, title and institution. Contributions should be in the form of a hardcopy together with a 5.25" diskette. Please send all contributions to the Publications Committee, ASCD Singapore, c/o CDIS, 465E Bukit Timah Road, Singapore 1025.

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ASCD's 47th Annual Conference in New Orleans, USA

"Transforming Learning : Paradigms, Practices, Possibilities"

April 4-7, 1992

Next year's ASCD Annual Conference will be held in New Orleans.

To extend your professional development further, we suggest that participants join one of the 18 outstanding Pre-Conference Institutes. These are scheduled for April 1-3.

To make your trip worthwhile, arrangements will be made for participants to visit a few schools in the New Orleans area after the Conference.

ASCD members who wish to attend the Conference will have to pay the full cost of the Conference. This is estimated to be:

Return airfare	S\$ 3,100
Registration fee	S\$ 250
Pre-Conference Institutes	S\$ 236 - \$570
10 days' hotel (twin sharing)	S\$ 1,350
(Cost may vary depending on the hotel)	

TOTAL	S\$ 4,936- 5,270
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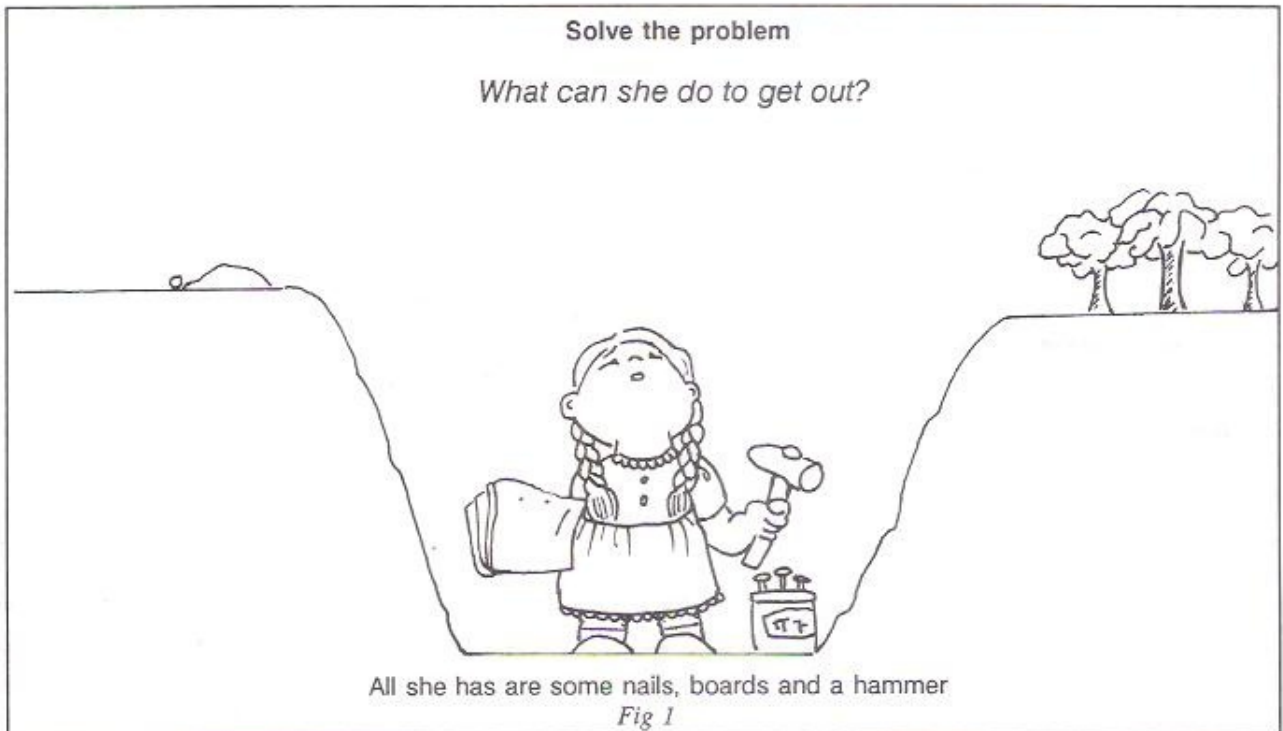
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Deadline : 15 December 1991

<i>PRE-CONFERENCE INSTITUTES</i>	<i>DATE</i>	<i>PRE-CONFERENCE INSTITUTES</i>	<i>DATE</i>
<i>Assisting Change in Education Program (Overview)</i>	<i>April 1</i>	<i>Success For All Students</i>	<i>Apr 1-3</i>
<i>Tactics for Thinking</i>	<i>Apr 1-3</i>	<i>Keys to Successful Peer Coaching</i>	<i>Apr 2-3</i>
<i>Integrating Instructional Models</i>	<i>Apr 1-3</i>	<i>Student as Worker:Teacher as Facilitator</i>	<i>Apr 2-3</i>
<i>Making a Transition to Whole Language Instruction</i>	<i>Apr 1-3</i>	<i>Importance of Leadership Vision</i>	<i>Apr 2-3</i>
<i>Developing Thoughtful Curriculums</i>	<i>Apr 1-3</i>	<i>Designing an Interdisciplinary Curricul.</i>	<i>Apr 2-3</i>
<i>Staff Developers as Internal Change Agents</i>	<i>Apr 1-3</i>	<i>Leadership for Productive Schools</i>	<i>Apr 2-3</i>
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Creative Problem Solving for Young Children



What is a Problem?

A problem is

- a toy that you break.
- when you lose something.
- when a friend bosses you around.
- when you don't know what you are supposed to do.
- when someone has a bike that you want.

Why Creative Problem Solving for Children?

When a child is encouraged to solve his own problems, what is he really

encouraged to do? To find answers? Solutions? The answer or solution is really a small part of problem solving. Far more important is the development of the intellectual processes involved. The child who is encouraged to solve his problems is being guided to explore, to think and to reason.

It is a primary objective of education to help each child to develop the ability to exercise these intellectual processes himself in a functional and creative way.

Problem solving is a form of reasoning. It is logical and often imaginative. It is invaluable to cognitive development, for in solving a problem almost all thought processes are engaged (Yinger & Eckland, 1975).

The child learns to:



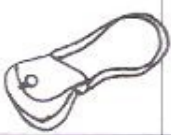


- explore

- identify and utilize resources
- question and gather information
- form ideas and opinions
- create options and then analyze
- decide among them, choose those that are the most useful, the most appropriate.

Perhaps more importantly a child who begins to solve problems is developing the ability to expand his skills with which to cope with all kinds of experiences he might face in daily life.

Going through the process of problem solving also increases the child's

A Gift for Grandma

Alternatives					
Would she like it?					
Could she use it?					
Could I (we) afford it?					
Would it last?					
Would Mum & Dad approve?					
Totals					

My (Our) decision:

Reasons why I (We) chose this:

Fig 2

awareness of himself as an individual. It helps the child to get in touch with his ideas and feelings and helps to clarify what has meaning for the child. The very fact that an adult trusts the child to solve some of his own problems, and he has some success in doing so, will foster self-confidence.

It is the adult's responsibility to guide children towards the ultimate goal of independence, self-sufficiency and responsibility for their own thoughts and actions.

When solving problems with others, children become aware of different points of view. This process encourages children to be less self-centred or egocentric.

What processes did you go through to solve a problem ?

1. *Problem Identification*
Was there something you wanted

to change?

Could you take some responsibility for changing the situation?

2. *Problem Clarification*
What was it you wanted to change?
How were you affected?
3. *Creation of Ideas*
What ways can we think of to solve the problem?
4. *Implementation of Ideas*
Which strategy might work?
5. *Evaluation of Outcome*
Was it a good solution?

What are some good problems for young children?

Problems must be appropriate for children's developmental levels and must take into account their experiences and abilities. Problems should be solvable at various levels of complexity and in various ways with the possibility of different solutions and use of different strategies. One

child might solve a problem using deductive thinking and another by trial and error (Goffin & Tull, 1985).

Good problems for young children should involve gathering information in a concrete way. Immediate feedback and observable consequences would provide children with information to make further decisions. This is especially true when the search for a solution involves several steps (see fig 2).

Solutions must be immediate, observable and increasingly obvious to the child. To effectively evaluate their decisions, children must be able to recognize their success. Children who can evaluate their own solutions are less dependent on an adult's affirmation of their success and this encourages independence and decision-making. The adult can then be a facilitator rather than serve as a solution expert. As a result, adults can ask probing questions when

creating and evaluating problem solving strategies for children.

Grown-ups can expand everyday activities into problem solving possibilities by encouraging children to plan, predict possible outcomes, make decisions, and observe the results of their actions.

A. Encourage children to develop these skills.

Curiosity - To be willing to

- toy with an idea
- look for answers to puzzling questions
- follow a particular hunch

Imagination - To have the power to

- visualize and build mental images
- dream about things that have never happened
- feel intuitively
- reach beyond sensual or real boundaries

Risk-Taking - To have the courage to

- expose oneself to failure or criticism
- take a guess
- function under conditions devoid of structure
- defend own ideas

Complexity - To be challenged to

- seek many alternatives
- see gaps between how things are and how they should be
- bring order out of chaos
- delve into intricate problems or ideas

Fluent Thinking

- generation of quantity flow of thought

- number of relevant responses

Flexible Thinking

- variety of kinds of ideas
- ability to shift categories
- detours in direction of thought

Original Thinking

- unusual responses
- clever ideas
- production away from obvious

Elaborate Thinking

- embellish an idea
- embroider upon a simple idea or response to make it more elegant
- stretch or expand upon things or ideas

Evaluation

- make decisions or judgements
- base conclusions on chosen criteria or standards

B. Encourage children to verbalize and see other's viewpoint.

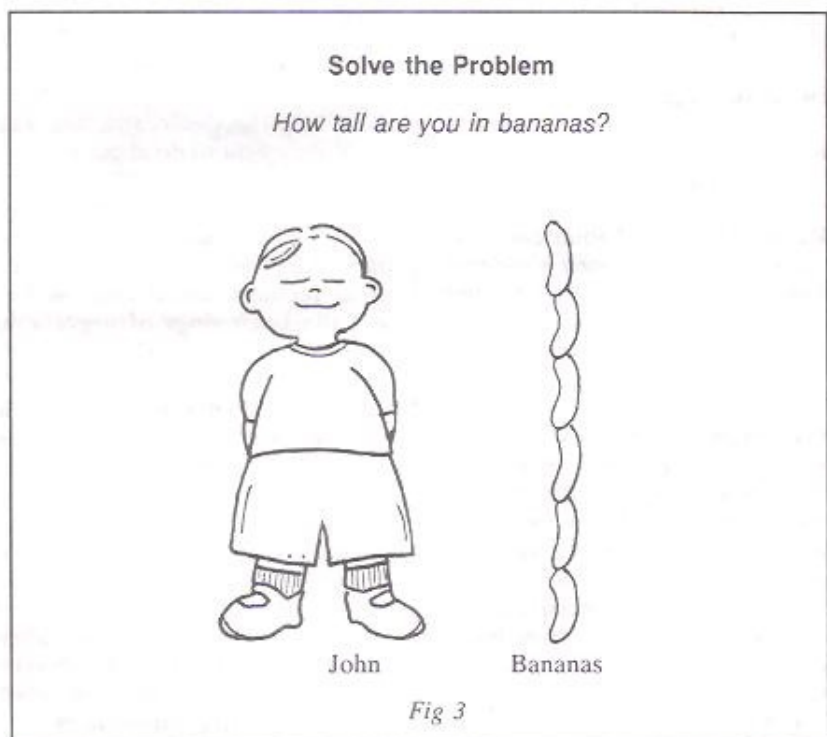
- talk about what they are doing
- talk about their feelings
- see another's point of view
- see effects of actions
- use descriptive and relational terms

What kinds of Problem solving Activities can we provide?

Adults can provide open-ended questions, materials, adding complexity to selected activities and encouraging children's efforts to deal with problems. Adults can offer problem solving activities that have multiple levels of entry and provide enough room for failure and self correction.

Social Problems Children need to consider more than one way to satisfy their needs and resolve difficulties that arise with others.

Adults can plan specific social problem solving activities for the children, e.g. through puppets and simple role-playing techniques.



Children are presented with a problem, e.g. "Robert is sitting on the bottom of the slide and he won't get off. Michael wants to come down." Children are then encouraged through discussion to generate multiple options and responses.

Cognitive Problems Cognitive problems emphasize the application of thinking skills such as classification, observation, hypothesizing, counting, estimation, pattern generalization, and ordering. For example: An estimation activity for children to determine without actually counting can be provided with measurable things, e.g. How many in a jar of groundnuts? a jar of sweets? a jar of jelly beans? a jar of marbles? The children may design measurement systems consisting of weighing a certain quantity of materials to determine a unit size, counting capfuls or handfuls of the material. It will involve discussion, record keeping, measuring and estimating.

Motor Problems Motor problems involve action upon objects and physical movement. Children can explore actions such as physical movement. Children can explore actions such as pushing, pulling, sliding and rolling to see what happens. Such physical knowledge is a critical source of knowledge to pre-school children (Kamii & DeVries, 1978)

How can adults guide problem solving?

What does the adult need to do then to foster children's problem solving?

Model The skilled adult can serve as a model when solving problems. Children need to see the adult acting as a creative problem solver, verbalizing, reflecting and probing and using a repertoire of strategies.

Ask planned questions Children often resolve a problem without understanding how the outcome was achieved (Forman & Fosnot, 1982). Adults' questions can challenge children to reflect on the thinking process as they are encouraged to reorganize their ideas. Using open-ended questions such as:

- What do you think the matter

is?

- What would happen if?
- What might you try first? Next?
- Is there anything you need to know?
- What else? Where else?
- Do you want to do something about it?
- Do you think that idea would work out?

Children should be given enough time to respond to questions and to express their thinking. Children are more likely to demonstrate their competence when questions are based on their practical knowledge.

Social Strategies Active listening and careful watching of the children is essential in all problem solving situations to help the children verbalize what they feel or think. Watch and wait to see if the children can solve the situation themselves before stepping in. If the adults' help is required then:

- help the children understand how they feel
- clarify the problem
- help the children decide what they want to do about it.

Most young children lack language for problem solving. We need to give the children words with which to express feelings, social relationships and the beginnings of negotiating strategy.

Young children need words such as "and" in order to generate multiple alternatives. They also need words such as "same", "some", "different" (related to other's preferences); "happy", "sad", "mad", (these are related to feelings); "why", "because", "if", "then", "maybe", and "might" (for evaluating consequences and alternative solutions). We need to develop children's concepts of these words during interesting experiences.

Open-ended in Problem Solving

The adult can help children see that not every problem need to be wrapped up with a "happy" solution. Choices may also include choosing to deal with a problem later or choosing to get someone to handle it. Adults should be available as resources and probers, but not as authorities. With young children, participating in the process is more important than the product. Sensitive observations can help the adult respond more appropriately to children's developmental perspectives.

Conclusion

Problem solving is important in developing the child's thinking skills. The environment surrounding the child should encourage exploration and help children to reflect on what they are doing. The adult needs to ask the kind of question's and provide the kind of problems that will stimulate a child's future thinking.

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RONALD S BRANDT

On Early Education: A Conversation with Barbara Day

Former ASCD president Barbara Day is a nationally recognized author and consultant on early education. She knows the pressures that lead educators to establish transition rooms, junior kindergartens, and similar special programs, but she recommends a different way of providing for "not ready" students.



You see educators all over the country who are concerned about early education. What are some of the issues they're wrestling with?

One of the largest issues is whether to begin offering programs for younger children in the public schools. This, of course, is a societal issue as well as an educational one. A second is whether kindergarten programs should be full-day, half-day or alternate days.

Related to that is, if children don't do well in kindergarten, should they move into a regular first grade or into

a transitional classroom? If by the end of kindergarten a child hasn't completed the requirements for that age group, the child must either go into regular first grade anyway, repeat kindergarten, or move into a transitional classroom. A pattern emerging in some areas of the country is the transitional classroom, which means that developmentally delayed children are placed in a homogeneous group. Now, I am opposed to that. I don't want four-, five-, and six-year-old children categorized as failures.

But there must be an argument for it if it's being done more widely?

The argument goes something like this. Picture a child - very often a little boy - who is small in stature, emotionally insecure, and who - perhaps because of his home situation - is simply not a social little being; he doesn't have a lot of verbal and social skills. As a consultant, I'm often asked what I would recommend: should a child like that move on to a first grade classroom where, in this particular instance, instruction is very formal and where that child is going to be absolutely frustrated, or should the child be placed in a setting where he is developmentally capable of happy, successful learning? That's a hard question to answer. Now, the problem is not where the child is developmentally; it's perfectly appropriate that a child should be at this particular stage in his or her life. Our challenge as educators is to provide a program based on the child's needs and in tune with his or her individual development. So I say there are some alternatives, such as a total, child-centered early childhood program, meaning birth through about age nine. It should be ungraded, experiential, and developmental in nature. In such a program, children

work at whatever developmental level they are capable of, and we simply do not say that every child must pass through neat packages of graded subject matter whether he or she is ready or not.

A second thing I recommend to school districts is - and we're having problems with this due to funding - instead of segregating these children who are so-called "developmentally delayed" or "presumed unable to meet the competencies of a particular grade," give them more opportunities for growth. I'm recommending that school systems assess these children and set up an eight-week summer school at the beginning of kindergarten or a program for four-year-old children if one is available, and that they do this every summer thereafter for the next several years. My hypothesis is that by about third grade, those children will have caught up. They simply need a little more time to grow, physically and socially as well as cognitively.

Our challenge as educators is to provide a program based on the child's needs and in tune with his or her individual development.

They would be with other children during the regular school year, but in a special program during the summer when the other children don't attend school?

Well, they might be, but - because I'm an advocate of quality care for children of all developmental levels - I believe strongly that schools should be open in the summer to all children who want to attend enrichment classes. So the children who are developmentally delayed would have time to work on the kinds of remedial skills that they need, but they would also be involved with the other children in the enrichment activities. I wouldn't want this summer program to be a burden and categorized as remedial only; I'd want it to be something that children look forward to attending, Art, dramatic play, dance, and language development opportunities should be provided; that's the way school should be for young children all the time. Specific skills in reading, writing, and math should be integrated throughout the day and approached from a child-centered view.

From an administrator's stand-point, there are lots of problems to getting a program like that. Funding, organization, training.

There are, but creative administrators can do it. Chapter 1 funds can be used for the children who need them, additional scholarships should be available, and many working mothers and fathers will pay whatever is necessary for children to attend enrichment programs during the summer.

Does what you're describing actually exist anywhere?

Well, Chapel Hill is an example. I chair the advisory council for the Chapel Hill Community Schools that plans all the enrichment activities for children in the regular school year and during the summer. My daughter, Susan, can leave her elementary school on Thursday afternoon, ride the school bus to another school in the same town, and attend violin classes. Other children can leave their elementary schools, and go to classes on poetry, storytelling,

Specific skills in reading, writing, and math should be integrated throughout the day and approached from a child-centered view.

bread-making, math games, and so on.

That's what I want to be happening in the summer. In North Carolina we have new legislation providing that, beginning with second grade and designated grades thereafter, any child who falls below a certain level on standardized achievement tests must go to summer school. I think that's wonderful; those children should have those kinds of opportunities; but I don't want children who go on to school in the summer branded as "You've got to go to summer school because you've failed." I want to see the schools offer enrichment classes so other children are involved as well. For example, this last summer my daughter went to a public school in Chapel Hill for five weeks of special art activities. Other elementary children attended classes in theatre, dance, computers, and so on.

You don't have research evidence at this point that the kind of program you recommend would produce the results you predict?

No, but I do have an "educated opinion" based on several years of research on young children. It would

make a wonderful research project.

Let's talk about a different use of screening tests. We hear a lot about tests being used to find out whether children are ready to attend school. If they can't pass the "entrance exam," their parents are encouraged to keep them home another year. Is very much of that going on?

That is a very questionable practice, and, yes, there is some of it going on. I have to present both sides of the issue. First of all, I believe in evaluating children to see where they are developmentally. The real concern is what we do with that information. I believe it should be considered a diagnostic process, not an entrance exam.

But let me represent the other side of the issue. I've had teachers say to me about a given child, "But Professor Day, I can assure you that if that child comes into my classroom as he is right now, he will not be able to meet the minimum competencies of the kindergarten." And that prediction might be very accurate. So which is better? For that child to go to kindergarten and fail, or to say to the parent, "I think your child needs one more year to grow and develop."

Of course, neither of these answers, in my opinion, is the right one. The right answer is that child absolutely *should* come into kindergarten and have a wonderful developmental pro-

The main reason I favor the full-day kindergarten is that in my observation all over the country, I note that children in full-day kindergartens are less hurried.



gram. A child like that needs the program more than a five-year-old who might be able to read on a third- or fourth-grade level.

I am also very concerned about the impact it has on a child to be brought to a testing situation knowing he or she might not be able to enter school if he or she doesn't do well. That's very wrong.

What's the alternative?

Good teachers, psychologists, and other evaluators are developing testing situations that make it a lot of fun for children. The Chapel Hill schools spend the first three days of the school in this kind of testing for kindergarten children. Except for the time they are being evaluated, the children don't even come to school for the first three days. Now some people question that technique, but I favor it more and more because it permits a very intensive look at a child's developmental level. The children have a great time. The kindergarten teachers who do the testing interact with the children in a very warm, supportive, encouraging way: it's like, "Here you're in school for the first time, and I'm one of the teachers; I might just be your teacher." It's never with the notion that, "Depending on how you score on that test, it will determine whether or not you come to kindergarten." Instead, it's "We're going to play these games and have lots of fun."

Another issue you've said is a concern is full-day versus half-day kindergarten. Is that really a legitimate question?

Yes, although it's not simply a question of which produces higher achievement. We have plenty of research showing that children in full-day kindergarten have higher test scores, but we also have data showing no significant difference over time. There is more research favoring full-day but we have evidence on both sides. So let's check that one off and move to other concerns. There are at least two.

The main reason I favor the full-day kindergarten is that in my observation all over the country, I note that children in full-day kindergartens are less hurried. There's no need to rush and have the language development group right this minute. There's no need to keep children from going to the block center because if they do we won't have time for our colors, our numbers, and letter recognition. In the full-day program it's perfectly fine for Sylvia to go to the block center; it's okay for children to go to the art center every day; it's wonderful if children want to go to the housekeeping center and involve themselves in dramatic play. So a full-day program allows time for the kinds of activities that are so important in the development of children of this age.

The second reason I believe that full-day is needed is a controversial

Caring for children's physical, social, and mental needs is all part of quality care and education.

Most teachers really do trust and respect children; they support a child-centered philosophy that stresses peer interaction, learning by doing, and positive self-concept development.

one; it involves the need for quality care as well as quality education. I believe that many children today need a safe, secure, happy environment, and that the public schools should provide it.

Some educators don't like to hear that kind of talk because we feel we're professionals; we're responsible for education. The fact that society has a need is not necessarily our problem; that should be somebody else's problem.

I understand, but I don't feel that way at all. Caring for children's physical, social, and mental needs is all part of quality care and education. If we support a child development approach, then we understand that a child's social, emotional, and physical needs are just as important as cognitive needs and, in fact, all are dependent on each other. Good quality care as well as quality education for our young children will offer the potential for long-term effects on positive social behaviors and intellectual achievement.

To help administrators know what kind of vision they might be working toward, will you describe how a developmental program operates?

Children in the programs that I've worked with spend about a third of their time on teacher-directed activities, small group or large group. Another third of the time they work on activities assigned to them by the teacher, and then work independently or in small groups with other children. The remaining third of the time they work on activities of their choice. Now, to organize a program like this you've got to believe that children are naturally motivated to learn, and that they learn best when they're able to select and initiate some of their own activities. This internal motivator is encouraged by basing activities on children's own interests - by allowing children to make choices among activities that are clearly useful and meaningful to them. The curriculum in such a developmental program focuses on exploration, discovery, and experimentation with hands-on materials.

Don't a lot of educators feel that the idea popular in the '60s of having children make their own decisions may have been unwise, and that teacher-directed instruction is really more efficient?

Yes, there's definitely a move away from student decision making, and for a very good reason: many teachers tried this approach without incorporating the appropriate amount of structure that is required. I say that an experiential, child-centered learning environment must be very structured, meaning very organized. Teachers must know what they're doing, and children must know what they're *supposed* to be doing: when and where and how. Unless you have a management system that they clearly understand, children will not learn the basic skills, will not learn to move from one activity to another smoothly, will not learn to be responsible and independent.

Let's say a principal or superintendent believes that the kind of program you describe is desirable. How can he or she go about getting it? How open are most teachers to these ideas?

I find that most teachers are very open to doing whatever they think

will be helpful for the children in their classrooms. Most teachers really do trust and respect children; they support a child-centered philosophy that stresses peer interaction, learning by doing, and positive self-concept development. The problem comes with the support they need, financial and moral. To have a developmental classroom, you must have a wide variety of concrete and sensory materials. The classroom needs to be organized with experiential learning centers that allow for differences in learning styles, that encourage children to explore a variety of materials and make decisions. In addition to learning centers, the curriculum in a developmental classroom is integrated and uses a unit approach to teaching and learning. It uses hands-on experiences and integrates math skills in areas such as cooking and science. It emphasizes language development. The program must be flexible enough to help each child learn according to individual needs, interests and abilities.

A principal or administrator must believe that this kind of experiential learning is the way children grow, and must reward teachers through his or her endorsement of materials they need and want, and through saying to the community, "We have a fine program here."

You make it sound as though all an administrator has to do is give adequate support and it will happen. Is that your experience?

Well, the support of an administrator is absolutely essential. We do have some strong teachers who are capable of moving ahead on their own, but there is a tremendous difference when that instructional leader is involved and supports the program.

Barbara Day is a Professor and Chair of the Department of Teaching and Learning, School of Education, University of North Carolina at Chapel Hill, NC 27514. Ronald S Brandt is Executive Editor of ASCD.

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DONALD SCHMITT

Parents and Schools as Partners in Preschool Education

In Mascoutah, Illinois, parents spend 90 minutes each week observing their at-risk preschoolers engaged in learning activities. The rest of the week, the parents take the teacher's role at home.

How can I help my child be ready for kindergarten?" is a question administrators and teachers in Mascoutah, Illinois - a district with approximately 3,200 K-12 students - set out to answer nine years ago. What evolved is a much-lauded program that has been recognized for its cost effectiveness and success in improving test scores and social habits

of four-year-olds as well as educating parents in the art of parenting.

The Mascoutah program works with children who are at risk in terms of kindergarten entry in the succeeding school year. They are given the Comprehensive Identification Process Test, the Caldwell Preschool Inventory, and the Harris Goodenough Revision Draw-A-Per-

son. Children who score 60 percent or lower on the Caldwell Inventory are invited into the program.

Parents receive detailed information about the program and how it differs from more traditional preschool programs, which typically involve children in an ongoing program of half-day sessions five days a week. In the Mascoutah program, teachers meet with the children and a parent or parent substitute for only one and a half hours per week for 30 weeks. Although most school people inquiring about or visiting the program consider the requirement for parent attendance a major roadblock, attendance has ranged between 85 and 89 percent for the past four years. At the sessions parents are given six daily activities that they and the children work on during the following week.

Parents Observing Children

Arriving at school, the parents and children are greeted by the preschool teacher and a parent instructor. The teacher takes the children to a carpeted area for large-group instruction while the parents gather in an adjacent room. Here, with the aid of microphones and a one-way mirror, parents can hear and watch their children. They spend up to 20



Working with parent educator Kathy Morio, right, parents Cleo Hoercher and Laura Mayberry try out a counting board they will use at home with their children.

minutes observing the classroom scene and receiving guidance from the parent instructor.

During this part of the morning, the preschoolers and their teacher are involved in group language activities. Any new concepts that the parents will be applying at home during the week are introduced while the parents are observing so they can see how the teacher works with the children. The parent instructor answers questions about the teacher's methods and suggests ways to make the activities easier or more difficult to suit the child's ability.

The observation room gives parents an excellent opportunity to see the wide range of individual differences among children. When conflicts arise, they see how the teacher deals with them and, ideally, will begin to model their own actions after the teacher's behavior. The parents and the parent instructor discuss any behavior or activity they feel needs clarification or explanation. The observation segment is followed by a discussion of the home activities of the previous week.

Home Activities

"What happens at home does make a difference" is the basic philosophy of the staff as they work with parents. Staff members believe that positive interaction between parent and child enhances the youngster's self-concept, which is crucial for success in school.

The parents and teacher review the comment sheets that parents write each week about the home activities. These sheets describe how the child liked the activity, whether it was successful, ways to improve the activity, and variations that work best with that particular child. The comment sheets also serve as a subtle reminder for parents to complete each week's activities. When the home activities include games or special materials, the parents prepare them during the morning discussion.

Home activities are the most important aspect of the Mascoutah program. If a difference is going to be made in the educational life of a young child, the hour-and-a-half weekly class is a good start, but the home end of the partnership is cru-

cial to cognitive gains. If the parents incorporate what they have learned in their group sessions within their everyday activities, the child should advance in prekindergarten readiness skills. Throughout the year, the teachers help the parents understand why specific activities have been planned and which skills are needed as a foundation for kindergarten readiness. The parents sometimes "role play" a teaching situation to prepare themselves for what to expect at home.

Parents and Children Together

The staff is primarily concerned about two aspects of the parents' relationship with their children: (1) the amount of time spent with children participating in the games and activities that are taken home from school, and (2) the parents' attitudes about raising their children as part of a family unit.

This information emerges during the weekly meetings. Through group interaction and problem solving, each parent becomes more aware of the attitudes of other parents and is able to assess the degree to which personal values and beliefs are shared by the others. In this way the group actually reinforces ideas that the parent instructor wishes to transmit. The group interaction opens the door to new ways of thinking for many parents. Hearing how others are handling similar problems can give parents new insights into ways of relating to their children's needs.

Student Helpers

The teacher/student ratio is high in the Mascoutah program and is facilitated by the participation of local high school students. Students may work with only two children at a time, making it easier to individualize the activities and to relate them appropriately to the children's needs. The preschool teachers and high school students use a large range of activities to cover six basic skill areas - knowledge of numbers and colors, recognition of shapes, fine motor skills, word concepts, expressive language, and listening skills.

The high school students take turns using checklists and evaluation

charts as well as games to determine the children's knowledge and progress in the skill areas. These observations are regularly shared with parents, who report back to the parent educator and preschool teacher about carryover and retention shown in the home activities used during the week.

Factors and Indicators of Success

Averaging pretest and post-test scores and expressing the difference of the averages as a percent when compared to the possible correct responses on the Caldwell Preschool Inventory reveals an average increase of 26 points per child each year over the life of the Mascoutah program.

Other indicators of program success include the high attendance rate of parents and children, parent feedback on the weekly evaluation sheets, and parent involvement (92 percent of parents use a minimum of 85 percent of the home activities).

Thus, parents and staff are partners in the Mascoutah program's efforts to prepare the youngsters for school. With training and guidance provided by the teacher, parents are encouraged to assume an active role in the education of their children and to enter into a real partnership with the school. This partnership brings about changes in the home environment that benefit not only the child in the program, but younger and older siblings as well. The children experience a more cognitively stimulating home environment.

Through this partnership, the school is able to influence five times as many children as would a teacher in a traditional preschool program in the same period of time. The cost ratio is less than one-fifth of a regular program.

Mascoutah's program is a prime example of what can be accomplished with at-risk students in a very cost-effective manner when schools and parents become partners.

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THOMAS P MCGARRY

Integrating Learning for Young Children

Kindergarten teachers in Fairfax County, Virginia, have accolades for a new curriculum that incorporates the entire instructional program in three integrated strands - motor development/music, mathematics/science, and language arts



In the language arts strand, students start to write early, emphasizing the use of language to express personal meaning.

In April 1984, *Educational Leadership* published an article describing the Primary Integrated Curriculum of the Jefferson County, Colorado, Public Schools. The project had incorporated instruction in a portion of the first- and second-grade curriculum - science, social studies, health, environmental education, and career education (Melle and Wilson 1984). The article was read with great interest in Fairfax County, Virginia, where pressures were mounting to simplify the curriculum while incor-

porating the best of the research on children's learning. Two years later, the Fairfax County Public Schools had expanded on Jefferson County's experience to implement a kindergarten curriculum that incorporated the *entire* instructional program in three integrated strands.

The Starting Point

Already in place or under development in Fairfax County in 1984 were

a number of initiatives that offered partial solutions.

- A research-based model for writing instruction at the elementary level was beginning to notably change the approach to language instruction. (The National Council of Teachers of English has since designated the program a Center of Excellence.)
- An inquiry and manipulative-based model for elementary science instruction (later declared a National Exemplary Program by the National Science Teachers Association) was well established (Lyon 1983).
- A manipulative-based mathematics program based on Baratta-Lorton's *Mathematics Their Way* (1976) was well liked, but teachers were frustrated by the use of different (although similar) manipulatives in mathematics and science.
- An initial analysis of underachievement among minority students was highlighting the need for concentration on language development at an early age and for providing a rich experience base.

- Previous curriculum development efforts had yielded valuable materials in music, motor development, health, and art, but teachers were not using them widely because of problems with "fitting it all in".
- Each element represented both a part of the problem and a part of the solution; together they formed a wealth of opportunity and a staggering burden for teachers. It was the curriculum staff's task to make them "do-able".

The Change Process

Over approximately six months, curriculum and school-based staff read, analyzed, discussed, disagreed, and tried to achieve consensus on a workable solution. One important item of agreement emerged early - a statement of philosophy for the kindergarten program, which drew from the commonly held wisdom on early childhood education and was supported by state guidelines and research. Agreement on principles was critical in later stages of program development, when disagreements were solved more than once by referring to the statement.

The primary issue during the initial planning was the degree of organization, direction, and support an in-



Key components of language development are pre-reading and pre-writing discussions.

tegrated curriculum should provide to teachers. Kindergarten teachers are well known for their ingenuity, originality, and flexibility in creating instructional settings. Should the new curriculum consist of objectives synthesized from the various disciplines, accompanied by sample units demonstrating how to integrate instruction? Or should it consist of fully developed, integrated units that provide teachers with a year's program? After much discussion with teachers and principals, the cur-

riculum staff adopted a model that would provide teachers with a complete set of integrated units, none of which had to be used, and all of which left room for teacher adaptation and innovation.

Throughout eight months of development and revision, we were guided by the knowledge of successful curriculum development efforts. In particular, Hulda Grobman's (1970) excellent history of National Science Foundation-funded projects stresses pitfalls to avoid and requisite steps to take. With this guidance in mind,

- teachers were involved in all stages of development;
- specialists reviewed and critiqued one another's work;
- groups of principals were briefed and asked for suggestions;
- other administrators with a vested interest and the school district leadership were kept informed; and
- nothing was distributed that wasn't stamped *draft*. All materials and activities were tried, evaluated and reshaped - sometimes through eight or nine revisions.



The language arts strand uses science, social studies, health, and art activities to promote oral language development and prepare the way for reading and writing.

- A. *Names and Addresses* - Students learn to identify their own names, addresses, and phone numbers and to recognize their names in print.
- B. *All About Me* - Students learn to identify themselves as unique persons with individual feelings, to build positive self-concepts, and to develop an acceptance and appreciation of the similarities and differences among people.
- C. *Working Together* - Students develop respect for self and others and accept responsibility for working and playing cooperatively.
- D. *Families* - Students recognize and appreciate similarities and differences among families, their needs, and how these needs are met.
- E. *Foods* - Students identify, choose, and prepare nutritious foods, use sanitary measures, and practice appropriate eating habits.
- F. *Senses* - Students learn about the senses and use them in a variety of ways to enhance their experience and promote language development.
- G. *Weather/Seasons* - Students observe and record weather and seasonal changes and their effects on living things.
- H. *Mapping* - Students begin to develop and use simple maps and develop an awareness of the globe.
- I. *Plants* - Students observe and describe the characteristics of plants, their needs, and their changes as they grow.
- J. *Animals* - Students describe the characteristics of animals and develop a caring attitude toward them.

Fig. 1 Integrated Units of the Language Arts Strand

The Final Product

The Integrated Kindergarten Curriculum consists of three strands.

- The *motor development/music strand* incorporates music activities (which develop skills in singing, playing instruments, listening, rhythm and movement, and improvisation) and physical education activities (which develop skills in locomotion, body awareness and control, directionality, creative movement, fitness, balance, and movement patterns). Teachers have flexibility in choosing and scheduling activities that suit the season and the children's needs.
- The *mathematics/science strand* combines mathematics and physical science objectives in six manipulative-based units that promote exploration, critical thinking, and concept formation - free exploration, patterns, counting and writing numbers, sorting and classifying, comparing, and number experiments. The strand also incorporates response units for identifying and challenging gifted students.

- The *language arts strand* combines all objectives from language arts, social studies, art, environmental science, and health. It consists of two major sections - a description of the three basic strategies and a set of ten integrated units (fig. 1) that may be scheduled separately or spread throughout the year.

It what proved to be the most challenging and innovative aspect of the development project, the process-oriented objectives and techniques of the language arts curriculum were infused throughout activity-based units created to teach other subjects. The processes were drawn from current research on language development, which is summarized in *Becoming a Nation of Readers* (Commission on Reading 1985). The units draw heavily on activities commonly used by kindergarten teachers. In addition, this strand incorporates response units to serve gifted students.

The three strands are built around comprehensive teacher guides and sets of student materials, both print and nonprint. They are supplemented by student centers for art, block play, dramatic play, language arts, science, and perceptual-motor skills, which extend the basic activities and allow for individualized instruction.

Implementation

To sustain the project throughout its implementation, we took several important measures.

- The school district organized a day-long "Great Beginnings" convention for kindergarten, first- and second-grade teachers and for special education teachers of young children to reinforce project themes and purposes and to encourage teachers to share successful ideas and practices in workshop sessions.
- All required print and non-print lesson materials were assembled and provided to teachers. Furniture, equipment, and techniques for managing instructional materials were also supplied. Simple as it sounds, this action received almost embarrassing praise.
- Each teacher attended four full-day inservice training sessions over the year. These relatively small-group meetings were conducted close to teachers' schools - an important consideration in a large district.

Much of the explanation for the curriculum project's success can be traced to the creative efforts of educators who refused to let obstacles deter them and to the research on effective program and staff development on which it is based

- Training sessions used teacher-presenters extensively.
- Teacher feedback was encouraged on all aspects of the program. Staff both preached and practiced that this project was a partnership.
- Ample time was allowed for teachers to interact informally at inservice training sessions.
- Developers visited classrooms regularly to solve problems, provide materials, answer questions, and stay in touch.

In Retrospect

Much of the explanation for the curriculum project's success can be traced to the creative efforts of educators who refused to let obstacles deter them and to the research on effective program and staff development on which it is based.

The project:

- *was responsive.* Staff listened to and acted on teachers' concerns.
- *was flexible.* It left ample room for teacher initiative.
- *was conceptually sound.* It was based on research and experience.
- *was thorough.* It went beyond exhortation and gave teachers all that they needed to succeed.
- *was practical.* It was created, tested, and revised by teachers, principals, and curriculum staff who had years of experience with kindergarten-aged children.
- *provided appropriate staff development.* Time and pacing were adequate to allow teachers to learn, assimilate, discuss, and practice with all components.
- *provided ongoing support.* Newsletters, staff visits, and inservice training sessions maintained a clear focus on project goals.

As one teacher participating in the project said, "It's wonderful to have organization after years of working things out for ourselves." Because the instructional elements that make up the program have a history of effectiveness in promoting student achievement, reaction and analysis by teachers is a key component of the assessment. Test scores also will be monitored. Scores for minority students, in particular, will determine whether an experience-based, language-oriented curriculum provides a partial answer to the problem of underachievement.

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Developmental and Experiential Programs: The Key to Quality Education and Care of Young Children

When children are engaged in programs that are developmentally appropriate for them, their on-task behavior goes up and they are actually able to learn more than do children in less complex classrooms.

At the heart of the educational process lies the child. No advances in policy, no acquisitions of new equipment have their desired effect unless they are in harmony with the nature of the child, unless they are fundamentally acceptable to him.

Knowledge of the manner in which children develop, therefore, is of prime importance, both in avoiding educationally harmful practices and in introducing effective ones (Plowden et al. 1966).

Given the well-established fact that young children learn differently, the conclusion that educators must draw is a straightforward one: the education of young children must be in keeping with their unique modes of learning (Elkind 1986).

The Plowden Report and the Elkind statement, written 20 years apart, succinctly summarize the rationale for developmental early childhood education program. The reality of such programs, described in the "Portrait" accompanying this article, is a complex learning environment designed to support the intellectual development of the young child.

The basic philosophy for developmental early childhood education is built on two beliefs: that each child is unique and needs a flexible program to develop as an individual and that

interaction, understanding, and cooperation in a group are fundamental requirements of society. Developmental programs allow for a flexible and varied curriculum designed to meet a broad range of developmental, socioeconomic, and cultural needs (Leeper et al. 1984).

Aspects of a Developmental Program

Four major areas should be considered when planning a quality developmental program. The first involves children's opportunities to practice developmental tasks (Tryon and Lilienthal 1950), including gaining appropriate dependence-independence patterns, establishing healthy patterns for giving and receiving affection, developing a conscience, encouraging physical growth, and creating communication opportunities that enhance the child's use and understanding of symbols.

The second major area concerns teachers and staff. The teachers' knowledge of the physical, social, and cognitive development of children is essential, as is the interaction between teachers and students. Phyte-Perkins (1981) showed that where teachers participated more with the children and were less directive, the children exhibited higher levels of cognitive play, task involvement, and verbal interaction.

Third, academics have an important place in the quality program. Children between the ages of two and seven are in the concrete stage of cognitive development. They learn from concrete experiences. Thus stories, dictating to the teacher, and counting can be used creatively to expose children to reading, writing and mathematics. First and second graders also need to continue to learn through concrete experiences as they make the transition into primary school.

The fourth major area considered in planning a quality program is the physical setting. Developmental classrooms are designed to encourage children to be independent and to have hands-on learning experiences. Learning centers for math, science, reading, writing, art, cooking, listening, and so on can engage children in experiences that allow them to use their hands, eyes, ears, and minds. Through them children learn about themselves and the world around them.

Organization and Management

Consideration also must be given to curriculum organization and classroom management (Day and Drake 1983). Curriculum organization is made up of three components - learning centers, skills groups, and units of

Portrait of a Developmentally Designed Early Childhood Classroom

You reach the school building and are impressed by the outdoor learning environment. You notice the flower and vegetable gardens, the play equipment, the animals, and many children of various ages engaged in a number of activities.

One child is sitting in a small rocking chair on a grassy area reading *Charlotte's Web*. A small group of children on the patio are "building a city" with blocks. In one area are fine animal cages containing a duck, a rabbit, and guinea pigs. A six-year-old girl is showing a five-year-old boy how to hold a rabbit correctly.

Around the school is a play area with gymnastic equipment, tire swings, slides, and other apparatus. You turn your attention briefly to a small red-haired boy who is measuring the slide with a measuring tape and recording it in a notebook.

As you walk inside the classroom area, you get the same feeling of action and spontaneity as you did observing the children outside. There are few individual desks in the room. Instead, there are tables supporting interest or learning centers. There are also small work-study tables where the teacher meets with small skill groups in reading and mathematics.

In the language arts center a woman, possibly a parent, is typing a story dictated by two five-year-olds. In the reading corner an older child is reading to a younger one who is stretched out on an oval rug. You spot another mother near a science area holding a small, squirming kitten while talking to a group of three or four children about baby animals.

The children are engaged in many different activities, some in groups and some alone; they seem to be getting along extremely well. You suddenly feel that something is missing - the teacher. A polite five-year-old tells you, "That is the teacher," pointing to a woman calmly writing on the blackboard. She turns at a request for her presence at a "tea party" prepared and served by a group of boys and girls and joins them with a smile.

- From Barbara Day, *Early Childhood Education: Creative Learning Activities*, 2nd ed. (New York: Macmillan, 1983).

study - that are organized to teach specific topics such as self-concept or animal habitats.

Classroom management com-

ponents include color coding, which is the systematic use of color to organize games, books, and activities to help young children manage a multi-

task environment; contracts, which are pictorial (later written) plans for the child's day to ensure that each child stays on task; and external and internal methods of discipline. External discipline refers to how the classroom environment influences the child's behavior. Internal discipline refers to the child's own ability to behave in appropriate ways. Clear expectations, consistent use of rules, and frequent feedback are techniques educators can use to help a young child develop internal discipline.

Effectiveness

We recently conducted a study using the Wasik-Day Open and Traditional Learning Environments and Children's Classroom Behavior Instrument. We found that children had an on-task behavior rate of 92 percent when their classrooms featured eight or more learning centers, were multi-aged (five- and six-year-old children were grouped together), and used contracts (Day and Drake 1983). Because of their exceptional on-task behavior, the children in the developmental classrooms actually received 120 more hours of schooling (20 more school days) over the entire school year than did children whose classrooms did not include learning centers or contracts.

Our intent was to investigate the relationship between various types of early childhood classroom environments and the on-task behavior rates generated by the children in each program. For this purpose the classroom environment was defined in terms of the number of simultaneous activity segments operating at any one time (Wilson 1983).

We observed 18 kindergarten and first-grade classrooms and categorized them into five different organizational patterns.

Type 1. Six-year-old children in classrooms that operated for most of the school day with only one or two simultaneous activities.

Type 2. Five-year-old children in classrooms that operated multiple activity segments (including eight or more learning centers) for the first hour of the school day, then operated only one or two simultaneous activities for the rest of the day.

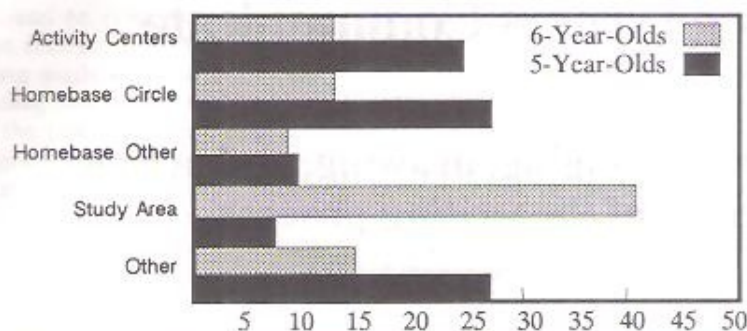
Table 1

Percentage of On-Task Behavior by Classroom Type

Type	Activities	Time	Contract	On-Task Behavior
1	1-2	-	no	79%
2	multiple	1 hr/day	no	79%
3	multiple	1/2 day	no	78%
4	multiple	all day	no	82%
5a	multiple	all day	yes	85%
5b	multiple	all day	yes	87%
5c	multiple	all day	yes	92%

Table 2

Percentage of Time by Place



Type 3. Six-year-old children in classrooms that operated multiple activity segments during the morning. The afternoon included only one or two simultaneous activity segments.

Type 4. Five-year-old children in classrooms that had multiple activity segments operating all day.

Type 5. Five- and six-year-old children in classrooms that operated multiple activity segments all day and used written contracts as a management technique.

Children in Type 5 classrooms were grouped in five-year-old kindergarten programs (Type 5a), six-year-old first grade programs (Type 5b), and multi-aged five- and six-year-old programs (Type 5c).

Table 1 shows the on-task behavior rates generated by each type of classroom.

Types 1, 2, and 3, which had little or no simultaneous activity, had similar on-task behavior rates of approximately 78 percent. Small positive changes in on-task behavior were produced by Type 4 classrooms (82 percent). Type 5 classrooms, however, generated on-task behavior rates as high as 92 percent.

These results suggest that a complex early childhood environment featuring learning centers in conjunction with an appropriate management system can achieve rates of on-task behavior higher than those achieved in less complex classrooms that rely on large- and small-group instruction and seatwork assignments.

Additionally, five- and six-year-olds had higher on-task behavior rates when working in learning centers

than when engaged in seatwork activities. This suggests that young children need classrooms that feature a variety of learning experiences.

We noted a particularly interesting example of the interaction between the developmental readiness of children for an activity and the on-task behavior rates generated by that activity. Five-year-olds had on-task rates of 29 percent, and six-year-olds had an on-task rate of 93 percent. Reading centers, as they are typically designed in early childhood classrooms, often do not involve five-year-old children, most of whom are non-readers. There appears to be a need to reorganize reading centers for five-year-olds to include stimuli other than print. For example, books with tape recordings of their content might interest five-year-olds more than books alone.

Table 2 presents interesting contrasts in how time is actually spent in kindergarten and first-grade classrooms. The typical first-grade day in this study is clearly structured differently from the typical kindergarten day.

Life is a spectrum of all types of overlapping skills and activities. A developmental teaching approach helps the child to see how new skills could fit into a broader realm of experience, thus providing a reason for learning. This method, involving center-oriented, simultaneous activity segments within the learning environment, is one of the most effective approaches to total child development.

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LEE KARNOWSKI

How Young Writers Communicate

For them talking, singing, drawing, and acting are all part of the writing process.



Jeffrey, a preschooler, is drawing another dinosaur for his dinosaur book. As he draws, he pretends to be a dinosaur by making growling noises. Suddenly he jumps up and announces to the girl beside him, "I'm going to eat you, Kristen!"

Lindsay, another preschooler, is writ-

ing a letter. She begins to make d's on her paper. She explains, "They're for the song. You know, sometimes they're hooked together." She hums as she writes. When she reads her letter she says, "I have fun writing with you. Thank you for letting me come downstairs. Love, Lindsay." She turns

the page over to where she has written the notes and begins to sing, "La, la, la ..."

Young children approach writing in a manner different from adults. Adult writers try to communicate primarily through words, resorting to graphs and pictures when words are

not enough. Young writers use everything they know about communication in oral language, art, music, and drama to make sense of the writing process and to communicate to an audience (Harste et al. 1984).

We have made great strides in understanding how young children approach the task of writing. Research has progressed through four stages of investigation. The first stage, *studies of invented spelling*, brought knowledge that the child is capable of making personal discoveries about the way speech sounds are used in written language. The second stage, *studies of individual children learning to write*, brought knowledge of the child's active role in constructing a system of written language. The third stage, *the social context of writing*, shifted the focus from the young child as a solitary writer to investigating early writing activities as performances that constitute one's culture. The latest stage, *viewing writing as a multimodal experience*, looks at the alternative expressions of language, such as speaking, listening, and reading, and the alternative communication systems, such as oral language, art, music, and drama, as they are included in the writing event.

Writing is now being viewed in its larger context of communication. Research suggests that young children convey meaning to others using many different communication systems and that they use what is known about one system to support the understanding of another system (Harste et al. 1984, Karnowski 1985). In other words, they use the more familiar communication systems to add depth and meaning to their newly acquired skill of writing.

In order to observe young children composing, I set up a writing center in a preschool classroom. The children, ranging in age from three to five, usually wrote as a very social group of three students at a time. The writing center was a free choice area and only one of many activities from which they could choose. The center contained lined notebook paper, unlined colored paper, small colored notepads, envelopes, small teacher-made blank books, pencils, markers and crayons. The average time spent at the center was 35 to 40 minutes. As the young writers composed, they

also used oral language, drawing, music, and drama to increase their communication potential.

Oral Language

Children use oral language for many different functions (Halliday 1973, Tough 1976). When writing they use it to seek needed information, to assist in the encoding and decoding process, to share information, and to elaborate on the meaning of their product to others.

Speech becomes a prewriting strategy when the topic or content of the writing is explored and decided upon.

Avigael: "I'm going to write something about the last holiday I enjoyed so much."

At other times, speech becomes a memory device to help hold the thought and transfer it to paper.

Lincoln: "I know how to write my name." He then orally spells it as he writes.

Lindsay is helping Avigael write the word didn't. "D, E, ... Oh, there's another D in it. Here, write another D right there. Now A ... I mean E."

Speech can also be a postwriting strategy to help elaborate and communicate meaning when written words are not enough.

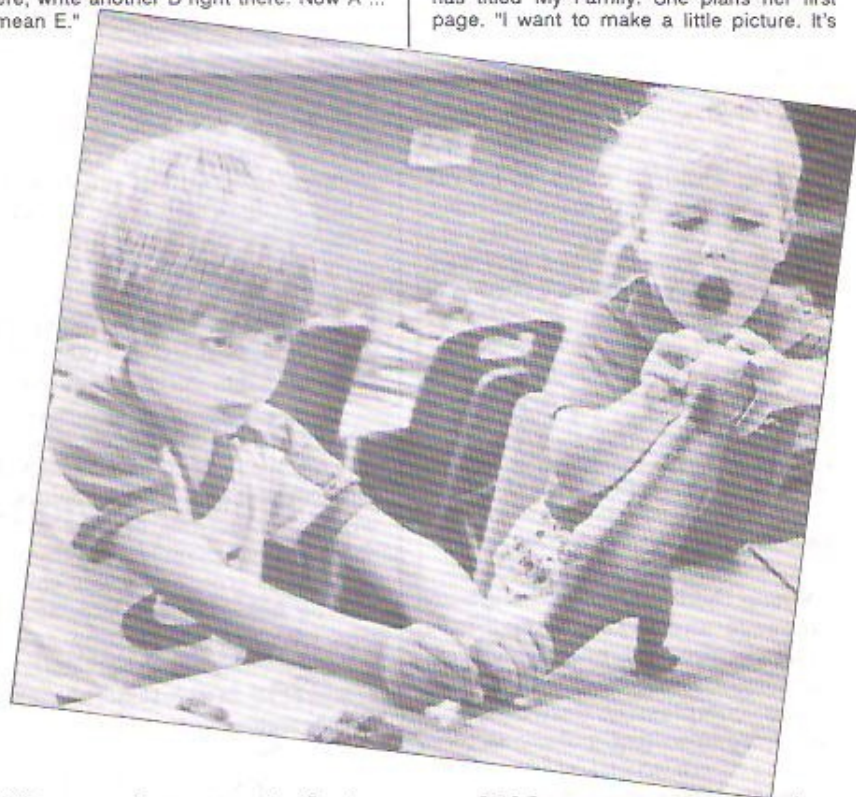
Lincoln writes R O under his picture of a robot. He then goes on to explain about the robot. "There's two things. There's a robot and a row of flowers. I'll put a stomach on it. Buttons to control them. Robots have to be controlled."

Marte draws a picture of a man. She labels her drawing Dad. To elaborate on this she says, "That's who I went out to lunch with."

Drawing

Drawing is one of the primary ways young children communicate. Many research studies have concluded that very young children, even as young as three, understand the difference between drawing and writing (Lavine 1972, Hiebert 1978, Harste et al. 1984). Young writers use drawing to explain and embellish their writing, usually as a prewriting strategy.

Avigael is beginning her book, which she has titled *My Family*. She plans her first page. "I want to make a little picture. It's



"Research suggests that young children convey meaning to others using many different communication systems and that they use what is known about one system to support the understanding of another system"

"If teachers value only conventional writing, coinciding with adult notions of how writing should be represented, then the exciting literary growth of young children will be missed."

gonna to be of my whole family, and there's five people. I'm gonna start with my Cabbage Patch." After drawing the picture, she labels each person in her family.

Jeffrey is drawing another dinosaur for his dinosaur book. "It has three toes ... he's eating a pencil." He makes growling noises as he draws in the teeth. "My dinosaur eats everything. How do you spell everything, dinosaur?"

Music

Young children enjoy using the sounds of music to make meaning. They often hum or sing while they are drawing or writing. A few may want to make notes for a singing portion of their written composition.

Avigael sings part of her note. "Avigael would like to tell you her first, last and middle name. They are Avigael Ann Newhouse. After you've slept the whole night through, sometimes you sometimes like to wake up and sing, la, la, la, ... la."

Drama

Young children can use both body language and oral language in a dramatic situation to communicate meaning. Drama can assist oral language, complement drawings, and add spice to writing.

Todd is adding a picture of a clown to his circus book. "I'm going to make a clown." He acts out what a silly clown would do.

Marte is telling the other children about the word she has written, sase (sassy). Marte says, "We say that word at home. Whenever we're bad we say ... my daddy

says (she lowers the tone of her voice and crosses her arms), "You're a sassy mouth." She then decides to add the word mouth to the word sassy. She writes sasemath.

Guidelines

Writing is but one system of communication. It is one way to exchange meaning with another. Just as children seem to be actively constructing their knowledge about written language, they also seem to be going through the same active construction with the various alternative communication systems of speaking, drawing, music and drama. The early childhood writing program depends on a writing environment that encourages children to use all of their communication potential to make sense of the writing process. This goal can be accomplished by following some guidelines.

1. *Teachers of young children need to know what children understand about communication in general and writing in particular.* They must build on the knowledge young children have acquired prior to coming to school. To do this effectively, educators need to be cognizant of the growing body of information on communication and early writing and then use this information when observing young children in a writing situation. Because children will come to school with varying experiences with print, early childhood teachers must also provide an environment that will allow students to experiment with writing and to share with others their growing communication awareness.

2. *Teachers must redefine their idea of what writing is.* If teachers value only conventional writing, coinciding with adult notions of how writing should be represented, then the exciting literacy growth of young children will be missed. Early experimentation with scribble writing and invented spelling must be valued and encouraged in the same way as experimentation in speaking and drawing is appreciated. Convention should never come before language expression.

3. *Because young children often combine writing with other alternative communication systems, teachers should*

include writing tools in other areas of the classroom, as well as in the writing center. Writing tools in the music area encourage the writing of musical notes or words to go with a rhythm. Writing tools in the home-making area encourage the writing of shopping lists, phone messages, notes, and reminders. Writing tools in the art center encourage children to write about their pictures, and writing tools in the block area encourage the labelling of structures and buildings. Writing flourishes in a social environment where young children are free to use oral language, art, music, and drama to explore and enhance their writing.

By encouraging young children to use their full communication potential, early childhood educators help children connect the function of writing to that of other means of communication.

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PATRICIA A. ROBBINS

Implementing Whole Language: Bridging Children and Books

By encouraging innovation, teachers in a small, rural school district in New Hampshire have constructed a whole-language program for their students.

As a child, I hated to read. The task was difficult and I couldn't excel. In 4th grade any hope that I might discover books a source of pleasure was lost. We had returned from our weekly visit to the library, where I had discovered a thin pictorial book on ants. I knew my teacher would not appreciate the book, but I wanted to know more about ants. I concealed the book in my lap and peeked into its contents. The legs of the ant looked like lofty columns holding together a mighty fortress - similar, I thought, to the buildings of ancient Greece. Suddenly my teacher jerked the book from my hands and thrust it high into the air. Proudly she announced that she had "captured an inappropriate book selection - too small in size, too few pages, and too many pictures." I was demoralized. Books were not my friends.

If I were a child today in the Contoocook Valley (ConVal) School District, I would love books. This rural district's eight elementary schools, scattered throughout the shadow of Mt. Monadnock, have achieved wonders with children and books. Every classroom is filled with exciting literature and children's books of all sizes and shapes. Teachers focus on what children *can do* as writers and readers. Children read any and every book that interests them. Whole-language instruction and writing proces-

ses bridge each child's curiosity and life experiences to language and books.

Children as Readers and Writers

From the first day of school, children in ConVal believe themselves to be readers and writers. They read from the books that interest them; they write stories that excite them. On large paper, using crayons and whatever lettering ability they have, children draw and write about a favorite toy or animal or place they have been. As each child reads his or her story out loud, the teacher transcribes it onto a corner of the

Continuous support of both a personal and a technical nature is essential if teachers are to successfully meet the needs of each student in their classrooms.

paper, preserving the story so it can be read again in the future. By the end of 1st grade all students have published at least one book of their own creation. At "authors' teas," students read their books to parents and peers. They always include an explanation about themselves and their reasons for selecting their topic. By the end of 6th grade, students have published as many as a dozen books. Children discover that books preserve their ideas, pictures, and conversations. They learn that authors use written words to express feelings, tell stories, and provide information.

Reading and writing at ConVal are considered integrated processes. Writing generates an enthusiasm for reading, and reading creates the impetus for writing. As children write stories, they organize their thoughts onto paper and analyze them during peer conferences. During class sharing and response time, children listen for contextual meaning in stories written by their peers.

Whole-language instruction teaches the value of the writing process during reading activities. While reading "big books" and other children's literature, teachers demonstrate how different authors convey meaning through the written language and illustrations. Students talk and write about their perceptions of the author's purpose, mean-

ing, and style of presentation. Sometimes they emulate a favorite author's style as they work to discover their own writing voices.

Children read from "real" books they select according to their own interest and reading levels. Basals and worksheets are not used in any of the district elementary schools.

Ten years ago teachers in the ConVal District began to bridge children and books, first through the writing process and then through whole-language instruction. This movement was generated at the grass roots level by teachers who found a dramatic difference in achievement when students applied the writing process. With support from the superintendent and administration, writing process and whole-language instruction became major district goals. The results include:

- high scores in reading comprehension on the California Achievement Tests;

New and Noteworthy

Marilyn Jager Adams' forthcoming book, *Beginning to Read: Thinking and Learning About Print*, (scheduled to be released in March 1989 by MIT Press in Cambridge, Massachusetts), draws information from the fields of cognitive psychology, developmental psychology, educational psychology, education, linguistics, computer science, and anthropology.

The Center for the Study of Reading (University of Illinois at Urbana-Champaign) has prepared a summary of Adams' long and scholarly book, selecting from this extensive book of research information particularly useful to teachers, school administrators, and parents. The summary is available for \$5.00; make your check payable to University of Illinois - Summary. For further information, contact: University of Illinois Summary P.O.Box 2276, Station A Champaign, IL 61825-2276. (217) 244-4083

- an increase in the quantity and quality of books read and written by students;
- a dramatic drop in the number of students identified for special education services;
- a recognition by the National Council of Teachers of English as a National Center of Excellence;
- the first ConVal Literacy Conference on Whole Language, which drew 300 educators from six states.

When we reflect over the past decade, it is clear that five distinct, yet interdependent, factors have influenced the widespread integration of writing and reading processes across the district. We believe these are out keys to success.

Innovation

At ConVal, innovation is highly valued. Teachers and administrators have created an atmosphere of cooperation, collaboration, and trust, rich in risk-taking and idea sharing. Teachers are encouraged to initiate instructional improvements and curricular adaptations. As Tom Peters (1984) said, "Innovation does not spawn from planning. It sparks from an idea."

And so it happened in ConVal. The writing process began as an idea: to find a way to make written language as meaningful as spoken language. This idea sparked one teacher, Paula Flemming, to integrate the writing process into her remedial reading program for elementary students. The dramatic jump in her students' reading scores gained districtwide attention.

Other teachers initiated instructional innovations connecting writing and reading. Amidst a growing belief that curriculum should be fully integrated and relevant to each child, early risk-takers discarded their basal readers. They developed theme-based, integrated units using trade books and children's literature, creating lessons relevant to the lives of the children in their classes. They gave children time to read and write

and the right to choose their books and topics.

Administrators supported these early risk-takers by budgeting for trade books and instructional materials. They provided time for teachers to work together, to share their ideas with other teachers, to attend workshops, and to visit other schools that practice writing process and a whole-language philosophy.

A Common Mission

As writing process and whole language gained wider interest across the district, a common mission emerged: the belief that all students can love to read and write. Love of language is fostered through teacher modeling, by focusing on what students can do as readers and writers, by building skills through relevant and meaningful child-centered experiences, and by connecting skills, concepts, and content through integrated, theme-based learning activities.

In support of this mission, three years ago the district made a commitment to maximize class size at 20 students and to minimize pull-out programs. By lowering class sizes and by keeping children in the classrooms, teachers can focus on creating

In ConVal, both the writing process and whole language are defined into usable frameworks that can be referred to during the stages involved in implementation, assessment, and teacher inservice.

an atmosphere of excitement about reading and writing that meets the needs of all students, including the handicapped and the academically gifted.

Teacher Support

Teacher support is essential to the success of a writing process and whole-language curriculum. Efforts to implement whole language and writing process will fail if teachers do not have consultants readily available to assist them. Teachers simply cannot be expected to implement, on their own after a few workshops, complex, instructional processes embedded in an unfamiliar philosophy.

ConVal uses a teacher-consultant model to provide support and inservice training to teachers across the district. The model was piloted seven years ago in one of the elementary schools. For three years, Paula Fleming served as full-time writing coordinator to train teachers in the writing process. Once again, her success gained districtwide attention.

The teacher-consultant model created by Fleming has since been implemented across the district. By reallocating staff and redefining job descriptions, ConVal administrators created four language arts teacher consultants who are full-time teacher trainers in writing process and whole-language instruction. They receive the same contract, salary, and benefits as other ConVal teachers.

Just as teachers identify the strengths of individual children in order to create successful reading and writing experiences, the consultants work with the strengths of individual teachers to create successful teaching experiences. Their services to teachers include individual confidential consultation, demonstration and team teaching, group presentations (including faculty meetings), mini-workshops, courses, and grade-level sharing sessions. They conduct response groups where teachers share their own writing, employing the same techniques used with students. The consultants help teachers diagnose and assess student achievement in order to design instructional strategies to meet the needs of each child.

The consultants have credibility

Teachers must read and write when children read and write; they must share when children share; they must openly experience the process along with their students.

with teachers because of their own successes as classroom teachers, their willingness to take risks, and their ability to listen and respond in a confidential manner to the needs of all teachers. As teachers interact with the consultants, trust builds between them, trust that is the foundation for growth and change.

This spring, two consultants spent three weeks in New Zealand observing and studying whole-language instruction. As a result of this exchange, an "early intervention" paralleling New Zealand's Reading Recovery program was implemented to remedy reading difficulties of first-

year 1st grade students (ConVal has no public kindergarten program). In this program, two Chapter I teachers use writing process and whole-language techniques during daily individualized tutoring sessions to help students focus on their reading strengths, not on their deficiencies.

Another new project involves 13 high school teachers who developed a school-within-a-school called the "Pyramid Program." The writing process is the main vehicle for integrating core content areas (English, social studies, math and science) for a heterogeneous group of 140 students in grades 9 to 12.

Initially the consultants were assigned to specific schools with a predetermined schedule that evenly distributed their time across all 11 schools in the district. This approach was not very effective because the consultant schedules took precedence over the needs of the teachers.

To remedy this situation, the consultants developed a new strategy, which they refer to as "intensified service." Essentially, this means that they flex their schedules to meet the needs and services requested by teachers and administrators. For example, Antrim Elementary's principal and faculty of 10 teachers decided to focus on guided reading as an alternative to traditional reading groups. The principal, the teachers, and a consultant brainstormed different ways to proceed. As a result, three consultants devoted the majority of their time over a six-week period to

Fig. 1 The Writing Process

Rehearsal:	sensory, experience, thought, reading, writing that is previous to the piece of writing.
Drafting:	putting ideas into writing in a tentative form.
Revision:	re-seeing the piece and making changes to it.
Editing:	fixing the writing mechanics, spelling, grammar, handwriting,
Publishing:	presenting the writing to others in its final form.
Response:	receiving feedback from others about the piece of writing.

Fig.2 Ten Elements of A Whole Language Program

Reading to children - the teacher reads quality literature to children to encourage them to read.

Shared book experience - a cooperative language activity based on the bedtime story tradition; the teacher reads and rereads appealing rhymes, songs, poems, and stories.

Sustained silent reading - everyone, including the teacher, reads for an extended period of time.

Guided reading - the teacher assigns books to groups of 8 to 10 children to read independently followed by reading conferences; books are selected to keep the children on the cutting edge of their reading ability.

Individualized reading - an organized alternative to guided reading; grows out of guided reading; careful monitoring of individual progress is done by both child and teacher.

Language experience - oral language is recorded by a scribe or audio cassette and made available to children in written format; firsthand or vicarious experience is translated into written language.

Children's writing - ConVal uses the writing process described in Fig. 1 (similar to that described by Butler).

Modeled writing - the teacher models writing process and behavior; children see and hear an "expert" writer in action.

Opportunities for sharing - a finished piece is presented to an audience; ConVal uses author's texts and published books as two methods.

Content area reading and writing - students see demonstrations of each type of text (by subject content) and learn about varying reading speed and looking for context clues.

- adapted for use in the ConVal District from Andrea Butler, 1987.

meet with individual teachers, model specific techniques, and conduct inservice training during faculty meetings.

The consultants make an effort to demonstrate their sensitivity and responsiveness to the needs of teachers through personal gestures. They pick up books at the bookstore and deliver them to teachers, write notes of encouragement, extend personal invitations to attend workshops, and highlight teachers' successes in newsletters. Continuous support of both a personal and a technical nature is essential if teachers are to successfully meet the needs of each student in their classrooms. And student success is the greatest motivator of teacher growth.

Structure Within the Philosophy

In ConVal, both the writing process and whole language are defined as usable frameworks that can be referred to during the stages involved

in implementation, assessment, and teacher inservice. This provides a concrete structure and a common language within a philosophy that can appear nebulous without close investigation.

The writing process is defined by these six phases: rehearsal, drafting, revision, editing, publishing, and response. They are described in Figure 1.

As children apply the writing process, the phases are explained and modeled. Publication of books written by students is managed by parent volunteers, who operate publishing houses in each elementary and middle school. Parents type children's stories into book form, laminate the covers, and bind and distribute them to children, classrooms, and school and town libraries.

Teachers draw on *The Elements of Whole Language* (Butler 1987) for a meaningful structure to whole-language instruction. Based on Brian Cambourne's (1987) theories on the conditions of language development, each of 10 elements identifies specific instructional strategies. A brief overview is shown in Figure 2.

To help teachers effectively implement the 10 elements of whole language and the writing process, the consultants have developed a teacher handbook that provides definitions, methods for managing a whole-language classroom, time allocation guidelines (see fig. 3), book lists, suggestions for assessment and evaluation, and methods of communicating student achievement to parents. The handbook is intended for use during inservice programs as a reference and resource guide.

The following resources were especially helpful to the teachers of the ConVal School District:

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- New Zealand Department of Education. (1986) *Reading in Junior Classes*. New York: Richard C. Owen Publishers, Inc.

**Fig 3 The Ten Elements of Whole Language:
Guidelines for Time Allocations**

<i>Elements:</i>	Grades 1-2	Grades 3-6	Grades 7-8
Reading to Children	Daily 10-20 min.	Daily 15-30 min.	Daily 15-30 min.
Shared Book Experience	3-5/Week 10-30 min.	only occasionally	
Sustained Silent Reading	Daily 10-20 min.	Daily 15-30 min.	Daily 15-30 min.
Guided Reading or Individualized Reading	Daily 20-45 min.	Daily 20-45 min.	Daily 30-45 min.
Language Experience	3-5/Week 10-20 min.	only occasionally	
Writing Process	Daily 15-30 min.	Daily 30-40 min.	Daily 30-40 min.
Mini-lessons (Modeled Writing)	Daily 5-10 min.	3-5/Week 5-10 min.	3-5/Week 5-10 min.
Opportunities for Sharing	Daily 10-20 min.	Daily 10-20 min.	Daily 10-20 min.
Content Area Reading and Writing	Daily	Daily	Daily
		specified for the specific content	

- constructed by ConVal Language Arts Teacher Consultants, 1988.

Discussions and debates have occurred among the ConVal teachers and administrators regarding the what's and when's of phonics, grammar, and spelling. Although they do not underestimate the importance of these language tools, they agree that they should be integrated within a meaningful context.

Writing and reading are defined into separate instructional processes, but they are considered interrelated and inseparable. Student achievement is strongly affected when reading and writing are taught as integral and connected processes (Flemming 1988). Writing, which creates a personal relationship between the child and the printed word, builds reading skills, and generates enthusiasm for reading and books, cannot be taught well in exclusion of reading.

Perhaps the most important, and yet most difficult, aspect of the writing process and whole-language program is teacher modeling. Teachers must read and write when children read and write; they must share when children share; they must openly experience the process along with their students. Through modeling, teachers not only encourage children

to imitate their actions, but they also help their students feel that they are sharing in an interesting process rather than having it imposed on them.

Voluntary Involvement

Teachers are more willing to become involved with new instructional techniques when they feel they have a choice. ConVal teachers have always had this choice, and their participation in district inservice programs on the writing process and whole language has increased dramatically over the past five years. This year the consultants and other ConVal teachers have scheduled 22 different courses and workshops to enhance instruction in the reading and writing processes. Although teachers do not receive extra pay for their involvement in these programs, which are conducted after school, they can apply inservice hours toward their certification and movement on the salary schedule.

Bridging Children to Books

Bridging children to books is criti-

cal if children are to become literate citizens in the complex world that lies ahead of them. Using whole language and the writing process connects a child's life experiences to the learning activities of the classroom. Teachers are empowered to make curricular decisions in order to address the needs of their children; the curriculum conforms to the child, not the child to the curriculum.

When teachers are empowered, students are empowered. The result in ConVal is a powerful bridge of love for books - one that connects a child's curiosity and life experiences to the world of books and language through the writing process and whole language.

In ConVal, there are no books that are "too small," with "too few pages and too many pictures," like my selection made in 4th grade. But there are many children in our district who have discovered books and who excel at reading and writing.

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Schools Children Run To

No question about it: as a major national issue, early childhood is *in*. Full-day or half-day kindergartens? What kind of day care? Who should fund "latchkey" programs? Researchers add information on a daily basis. Educators and parents churn with activity as they strive to meet the new challenge.

I'm a simple person. I like to hang out with the kids: play with them, talk to them. Young children tell us how they want to be taught. We don't always listen.

Observe young children on their way to school: knapsacks on their backs, colorful lunch boxes gripped in their hands, their feet barely touch the ground as they bound eagerly for school. They can't wait to start the day. They insist on coming to school even if they feel under the weather. The climate in the school has healing powers.

What is happening in such schools? No matter the building structure or newness of materials, these schools are filled with love, fun, surprises, interesting experiences, and activities that promise success. The children know they will be safe at any speed.

A teacher paints a large ice-cream container, cuts a small hole in it, and turns it into a "mouse house". Every day, she reaches into the mouse house and finds - ta tum! - letters from the mouse to the children.

Very early one still dark morning, a family hears sounds downstairs near their front door. Nervously they tiptoe down to confront the intruder. There they discover their kindergartener - dressed and ready for school - two hours early.

"What are you doing up so soon?" they ask, astonished.

"I've got to get to school early today!" Their child jumps with impatience. "I think I have a letter from the mouse!

Is today the day the children will wrap bean seeds in moist paper towels, place them neatly in plastic sandwich bags, and tuck them cozily into their pockets to make "pocket gardens"? Or is today the day they will see their bean sprout with their own eyes?

You can bet that in such schools, young students are learning in holistic, integrated, joyful, playful, open-ended ways. Their days are rich with diverse materials, a wide variety of experiences that help them make connections, find meanings, and make sense of the world. I'm impressed with programs kids *run to*.

But there is a flip side. Observe those schools that repel students. Watch downcast, reluctant kids on their way to school - a dreary, stiff, scary place. Here children come to school healthy and get sick.

Mark's favorite things to play with are blocks. He *loves* blocks. But his is a school where blocks, sandboxes,

puppets, stuffed animals, and play areas have been replaced by reading groups, workbooks, and flash cards. Stories, singing games, and free play have taken a back seat to language drills. In this class, the children sit around a chart that explains short vowel sounds, long vowel sounds. The tone of the class is muted, flat. Ask Mark how he likes kindergarten. His response is melancholy: "There are no blocks in kindergarten," he states, still trying to fathom that reality.

Which way will we go with early childhood education? Will we enhance children's lives or diminish them? It's a crucial choice - and there's no neutral when we're dealing with the strong but delicate spirits of our young children.

These schools are filled with love, fun, surprises, interesting experiences, and activities that promise success.

Mimi Brodsky Chenfeld is a teacher and national consultant. She is the author of *Creative Activities For Young Children* and *Teaching Language Arts Creatively*, both published by Harcourt Brace Jovanovich. She can be reached at 2670 Halleck Dr., Columbus, OH 43209.

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WOO YOKE YOONG

ASCD Diary of Professional Development

5 June 1991

Enhancing Children's Behavior

How pupils behave in a classroom affect their learning. Managing young children's behavior is difficult but knowledge on how to make the task easier is now available. Dr Ang Wai Hoong, Director of the Curriculum Development Institute of Singapore shared some of that knowledge at a workshop for early childhood educators. "It was a morning well spent", beamed one of the participants at the end of the workshop.

6 June 1991

The Shared Book Approach

A tired teacher once declared, "Heaven is a place where children love to read." How does one get children to love books?

"Start early," advised Mrs Kamala Thiagarajan, Head of the Pre-Primary English Language Programme and Project Director of the Primary English Programme. In a workshop for teachers of young children, Kamala shared strategies on how to develop a non-threatening environment for reading.

27-28 June 1991

Inviting School Success For Everyone

Is "I Can" more important than "I.Q."? Dr William Purkey, Professor of Counselor Education at the University of North Carolina, believed that the answer is "Yes". At a Mini-Conference for 700 people, Dr Purkey suggested ways of making a school the most inviting place in town. A school with a long list of "Thou shalt nots" is not an inviting place. Among the pearls of wisdom from the 61 year old professor: "Schools only need two rules -

'Respect People' and 'Respect Property'."



6 July 1991

Cooperative Learning for Young Children

Three hundred teachers and administrators attended a talk by Barbara Allen. Cooperative Learning can enhance the quality of pupils' thinking and develop verbal interaction and communication skills. Pupils learn team work and individual accountability as a result. As Ms Allen says, "Nobody is good at everything, but everyone is good at something."



4-7 September 1991

Cooperative Learning

The gurus of Cooperative Learning were in Singapore to give a workshop and talk. Dr Roger Johnson, Professor of Curriculum & Instruction, and his brother Dr David Johnson, Professor of Educational Psychology at the University of Minnesota compared Competitive, Individualistic and Cooperative goal structures. "Not all group learning is cooperative learning," explained Roger. His brother described how children can be taught to take responsibility for their own individual learning while practising the motto: "All for one and one for all".

26 October 1991

Science Activities for Early Childhood

Science does not just belong to laboratories. It is all around the child, in his everyday life. In a workshop for teachers and parents, Ms Tan Teng Wah, Deputy Director, Sciences Branch revealed ways of opening the eyes of young children to the world of science.

Relating to Children

How do adults relate to young children? That was the question addressed by Dr Low Guat Tin, a lecturer from the Nanyang Technological Institute during a lecture to parents and early childhood educators.

Woo Yoke Yoong is the Assistant Secretary of Singapore ASCD.

Good Teachers: What Are They?

Teachers teach, pupils learn: this is a generally accepted norm in education. While there are numerous studies on education, studies which compare teacher and pupil perspectives on classroom teaching are few (e.g. Brown and McIntyre, 1988; Batten, 1989). For research into teaching, pupil opinion is an underutilized source of information, as pointed out by Wragg and Wood (1984).

In June 1991, I conducted a survey using a sample of twenty-three secondary one pupils from a local school. The pupils were asked to comment on the qualities of good teachers. The tape-recorded interviews were conducted in groups of six pupils for the first three groups, and a group of five for the remaining group. In order to minimize inhibitions and to facilitate intra-group communication, the pupils were free to select their own group members.

In the four interview transcripts, the interviewer and interviewees were labeled "R" and "S" respectively. A system of notation (Mishler, 1986) was used to indicate features of speech: interruptions and overlaps between speakers by left-handed bracket "("; hesitations and pauses by "(P)"; nonlexical expressions such as "ah", "Hm" and "Er". Unclear speech is enclosed in parentheses (...). False starts and repetitions of words were preserved.

In the eyes of the pupils, teacher's knowledge of the subject and their understanding of the lessons are very important.

R: What do you consider as the most important quality of a teacher?

S3: She must know the subject well.

S10: The teacher knows the subject

she wants to teach very well.

R: Oh. Know the subject

(
S10: and understand

R: That means know and understand the subject

(
S8: She must know how to explain it.

S5: She also must have an open mind so that she can see the different views of things her pupils see different from her so that ah... she can understand them better and can teach better too.

S6: She must make sure that the pupils must understand the topics that she teaches and (P) give simple examples to make the students understand her.

In comparison, certain similarities could be seen from the actual words of these 13 year-olds and those of a Professor of Education, Lee S. Shulman (1990):

"Teaching is a special kind of knowing, in which the pedagogue must both *know and make known*, both represent new ideas to himself or herself, and render those ideas accessible to others."

Pedagogical ways of knowing requires that the teacher "possess and continually develop a repertoire of representations - analogies, metaphors, examples... - to build the necessary bridges between student knowledge and teacher knowledge" (*Pedagogical ways of knowing*, p. 17). It is also essential for the teacher to be able to *see from the learner's perspective*.

Patience, consideration, care and understanding from teachers were also valued very highly by the pupils.

This corresponds to a study by Wright (1984) of teacher characteristics as identified by the students; the results indicated strong positive stereotypes for the concept "good teacher" with terms such as "nice, warm, friendly, and caring".

S1: A good teacher must be patient, considerate, understanding (P).

S14: Yes. And if you still do not know er (P) if you still do not know uh... she must slowly explain it to us (P)

S20: (P) She must be always willing to lend them a hand when they - they meet difficulties in their work.

(
R: Hm ...
S20: Like teaching them, she should - should treat them like her own children like that, teaching them slowly until they-until they can-they can remember everything, and to do everything on their own.

S18: To be a teacher she must be very patient and understanding or else (P) she will get fed up with the students.

S19: (P) The teacher should have responsibility, she must have -he or she must have good patience in teaching.

S19: She must - she must also have the respect for the - for the pupils that she taught

(
R: Yes?

S19: and be considerate (P)

It was apparent from the above responses that from the pupils' perspective, good teaching involves an investment of teacher energy and faith. Faith that the taught possesses a potential for success. They also expressed the need for a listening ear and that the teacher be willing to

spend time with them.

S13: *patient, understanding, and willing to spend her time with us.*

S1: *willing to spend more time if the pupils cannot understand her. Understand her students well, spending more time with them, ask-asking them how do you find the lesson or (ask) "Do you understand the thing I teach you? Or (P) or and then if she will give special classes to them.*

S4: *She must be willing to listen to the pupils and if the pupils want er.. to ask her something she must be willing to spend some time to listen to the students and asking them what problems they have.*

In an article on "Time" (Low 1991), the educator wrote, "I'm often amused by the fact that human beings seem to be controlled by the very instruments or machines they invent...I believe we have been socialised into believing that good use of time equals productivity. But what is productivity? We talk so much about maximising resources and increasing output. (factory language) but can we measure everything? Can we measure the quality of a relationship?"

Can we measure the quality of a teacher-pupil relationship? Research data (eg. Bain, 1989) apparently indicate that effective teachers maintain excellent personal interactions with pupils. In our society, we are very much indoctrinated to believe that time is precious. Teacher's time is also precious. Students can be a joy to teach in class, but, they can also be terrific time wasters beyond curriculum time, in the eyes of a clockwatcher teacher. It can also be an exhausting experience for a dedicated non-clockwatcher as she experiences teacher burn-out.

Enthusiasm on the part of the teacher was deemed essential. It is a quality prominent among effective teachers (Bain, 1989; Sherman, 1985).

S2: *She must be enthusiastic. (P)*

S20: *She should be interested in the subject that she is teaching.*

S2: *The teacher must be enthusiastic too. For example (P) she -she gives - she sets you an activity and she herself*

is not enthusiastic. The others-the pupils also will think that, "Come on, the teacher sets us the activity and she herself is sitting on the teacher's table and she doesn't be bothered or anything."

I think good teachers love teaching, and find personal fulfilment in teaching. Enthusiasm can be infectious. It is easier for good teachers to infectiously communicate a love for the subject and excite their pupils to learn. And, from the mouth of a pupil in the study:

S2: *Like the teacher's character and whatever she does in the class - she may influence the students so that I feel that the teacher should be enthusiastic.*

The pupils in this study also viewed favouritism as a negative factor in teacher quality. In the collaborative research on *Perceptions of the "Ideal Teacher" and the Teacher-In-Practice in the ASEAN* (Cortes et al., 1986), the most highly rated attributes are fairness, leadership qualities, being a model of good behavior, responsibility and approachability. I think, it would be useful for teachers to have self-awareness of their own biases towards pupils, and adjust wisely.

S13: *and must not care for only one of the students.*

(
R: *Hm.*

S13: *She must be fair.*

S15: *She must not take sides with some students she likes the most (P). She should treat equally to all students and not pass more knowledge to one of the students*

S12: *(P) A teacher also must be very strict. She must not er... be (P) like for example, some children curry-favour, she must not be er...affected by it. She should be strict because she must be fair and square*

Studies (e.g. Ellis, 1989; Bain, 1989; Brophy, 1979; Cortes, 1986; Blair, 1984; Reyes, 1986) have shown that when teaching is appropriate and learning is meaningful, student misbehavior seldom occurs. The most effective teachers have the least discipline problems. In the interview, there was also sharing of expressions

about how the students felt with regard to teacher self management and classroom management.

The perceptiveness and sensitivity of students to teacher outbursts was shown:

S15: *(P) To be a good teacher, the first thing is (P) she (P)*

R: *Yes?*

S15: *She should not angry with a - with a - over a small matter*

S2: *She-she must have a very good self-control so that for every little thing she mustn't be like yelling at the whole class*

S11: *(P) A teacher should also be friendly and (P) she should not get angry very easily. Her pupils will not enjoy her lesson (...) if the teacher is - gets angry very easily. She should make the subject fun -*

S1: *... not just ah yelling at them, "Keep quiet ah. I'm not teaching ah". Not this type.*

S23: *(P) She must not be rude.*

S2: *She must make sure that the classes she makes are those the times must tally with - that the times she decides (...) She mustn't always like look for her own convenience and then if the student doesn't turn up, that's it. The student gets (P) and act something like she sort of yell at the student. Like for example if the student said that she had tuition or something like that then the teacher sometimes says that, "OK. You go - go to have your tuition. Don't come to school." This may hurt the student.*

A classroom environment is not static. The desirable quality of flexibility and firmness in the interest of the teacher and the class was voiced:

S10: *A teacher should at times be friendly and sometimes has to be fierce in order to er... show authority and not let the pupils create havoc in the class*

S10: *If - if - if the teacher does not (P) control the class, the class will not be quiet and the children - when the teacher teaches, pupils will think that they can make as much noise as they want and not be scolded.*

R: *Hm. (P) And will it affect you?*

S10: *If - if I am one of the pupils that are making the noise, I don't think I will. If let's say I am the one-I don't*

like noise, maybe I will feel very ah... irritated and (P)

R: Yes?

S10: Ah... (P) can't concentrate in the lesson.

The pupils also appreciated humour in the classroom:

S1: She must be humorous too.

About making - making the whole class filled with laughter

S11: she must have a sense of humour.

(
R: So that the students will pay attention

(
S11: and will not hate the subject.
S8: (P) I think the teacher must have a sense of humour

(
R: Er...Yes?

S9: If teach the lesson very boring, then the children will not be able to enjoy the lesson.

The above are points raised by the pupils in their sharing of opinions. They showed that pupils can be far more conscious of teachers' actions and their impact.

Within and beyond classroom interactions, teachers in many ways, can be transparent to their pupils. Pupils can be perceptive to teachers' verbal and non-verbal communication signals. The survey research reveals insights into pupil knowledge of quality teaching and teachers.

In the search for greater professionalism, it would help if teachers capitalise and tap their "clients" as source of feedback. Pupils are, after all, the very "grassroots contacts". Knowledge of pupil perspectives can provide useful information for researchers and reflective practitioners.

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Bilingualism: Pains and Pleasures

The problem of bilingualism knows no temporal and spatial boundaries. European records show that bilingualism existed as far back as 400 B.C. In fact, Sumerian coniferous scripts of two to three thousand years B.C. recorded attempts of children trying to translate between languages. In China, when Confucius travelled from state to state trying to convince the kings of his political ideology, as the records goes, he used an "official language"; this implied that there was more than one language in concurrent use in the ancient China some two and a half thousand years ago.

The problem of bilingualism is not one that is particular to present-day Singapore. As a matter of fact, research on the Canadian problem of French-English bilingualism has been an inspiration to researchers of bilingualism all over the world. In more recent years, the establishment of the European Economic Community with its political and economic needs has given rise to the bilingualism problem which Europeans did not have to contend with in the past. The problem seems to be even more acute in the northern region of Europe where the languages are not the 'mainstream' ones. A very vivid instance of bilingualism, or more accurately multilingualism, is exemplified by the situation found in the USSR where there are no less than 130 different languages; literary works are published in 78 languages; plays are performed in 42 languages; learned journals are printed in 46 languages and school textbooks in 56 languages; and, radio stations broadcast in 67 different languages. Obviously, this is no simple problem in

any sense of the word.

Thus, when we look beyond our shores, from past to present, bilingualism is not new at all and is definitely not our monopoly.

Bilingualism and Thinking

Does learning two languages concurrently affect a person's thinking? This is not only an academically interesting question; it has implications for school learning and, later on, work life as well.

The close relation between language and thinking can be understood with a few examples. For instance, in English, the colours of the rainbow are described conventionally as red, orange, yellow, green, blue, indigo, and violet. Yet, in the Shona

language of Rhodesia there are only four colour names for the rainbow. There is only one word for *snow* in English, but the Eskimos refer to different states of snow by no less than six names, for falling snow, frozen snow, melting snow, etc. What is called by one Chinese word, *loutuo* (骆驼 camel), is represented by a very large vocabulary in Arabian to differentiate the rather subtle differences among camels of different breeds.

Closer home, the English words *uncle* and *aunt* do not take into account linearity in family relationships. However, in the Chinese language, it takes five different Chinese characters to make clear the distance and seniority in family relations:

bo 伯 for paternal uncle who is older than father; *shu* 叔 for paternal uncle who is younger than father; *jiu* 舅 for maternal uncle, both older or younger than mother; *gu* 姑 for paternal aunt, irrespective of seniority; and, *yi* 姨 for maternal aunt, again, irrespective of seniority. Likewise, the word *cousin* covers what in Chinese is of eight different relationships when linearity, seniority, and gender are all taken account of.

These instances suggest that things (here, concepts) may be quite different in different languages and that the differences may well reflect the cultural differences and, perhaps, economic and other practical reasons.

The relation between language and thinking has also been studied empirically. Experiments show that the emotional responses elicited in the bilingual person by the same word presented in two languages are not

Concepts may be quite different in different languages and these differences may well reflect cultural differences and, perhaps, economic and other practical reasons.

necessarily the same. For example, words referring to concrete objects, such as *table* and its French equivalent, means the same *emotionally* to English-French bilinguals. Abstract words such as *democracy* and its French equivalent, however, induce different emotional responses in the bilinguals. Similarly, in the local scene, *hate* is used rather freely with much weaker emotional tone than its Chinese equivalent *恨*. Another good example is the word *dear* which suggests nothing more than friendly fondness in English; but to address or be addressed by its Chinese equivalent (*qinaide* 亲爱的) implies an intense emotional attachment which is normally reserved for a loving couple.

An American study shows clearly how language influences thinking. A group of French-Arabian bilingual university students were asked to answer the question, "What would you do if your wife disagrees with you?" In French, a typical answer was, "I shall try my best to understand her." In Arabian, when answering the same question six weeks later, a typical answer was, "I will divorce her." This suggests that when thinking in a particular language, people tend to bring into their frame of mind the cultural aspects of that language. Similar

...when thinking in a particular language, people tend to bring into their frame of mind the cultural aspects of that language.

results were found in Australian studies of Australian and Chinese students in universities. These students were asked to write about how they would persuade their unmotivated brothers to study hard. Australian students tended to point out personal benefits that might accrue to the brothers and used a more persuasive tone. On the other hand, the Chinese students mentioned more frequently the importance of studying hard so as to contribute to the well-being of the society and the nation; they were more direct and invoked more imperatives.

Is it then beneficial to master two languages? In a Canadian study, the students involved were interviewed after they had taken the tests and were asked which language (English or French) they had used throughout the testing. Some students reported that they switched from one language to the other when a question got tough. Other students did not realize they had switched languages after reading the questions, until they were probed by the researchers. It seems that mastering two languages equipped the students not only with bilingual abilities but also a more flexible and versatile thinking process. In fact, such code-switching is not an uncommon linguistic fact in any bilingual or multilingual community. Purists may throw up their arms and sociolinguists may smilingly accept it; and, the debate goes on.

Mutual Influence Between Languages

Is learning another language detrimental to the one learned earlier? In local terms, will learning, say, Chinese (or English) adversely affect the learning of English (or Chinese)? People do not seem to agree on this point and what does research say? Before trying to answer this question, another question has to be asked: Are we talking about a particular child in a specific and, perhaps, atypical situation or a large group of children under 'normal' circumstances?

First of all, we ought to accept the fact that there is no such thing as a 'perfect' language; it is an abstraction that exists in the mind of the academic linguist studying a 'typical' language user who does not exist. Even if we were to spend all our time

Research evidence shows that a great proportion of the mistakes children make when learning two languages are not caused by the commonly accused culprit of inter-lingual interference...

learning only just one language, not all of us will reach the hypothetical level of perfection. What of learning two languages? On the other hand, there are people who easily master not even two but six or seven languages; such are exceptional, of course.

As a matter of fact, research evidence shows that a great proportion of the mistakes children make when learning two languages are not caused by the commonly accused culprit of *inter-lingual interference*; many of the so-called errors arise from the children's attempt to apply what they have learned in the first-learned language. For instance, having learned that one adds '-ed' to a verb when referring to a past event, applying this rule to the word *go* (where the rule is not applicable, for reasons unknown to the children and, of course, the adults around them) gives rise to the erroneous *goed*. It is through making such errors that the children come to learn about the arbitrary exceptions and gradually 'perfect' his English. Such 'errors'

have nothing to do with any other language the children are learning concurrently. More specifically, studies involving children in bilingual programmes, of English and other European or non-European languages, show that errors that can be legitimately classified as due to inter-lingual interference constitute around five percent of all the errors the children made. In other words, inter-lingual interference might have been a scapegoat carrying the can for errors arising from other sources and conditions; or at least, the importance of such interference has been unduly exaggerated.

Should learning two languages concurrently cause inter-lingual interference, then one would expect a person who is proficient in one language to be weak in another. In statistical terms this means that a *negative correlation* between levels of proficiency in the two languages should be found among a large groups of children learning two languages at the same time. On this, what does research say?

Studies in this regard by and large involved American and Canadian students, especially undergraduates, and show that the two languages are complementary rather than antagonistic. Having mastered one language enhances the ability to learn another and hence makes the learning of another language easier. (No one will disagree that being able to drive a Ford Laser makes driving an Alpha Romeo easier, with some adjustments when compared with learning to drive the very first car.) Of course, such beneficial **positive transfer** depends to some extent on the relation (or distance) between the two languages. As gathered from results of empirical research, the amount of 'overlap' between English and other languages are: 29-42% with Swedish, 46% with French, 47% with an African language, and 21% with Spanish.

A much neglected point needs be mentioned, here. In practically all such studies, the two language tests have different content. For instance, a description of an accident may be used in one language test while the test of the other language may be about a day by the seaside. Thus, the two language tests assess students on

When adults learn another language, they may have to go through a stage of anomie

their relevant knowledge in addition to testing them on languages. This results in an underestimated relation between the two sets of language scores and leads (or, misleads) to the impression that languages are unrelated. A local research shows that when tests of English and Chinese used the same content for writing the questions and thus kept content of the language tests constant, there is a rather high overlap of no less than 80% between the two sets of scores obtained from the same children. What this suggests is that, under normal circumstances, learning one language should help the learning of the other. This also suggests that deep down in the minds of the bilinguals, there is a common core of knowledge which can be coded and expressed by using two languages interchangeably.

Bilingual Pains

Like many things in life, mastering two languages begins with some bitter experiences but ends with sweet fruits. Talking from personal experience, I was very interested in Western classical music in the fifties and most of the books on it were in English. To learn more about music, I had to read books in English. One problem was that there were so many unfamiliar words on every page, sometimes twenty or more. The only solution was to look up a English-

Chinese dictionary. This laborious process, as expected, slowed down the reading speed and took away much of the pleasure. However, reading for a second time was more rewarding. In the sixties, when I became a lecturer at the then Teachers' Training College, I was faced with a similar problem because most of the materials I needed were available only in English. In hindsight, I was glad that my interest in music and my job as a lecturer provided me with the necessary motivation to become bilingual. As the days passed by, what was a toil in the beginning became a habit and reading in English has since become second nature to me. Of course, there is a long way from looking up words in the dictionary to thinking in English.

Not long ago, I asked a group of teachers and other professionals about how they felt about becoming bilinguals -- the painful side of it. Here are some of their replies:

Learning new words

Unable to read newspapers

Can't speak Mandarin during work

Mixing up words in two languages

Being 'half half' in both languages

When learning, is afraid of being laughed at

Because of bi-culture, has communication problems

Called upon to serve as an interpreter

Being criticised in another language, yet the other person thought I didn't understand the language

Much of these pains or displeasure are temporary, superficial, and transitory. However, the difficulty in communication due to bi-culturalism is worthy of further thoughts. When adults learn another language, they may have to go through a stage of *anomie*, a feeling of normlessness, a sense of being neither fish nor fowl, or simply an emotional state of 'does not belong'. In an American experiment, a group of undergraduates learning French were forbidden to speak in English during the experimental period. As they advanced in mastering French, they increasingly felt lost and ambiguous as if they did not know where they were heading for, psychologically. This feeling, however, did not last long. Again, speaking from personal experience, I

Learning one more language is opening another window on your house and it gives you another beautiful scenery to admire at.

had similar feelings when moving between my Chinese-educated and English-educated colleagues years back. When I was in the company of Chinese-educated colleagues, I not infrequently found discordance in the ways we saw things. Likewise, with my English-educated fellow-lecturers, I sensed the difference in our thinking, too. How my colleagues really thought, I did not know; but, the *anomic* feeling was very real to me, then.

Thus, moving between people of different cultural backgrounds, one can experience a psychological normlessness which makes one feel out of place or misfitting, however shortlived this may be. This is by no means a comfortable emotional state,

as people need people. One possible solution is to seek the company of people with like experience, the bilinguals, and thus reduce the psychological ambiguity.

Bilingual Pleasures

What then are the pleasures of being a bilingual? Again, I asked some teachers. Here are some of what they shared with me:

- Learn about another culture*
- Make more friends*
- Able to enjoy more TV programmes*
- Able to talk to more people*
- Read newspapers in two languages*
- Gain more knowledge*
- Make another person feel at ease*
- Able to speak different languages according to the situations*
- Feel proud of knowing own language*
- Appreciate another culture*
- Able to communicate with people of different cultural backgrounds*
- When a problem cannot be solved in one cultural perspective, use the other one*

In another enquiry, I asked a group of adults who were learning Mandarin for either professional or personal reasons, what pleasure they got from learning another language. These are what they said:

- Able to speak another language*
- It helps in work and social life*
- Feel proud of being able to learn it*
- Understand another culture, appreciate its roots*
- When marketing, able to use the proper names and do not have to gesticulate*
- Can express myself and be understood*
- It lets me understand another cultural perspective*
- Able to switch between languages*
- It expands my thinking*

As gathered from these, the pleasures of becoming bilingual are plenty: enriching knowledge, enhancing cultural awareness, increasing enjoyment, promoting communication, improving thinking skills, facilitating social and work life, and strengthening self-respect. All

this is aptly summed up in what a great Greek philosopher said, more than two thousand years ago:

Learning one more language is opening another window on your house and it gives you another beautiful scenery to admire at.

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ALICE LEONG

Teachers' Dilemmas

If a doctor, lawyer, or dentist had 40 people in his office at one time, all of whom had different needs, and some of whom didn't want to be there and were causing trouble, and the doctor, lawyer, or dentist, without assistance, had to treat them all with professional excellence for nine months, then he might have some conception of the classroom teacher's job."

- Donald D. Conn [Source: Dale, Edgar (ed) (1984) *The Educator's Quotebook* Indiana: Phi Delta Kappa Educational Foundation.]

Teaching is certainly complex. Practising teachers know this all along and empirical studies have shown that this is so (see Jackson, 1968 and Lortie, 1975). A teacher faces many uncertainties in the classroom such as which pupils could not follow the lesson, how much of the lesson is actually learnt and how the pupils would react to a certain teaching strategy (Clark & Floden, 1988). No wonder teachers make so many on-the-spot decisions, estimated to be at the rate of one per two-minute (Clark & Peterson, 1986). Secondly, a teacher has to meet multiple and sometimes conflicting obligations: to the organisation, parents, and her charges - the pupils. (As most teachers are female, in this paper, I use the feminine pronoun to refer to a teacher in general.) Indeed, conflicting demands made on the teacher by pupils, parents, administrators and colleagues contribute to stress experienced by teachers in Singapore (Yong, 1986; Khoo, 1990; Lim-Ng, 1990).

Attempts have been made to model

the uncertainties (as well as raise the job status) by viewing teachers as "rational professionals who, like other professionals such as physicians, make judgements, and carry out decisions in an uncertain, complex environment." (Shavelson & Stern, 1981) Research based on this model has yielded much insight into the work of a teacher (see Shavelson & Stern, 1981; Clark & Peterson, 1986).

However, as I will show in this paper, such a model is incomplete for two reasons. Firstly, some problems which teachers face cannot be solved rationally. Secondly, the constraints under which teachers work limit their autonomy and hence their ability to function as a professional in this sense. I will draw on teachers' descriptions of their problems (which they perceived to be unsolvable) to illustrate the latter point and show that such a notion of teacher's professionalism may actually lead to disillusion and job dissatisfaction.

Dilemmas in teaching

Some of the problems in teaching are not easily solved as in situations where a teacher may need to forgo say, the gain of a student for the benefit of the group. Lampert (1985; 1986) observed that in most dilemma situations, the teacher does not choose one option in favour of another. Instead, teachers adopt strategies to overcome the conflict indirectly such as by reframing goals rather than accomplishing them. Hence, she suggested that "teaching involves inventing personal strategies for working with universal contradictions that cannot be finally resolved." (Lampert, 1984). Her conclusion has been supported by Lyons (1990).

This conclusion certainly contradicts the view of teacher as a rational professional. The idea of a rational professional conveys the implication that problems should be solved by correct application of skills and knowledge; problems are unsolvable only because of a lack of skills or knowledge or both.

Another researcher, Wagner (1984) looked at dilemmas as conflicts in the teacher's mind. She suggested that such conflicted cognitions could be due in part to imperative exhortations of what is expected of a good, effective teacher which the teacher cannot actually carry out in practice.

The study

The purpose of this study was to identify some common types of dilemmas faced by secondary school teachers in Singapore. This was done with the hope of contributing to the knowledge of teachers' professional dilemmas so that beginning teachers could be better prepared and school administrators could be better aware of the constraints that teachers work under.

The method

Data for the study was collected using an open-ended questionnaire. I sent out 28 open-ended questionnaires to teachers in five different schools through personal contacts. In the questionnaire, the teacher respondent was specifically instructed to describe a dilemma encountered in her teaching experience which bothered her; it could be work-related, school-related or teaching-related. It was hoped that this would

Table 1 Distribution of respondents according to gender and years of teaching experience

	Length of teaching experience (yrs)				Total
	< 2	2 - 5	5 - 10	> 10	
male	0	2	2	2	6
female	0	2	4	6	12
total	0	4	6	8	18

capture dilemmas deemed most bothersome by teachers.

Out of the 28 questionnaires sent out, 22 were returned with 4 not usable (one was blank whilst the other three were vague). Table 1 shows the distribution of respondents according to gender and years of teaching experience.

Findings and discussion

The themes in the dilemmas reported were identified. Most of the respondents described their dilemmas to be problems which they perceived to be unsolvable. As teachers deal with pupils most of the time, it is not surprising that most of the dilemmas revolve around them. A breakdown of the types of dilemmas identified is shown in Table 2. 13 out of the total 18 respondents described dilemmas of the type in which on the one hand they want to do more for their pupils (motivate them, get them to be successful in their studies, counsel them, spend more time to understand them, and so on) but on the other hand, they are constrained in some ways.

One of the constraints described is related to the multi-tasks nature of the teacher's work and the fact that the teacher does not have the luxury of seeing their clients one at a time in the normal course of her work. As one teacher put it,

"With a class of 40 pupils or more I am unable to give them personal attention or extra work on a regular basis to improve their standard in the subject concerned. Of course, we do have remedial classes which do and do not help them. The teacher hardly has time to deal with their attitude problem, interest and get them to pay

special attention to their weak subject. This is the greatest dilemma that I face all the time and not being able to do anything about it unless I am able to work like priests or nuns or sisters minus their leisure hours."

The second source of constraint is related to the system and its policies as the case of a teacher who found it difficult to motivate her pupils to be interested in her subject because that particular subject is not recognised for entry into junior colleges or the polytechnic. A teacher does not have the authority or autonomy to make decisions in the way a professional doctor does: using her professional knowledge, skills and judgement, as well as taking into account the unique needs of individual clients in deciding on the appropriate strategies or treatments. (Darling-Hammond, 1989). Others described dilemmas in

which the lack of an established professional code of ethics causes them to wonder what they should do. When subject teachers reported to the form-teacher on the pupils' misconduct, she found that:

"They (the pupils) gave me reasons which I had to brush aside because I could not allow them to disregard my colleagues....They (the pupils) were not happy because they felt I was on the teachers' side. I could not bring this matter up to the principal. Who am I to tell the teacher(s) concerned that the students complained about them. On the other hand, I wanted to help my students but I was hopeless and helpless."

Another teacher found a mistake in the examination marking scheme in which a wrong answer was given. She was in a dilemma as whether to award marks to pupils who gave the answer as in the marking scheme. Some of her colleagues had already marked their share of scripts according to the marking scheme. If she did not award the mark as stated in the marking scheme, she would be penalising her own pupils who would query her when they compared their marked scripts with others. But in awarding the mark, she would be giving credit for something that was wrong. To her shock, her colleagues (who set the paper) did not appreciate her dilemma but instead reminded her that she herself had agreed to the marking

Table 2 Types of dilemmas reported by respondents

Type of dilemma	No. of respondents
1(a) Wanting to do more for pupils but having to pay attention to other aspects of job	5
1(b) Wanting to do more for pupils but not having the authority due to system constraint	4
1(c) Wanting to do more for pupils but meet with some form of conflict with collegial norms	4
2 To carry on with an assigned duty or to request for change of duty	2
3 To quit or not to quit teaching	3

scheme.

These two teachers perceived their colleagues as being "unprofessional" in their conduct. But as there is no written professional code of conduct, their conception of professionalism is merely self-conceived. Their peers may not share the same conception of professionalism with them. In fact such individualistic conception of practice was observed by Lortie (1975). More recently, Mead (1988) also found that

"... teachers' professional code is not a result of careful reflection among fellow professionals in training.... The code is not a result of a high level of collegial exchange where the application of those norms to specific situations is thought through."

Thus, it is not surprising that the younger teachers (those with less than 5 years of teaching experience) found real teaching far from the ideal:

"As a young enthusiastic teacher, I find it very difficult to dare to speak out against very narrow-minded views about teaching. I felt very put down and my ideas are often looked upon as ideals, unrealistic, time-consuming especially in the area of teaching..... The professionalism of some teachers also bothers me greatly."

Two teachers described dilemmas which are work-related. One was appointed to chair a committee but found herself

"... not invested with the necessary authority as Chairman to carry out my duties. In the end, I antagonised many people and vice versa."

She was in a dilemma as to whether to carry on (in a post she was unhappy to hold) or to quit (running away and leaving a job half done). How common are such cases? This small scale exploratory study can only highlight the existence but further investigation is needed to determine if this constitute a significant problem.

The other teacher was affected by the importance which society and administration placed on paper qualifications:

"When a teacher with higher qualification joined my school I had to decide between teaching Examination classes or non-examination classes although I had many years of experience and I had confidence of

It appears that the dilemmas arise because of a mismatch between what the teachers perceive should be and the reality.

doing well."

This teacher would not be in this dilemma if some form of recognition is given to effective teachers. For instance, medical specialists in hospitals are evaluated according to their professional knowledge and skills by established medical bodies and promoted to registrar, senior registrar and consultants. Similarly, could not a system of objective evaluation be instituted so that effective teachers are promoted, say, to master teachers?

Consider the case of a male teacher who was in a dilemma as to whether to quit teaching. He was considering his promotion prospects:

"....it leaves me to feel that other things besides ability lead to promotion. In the teaching profession what options do I have. Promotion is based on teaching abilities, but HODs, VPs, Ps and inspectors have more admin rather than teaching abilities." (sic)

This teacher triumphantly announced:

"I've solved it. I'm resigning!"

Are we losing effective teachers because the career path is such that those who do not see themselves as wishing to be principals see that they would remain just a teacher till they retire with no recognition whatsoever given to the skills they have accumulated over the years albeit the yearly increment which everyone receives?

Surely this question deserves further study.

However, teachers do have other reasons for considering quitting as the case of a respondent who found the job stress unbearable.

Conclusions, limitations and implications

Assuming that the respondents have been open and truthful, the dilemmas that are uppermost in the teachers' minds are not related to teaching strategies or teaching approaches. Like Wagner's (1984), it appears that the dilemmas arise because of a mismatch between what the teachers perceive should be and the reality.

Of course, this sample, being only 18 in number and a convenient one too, cannot be a true representation of all teachers in Singapore government secondary schools. But it does highlight the key problems identified by Yong (1986), Khoo (1990) and Lim-Ng (1990) - time pressure and conflict between administration and teachers. What then are some implications for educational administrators, teachers and teacher educators?

That the teacher's job is not well defined is already known. In recent years, school principals have attempted to convey their expectations of teachers' work by listing explicitly the duties of teachers in school teacher's manuals. The Ministry of Education too has revised its staff appraisal instrument in order to explicitly spell out essential skills expected of teachers. These are certainly positive steps.

However, much more could be done to improve communication between administration and teachers, as well as, among teachers. Administrators and teachers should be clear as to what constitute a 'professional teacher'. The idea of a teacher being a professional in the sense of a doctor, a lawyer or an accountant is definitely unrealistic. Also, it is not clear to whom and for what are teachers really accountable.

Prospective teachers need to be informed of the real situations in teaching. Perhaps the case studies approach (such as recommended by Kowalski, et al., 1990 and Shaver &

Strong, 1982) could be used in teacher education.

Teachers themselves should have more interactions among themselves in order to develop a strong group ethos. Perhaps, as advocated by Noddings (1986), educationists should consider adopting and developing an ethic of caring. Such problems would then be seen in a different light - and administrators and teachers could learn to work as a team as suggested by Hassenpflug (1986).

There are questions unanswered in this study. For instance, the sample is drawn only from among secondary school teachers. How about primary school teachers? Do they encounter a similar set of dilemmas or do they have other types of dilemmas? How do the types of dilemmas change with the years of teaching experience? Are there differences among male and female teachers? Are there dilemmas that are related to the subject discipline - such as dilemmas peculiar only to the language teachers or the mathematics teachers? How do teachers deal with their dilemmas? Some of these questions will be addressed in another study comprising a bigger sample of teachers.

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Students Need Challenge, Not Easy Success

Only by teaching students to tolerate failure for the sake of true success can educators control the national epidemic of "educational suicide".

Hundreds of thousands of apathetic students abandon their schools each year to begin lives of unemployment, poverty, crime, and psychological distress. According to Hahn (1987), "Dropout rates ranging from 40 to 60 percent in Boston, Chicago, Los Angeles, Detroit, and other major cities point to a situation of crisis proportions." The term *dropout* may not be adequate to convey the disastrous consequences of the abandonment of school by children and adolescents; *educational suicide* may be a far more appropriate label.

School abandonment is not confined to a small percentage of minority students, or low ability children, or mentally lazy kids. It is a systemic failure affecting the most gifted and knowledgeable as well as the disadvantaged, and it is threatening the social, economic, intellectual, industrial, cultural, moral, and psychological well-being of our country. Equally disturbing are students who sever themselves from the flow of knowledge while they occupy desks, like mummies.

Student apathy, indifference, and underachievement are typical precursors of school abandonment. But what causes these symptoms? Is there a remedy? What will it take to

stop the waste of our intellectual and creative resources?

To address these questions, we must acknowledge that educational suicide is primarily a motivational problem - not a physical, intellectual, financial, technological, cultural, or staffing problem. Thus we must turn to motivational theories and research as a foundation for examining this problem and for identifying solutions.

We must encourage students to reach beyond their intellectual grasp and allow them the privilege of learning from mistakes.

Curiously enough, modern theoretical principles of motivation do not support certain widespread practices in education. I will discuss four such discrepancies and offer suggestions for resolving them.

Moderate Success Probability Is Essential to Motivation

The maxim, "Nothing succeeds like success," has driven educational practice for several decades. Absolute success for students has become the means *and* the end of education: It has been given higher priority than learning, and it has obstructed learning.

A major principle of current motivation theory is that tasks associated with a moderate probability of success (50 percent) provide maximum satisfaction (Atkinson 1964). Modern probability of success is also an essential ingredient of intrinsic motivation (Lepper and Greene 1978, Csikszentmihalyi 1975, 1978). We attribute the success we experience on easy tasks to task ease; we attribute the success we experience on extremely difficult tasks to luck. Neither type of success does much to enhance self-image. It is only success at moderately difficult or truly challenging tasks that we explain in terms

of personal effort, well-chosen strategies, and ability; and these explanations give rise to feelings of pride, competence, determination, satisfaction, persistence, and personal control. Even very young children show a preference for tasks that are just a bit beyond their ability (Danner and Lonky 1981).

Consistent with these motivational findings, learning theorists have repeatedly demonstrated that moderately difficult tasks are a prerequisite for maximizing intellectual development (Fischer 1980). But despite the fact that moderate challenge (implying considerable error-making) is essential for maximizing learning and optimizing motivation, many educators attempt to create error-proof learning environments. They set minimum criteria and standards in hopes of ensuring success for all students. They often reduce task difficulty, overlook errors, de-emphasize failed attempts, ignore faulty performances, display "perfect papers," minimize testing, and reward error-free performance.

It is time for educators to replace easy success with challenge. We must encourage students to reach beyond their intellectual grasp and allow them the privilege of learning from mistakes. There must be a tolerance for error-making in every classroom, and gradual success rather than continual success must become the yardstick by which learning is judged. Such transformations in educational practices will not guarantee the elimination of educational suicide, but they are sure to be one giant step in that direction.

External Constraints Erode Motivation and Performance

Intrinsic motivation and performance deteriorate when external constraints such as surveillance, evaluation by others, deadlines, threats, bribes, and rewards are accentuated. Yes, even rewards are a form of constraint! The reward giver is the General who dictates rules and issues orders; rewards are used to keep the troops in line.

Means-end contingencies, as exemplified in the statement, "If you complete your homework, you may watch TV" (with homework being the

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means and TV the end), are another form of external constraint. Such contingencies decrease interest in the first task (homework, the means) and increase interest in the second task (TV, the end) (Boggiano and Main 1986).

Externally imposed constraints, including material rewards, decrease task interest, reduce creativity, hinder performance, and encourage passivity on the part of students - even pre-schools (Lepper and Hodell 1989)! Imposed constraints also prompt individuals to use the "minimax strategy" - to exert the minimum amount of effort needed to obtain the maximum amount of reward (Kruglanski et al. 1977). Supportive of these findings are studies showing that autonomous behavior - that which is self-determined, freely chosen, and personally controlled - elicits high task interest, creativity, cognitive flexibility, positive emotion, and persistence (Deci and Ryan 1987).

Unfortunately, constraint and lack

of student autonomy are trademarks of most schools. Federal and local governments, as well as teachers, legislate academic requirements; impose guidelines; create rewards systems; mandate behavioral contracts; serve warnings of expulsion; and use rules, threats, and punishments as routine problem-solving strategies. We can legislate school attendance and the conditions for obtaining a diploma, but we cannot legislate the development of intelligence, talent, creativity, and intrinsic motivation - resources this country desperately needs.

It is time for educators to replace coercive, constraint-laden techniques with autonomy-supportive techniques. We must redesign instructional and evaluation materials and procedures so that every assignment, quiz, test, project and discussion activity not only allows for, but routinely *requires*, carefully calculated decision making on the part of students. Instead of minimum criteria, we must define criteria (levels of minimum, marginal, average, good, superior, and excellent achievement), and we must free students to choose criteria that provide optimum challenge. Constraint gives a person the desire to escape, freedom gives a person the desire to explore, expand, and create.

Prompt, Specific Feedback Enhances Learning

A third psychological principle is that specific and prompt feedback enhances learning, performance, and motivation (Ilgen et al. 1979, Larson 1984). Informational feedback (that which reveals correct responses) increases learning (Ilgen and Moore 1987) and also promotes a feeling of increased competency (Sansone 1986). Feedback that can be used to improve future performance has powerful motivational value.

Sadly, however, the proportion of student assignments or activities that are promptly returned with informational feedback tends to be low. Students typically complete an assignment and then wait one, two or three days (sometimes weeks) for its return. The feedback they do get often consists of a number or letter grade accompanied by ambiguous

comments such as "Is this your best?" or "Keep up the good work". Precisely what is good or what needs improving is seldom communicated.

But, even if we could convince teachers of the value of giving students immediate, specific, informational feedback, our feedback problem would still be far from solved. How can one teacher provide 25 or more students immediate feedback on their tasks? Some educators argue that the solution to the feedback problem lies in having a tutor or teacher aide for every couple of students. Others argue that adequate student feedback will require an increased use of computer technology. However, there are less expensive alternatives. First, answer keys for students should be more plentiful. Resource books containing review and study activities should be available in every subject area, and each should be accompanied by a key that is available to students.

Second, quizzes and other instructional activities, especially those that supplement basic textbooks, should be prepared with "latent image" processing. With latent image paper and pens, a student who marks a response to an item can watch a hidden symbol emerge. The symbol signals either a correct or incorrect response, and in some instances a clue or explanation for the response is revealed. Trivia and puzzle books equipped with this latent image, immediate feedback process are currently being marketed at the price of comic books.

Of course, immediate informational feedback is more difficult to provide for composition work, long-term projects, and field assignments. But this does not justify the absence of immediate feedback on the learning activities and practice exercises that are aimed at teaching concepts, relationships, and basic skills. The mere availability of answer keys and latent image materials would probably elicit an amazing amount of self-regulated learning on the part of many students.

Moderate Risk Taking Is a Tonic for Achievement

A fourth motivational research finding is that moderate risk taking

Risk takers continually and freely face the probability of failing to attain the pleasure of succeeding under specified odds.

increases performance, persistence, perceived competence, self-knowledge, pride, and satisfaction (Deci and Porac 1978, Harter 1978, Trope 1979). Moderate risk taking implies a well-considered choice of an optimally challenging task, willingness to accept a moderate probability of success, and the anticipation of an outcome. It is this combination of events (which includes moderate success, self-regulated learning, and feedback) that captivates the attention, interest, and energy of card players, athletes, financial investors, lottery players, and even juvenile video arcade addicts.

Risk takers continually and freely face the probability of failing to attain the pleasure of succeeding under specified odds. From every risk-taking endeavor - whether it ends in failure or success - risk takers learn something about their skill and choice of strategy, and what they learn usually prompts them to seek another risk-taking opportunity. Risk taking - especially moderate risk taking - is a mind-engaging activity that simultaneously consumes and generates energy. It is a habit that feeds itself and thus requires an unlimited supply of risk-taking opportunities.

Moderate risk taking is likely to occur under the following conditions.

- The success probability for each alternative is clear and unambiguous.
- Imposed external constraints are minimized.
- Variable payoff (the value of success increases as risk increases) in contrast to fixed payoff is available.
- The benefits of risk taking can be anticipated.

My own recent research on academic risk taking with grade school, high school, and college students generally supports these conclusions. Students do, in fact, freely choose more difficult problems (a) when the number of points offered increases with the difficulty level of problems, (b) when the risk-taking task is presented within a game or practice situation (i.e. imposed constraint or threat is minimized), and (c) when additional opportunities for risk taking are anticipated (relatively high risk taking will occur on a practice exercise when students know they will be able to apply the information learned to an upcoming test). In the absence of these conditions we have seen students choose tasks that are as much as one-and-a-half years below their achievement level (Clifford 1988). Finally, students who take moderately high risks express high task interest even though they experience considerable error making.

In summary, risk-taking opportunities for students should be (a) plentiful, (b) readily available, (c) accompanied by explicit information about success probabilities, (d) accompanied by immediate feedback that communicates competency and error information, (e) associated with payoffs that vary with task difficulty, (f) relatively free from externally imposed evaluation, and (g) presented in relaxing and non-threatening environments.

In today's educational world, however, there are few opportunities for students to engage in academic risk taking and no incentives to do so. Choices are seldom provided within

tests or assignments, and rarely are variable payoffs made available. Once again, motivational theory, which identifies risk taking as a powerful source of knowledge, motivation, and skill development, conflicts with educational practice, which seeks to minimize academic risk at all costs.

We must restructure materials and procedures to encourage moderate academic risk taking on the part of students. I predict that if we fill our classrooms with optional academic risk-taking materials and opportunities so that all students have access to moderate risks, we will not only lower our educational suicide rate, but we will raise our level of academic achievement. If we give students the license to take risks and make errors, they will likely experience genuine success and the satisfaction that accompanies it.

Using Risk Can Ensure Success

Both theory and research evidence lead to the prediction that academic risk-taking activities are a powerful means of increasing the success of our educational efforts. But how do we get students to take risks on school-related activities? Students will choose risk over certainty when the consequences of the former are more satisfying and informative. Three basic conditions are needed to ensure such outcomes.

- First, students must be allowed to freely select from materials and activities that vary in difficulty and probability of success.
- Second, as task difficulty increases, so too must the payoffs for success.
- Third, an environment tolerant of error making and supportive of error correction must be guaranteed.

The first two conditions can be met rather easily. For example, on a 10-point quiz, composed of six 1-point items and four 2-point items, students might be asked to select and work only 6 items. The highest pos-

sible score for such quizzes is 10 and can be obtained only by correctly answering the four 2-point items and any two 1-point items. Choice and variable payoff are easily built into quizzes and many instructional and evaluation activities.

The third condition, creating an environment tolerant of error making and supportive of error correction, is more difficult to ensure. But here are six specific suggestions.

First, teachers must make a clear distinction between formative evaluation activities (tasks that guide instruction during the learning process) and summative evaluation activities (tasks used to judge one's level of achievement and to determine one's grade at the completion of the learning activity). Practice exercises, quizzes, and skill-building activities aimed at acquiring and strengthening knowledge and skills exemplify formative evaluation. These activities promote learning and skill development. They should be scored in a manner that excludes ability judgements, emphasizes error detection and correction, and encourages a search for better learning strategies. Formative evaluation activities should generally provide immediate feedback and be scored by students. It is on these activities that moderate risk taking is to be encouraged and is likely to prove beneficial.

Major examinations (unit exams and comprehensive final exams) exemplify summative evaluation; these activities are used to determine course grades. Relatively low risk taking is to be expected on such tasks, and immediate feedback may or may not be desirable.

Second, formative evaluation activities should be far more plentiful than summative. If, in fact, learning rather than grading is the primary objective of the school, the percentage of time spent on summative evaluation should be small in comparison to that spent on formative evaluation (perhaps about 1:4). There should be enough formative evaluation activities presented as risk-taking opportunities to satisfy the most enthusiastic and adventuresome learner. The more plentiful these activities are, the less anxiety-producing and aversive summative

activities are likely to be.

Third, formative evaluation activities should be presented as optional; students should be enticed, not mandated, to complete these activities. Enticement might be achieved by (a) ensuring that these activities are course-relevant and varied (e.g. scrambled outlines, incomplete matrices and graphs, exercises that require error detection and correction, quizzes); (b) giving students the option of working together; (c) presenting risk-taking activities in the context of games to be played individually, with competitors, or with partners; (d) providing immediate, informational, nonthreatening feedback; and (e) defining success primarily in terms of improvement over previous performance or the amount of learning that occurs during the risk-taking activity.

Fourth, for every instructional and evaluation activity there should be at least a modest percentage of content (10 percent to 20 percent) that poses a challenge to even the best students completing the activity. Maximum development of a country's talent requires that *all* individuals (a) find challenge in tasks they attempt, (b) develop tolerance for error making, and (c) learn to adjust strategies when faced with failure. To deprive the most talented students of these opportunities is perhaps the greatest resource-development crime a country can commit.

Fifth, summative evaluation procedures should include "retake exams." Second chances will not only encourage risk taking but will provide good reasons for students to study their incorrect responses made on previous risk-taking tasks. Every error made on an initial exam and subsequently corrected on a second chance represents real learning.

Sixth, we must reinforce moderate academic risk taking instead of error-free performance or excessive high or low risk taking. Improvement scores, voluntary correction of errors, completion of optional risk-taking activities - these are behaviors that teachers should recognize and encourage.

Toward a New Definition of Success

We face the grim reality that our

extraordinary efforts to produce "schools without failure" have not yielded the well-adjusted, enthusiastic, self-confident scholars we anticipated. Our efforts to mass-produce success for every individual in every educational situation have left us with cheap reproductions of success that do not even faintly represent the real thing. This overdose of synthetic success is a primary cause of the student apathy and school abandonment plaguing our country.

To turn the trend around, we must emphasize error tolerance, not error-free learning; reward error correction, not error avoidance; ensure challenge, not easy success. Eventual success on challenging tasks, tolerance for error making, and constructive responses to failure are motivational fare that school systems should be serving up to all students. I suggest that we engage the skills of researchers, textbook authors, publishers, and educators across the country to ensure the development and marketing of attractive and effective academic risk-taking materials and procedures. If we convince these experts of the need to employ their creative efforts toward this end, we will not only stem the tide of educational suicide, but we will enhance the quality of educational success. We will witness self-regulated student success and satisfaction that will ensure the intellectual, creative, and motivational well-being of our country.

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What We Really Know about Strategy Instruction

Powerful strategies for improving students' learning are available to teachers, but the conventional wisdom about which ones are effective is not always supported by research.

On a Monday morning last spring, a 2nd grade teacher taught a class of bright under-achievers at Benchmark School near Philadelphia how to summarize an excerpt from their social studies text. This teacher believed his students' comprehension would be improved if they could sum up what they had been reading. That same morning, a 1st grade teacher in Madison, Wisconsin, taught her class to subtract by counting down from the larger number to the smaller number. She felt this strategy would improve her pupils' understanding of subtraction. Later in the day, a group of 3rd grade students in East Lansing, Michigan, watched their teacher "think aloud" as he read a story to the class: when he did not understand the text, he reread it, looking for clues to its meaning.

All these teachers were teaching *strategies*: procedures for accomplishing academic tasks.

Strategies can enhance student performance in reading, composing, computation, and problem solving.

We realize now that many students do not learn strategies automatically. This assertion may be startling, especially to those who know the "classic" literature on children's use of simple memory strategies. For instance, preschool children typically do not rehearse when asked to learn lists of

We realize now that many students do not learn strategies automatically.

items (e.g. *apple, cat, dog, grass, bottle*) - that is, they do not say the words over and over in order. In contrast, 11 and 12-year-olds do. Thus, many commentators have concluded that autonomous use of strategies develops between 4 and 12 years of age. But even in adults, the development of some strategies is observed infrequently, for example, the use of self-questioning to learn facts (Pressley et al. 1988b). So we've found that our earlier assumptions were not accurate.

And we've also learned a partial explanation for the dearth of strategy use: many people do not know strategies because their teachers, unlike those in the opening paragraph, don't teach them in school. Researchers find little strategy instruction in classrooms (see Pressley et al. 1989a). Information about strategies is rarely included in textbooks either, despite the growing database on strategies applicable to school tasks.

The Status of Strategy Instruction

Is cognitive strategy instruction really developed well enough to distribute to schools? The answer is complicated. Some school tasks and academic strategies have been studied much more thoroughly than others. On one end of the continuum is reading comprehension, which has been the concern of many reading researchers and educational psychologists. Quite a few reading comprehension strategies have been evaluated in true experiments, and about half a dozen have been found to improve memory and comprehension, at least for some children. These include summarization, imagery, story grammar, prior knowledge activation, self-questioning, and question-answering strategies (Pressley et al. 1989b) (see fig. 1).

Today's researchers are energetically investigating the matter of essay-construction strategies, aimed at affecting the entire planning, translating, and revising cycle that constitutes skilled writing (Harris et al. in press a). Englert, Raphael, and their colleagues at Michigan State are completing the evaluation of a strategy-instructional package that fosters the development of mature composition skills in elementary school children. Karen Harris, Steve Graham, and their associates at the University of Maryland have validated both a self-instructional strategy training approach and a set of strategies that promote effective writing (cf., Harris and Graham 1985; Graham and Harris 1989a, 1989b). For example, Graham and his associates (1989) produced strik-

ing improvements in the compositions of 11- to 13-year-old learning-disabled students. They taught these children a particular method for setting writing goals, generating and organizing notes in anticipation of writing, continued planning as writing proceeds, and evaluation of goal attainment.

So, some powerful strategies appropriate to particular academic goals and populations have been developed. However, *much* more research is required before a full panorama of well-validated strategies will be available.

Quite a few reading comprehension strategies have been evaluated in true experiments, and about half a dozen have been found to improve memory and comprehension, at least for some children.

Although this may come as a surprise to teachers, many strategies endorsed by curriculum and instructional publications represent only conventional wisdom about the nature of teaching and learning and have never demonstrated their worth in objective experimental evaluations. Take, for example, the presumed benefits of semantic-context strategies for acquisition of vocabulary-definition associations. Teachers are typically advised to teach students to use new words in context, that is, to construct meaningful sentences containing new vocabulary, to generate synonyms, or to practice semantic mapping of a word, including specification of related terms and opposites. These methods of vocabulary acquisition share one problem, however: They do not work. Quite a few experiments conducted during the last 15 years compared these methods to that of simply giving students words and their meanings to study. None of the semantic-context procedures produced better learning of vocabulary-meaning associations than the no-strategy control procedures (see Pressley et al. 1987). Many strategies that have traditionally been recommended simply lack research support.

Methods of Teaching Strategies

It is very difficult, based on the available research, to make definitive statements about how to teach strategies, but some guidelines can be stated. Ideally, most researchers agree, cognitive strategies should be taught in conjunction with content and in response to learner needs and capabilities¹. Thus, before they begin strategy instruction, teachers should take affective, behavioral, and cognitive assessments of learners as they attempt the target task (Harris 1982, Harris et al. in press, Graham and Harris 1989b, Wang and Palincsar 1989). Once a task-appropriate strategy that matches a student's abilities has been selected, the teacher and the student should establish the potential benefits of that strategy, the goals of strategy instruction, and how and when to use the strategy (e.g. Brown et al. 1981, Pressley et al. 1984b, 1985).

Fig.1 Tried and True Reading Comprehension Strategies

The following half-dozen strategies have been found to improve children's memory and comprehension:

Summarization : Creating a representation of gist.

Imagery: Constructing an internal visual representation of text content.

Story grammar: Identifying the setting, problem, goal, action, and outcome in a narrative.

Prior knowledge activation: Relating what one already knows to the content of a text.

Self-questioning : Generating questions that integrate across different parts of a text.

Question-answering : Teaching students to analyze questions as a part of trying to respond to them.

Strategic Reading

In *Strategic Teaching and Learning: Cognitive Instruction in the Content Areas*, Beau Fly Jones and her colleagues seek to apply knowledge of the learning process to methods of instruction in all content areas, to benefit both high- and low-achieving students. Their approach, strategic teaching, focuses on the role of the teacher as a model and a mediator and recognizes the dual agenda of teaching both content and strategies.

Part 1 of the book describes the framework of strategic teaching and the editors' working conclusions about learning and instruction. Part II tests this application of strategic teaching in science, social studies, mathematics, and literature.

Teacher modeling and self-regulated use of the procedure lie at the heart of good instruction. The teacher demonstrates the use of the strategy in the context of meaningful academic tasks and introduces strategies one or a very few at a time (that is, teaches one or two strategies over the course of several weeks or months). At first students may not "get it," at least not completely, but they will be able to start trying the procedure. The teacher guides their initial attempts, providing many prompts at this point about what to do and when to do it and tailoring feedback and re-explanations of the strategies to individual student needs.

Gradually the teacher transfers control of strategy performance to the student; the student assumes responsibility for recruiting, applying, monitoring, and evaluating the strategy over a number of sessions, with the teacher ready to intervene with additional instruction if difficulties arise. Throughout the instructional sequence, the teacher fades input at a pace permitting competent performance by the student. Strategy instruction is "scaffolded" (Wood et al. 1976), to use a term that is popular today. Student progression is criterion-based rather than time-based (Graham and Harris 1989a), with teaching and interactive practice continuing until the student understands the strategy and can carry it out.

Good strategy instruction is interactive: students should collaborate in determining the goals of instruction as well as in the implementation,

evaluation, and modification of the strategy and strategy acquisition procedures (Harris and Pressley, in press). In short, the teacher helps students to understand what they are learning and why they are learning it.

Teaching for Transfer

Once a student can carry out a strategy independently with instructional tasks, the challenge is to teach him or her to use the technique consistently for appropriate tasks. One way to do this is to have students apply strategies across the curriculum. Thus, the students can use variations of summarization strategies taught in reading lessons to increase comprehension and recall of science and social studies text; similarly, students can apply planning-translation-revision writing strategies (like the one being investigated by Graham and Harris 1989a, 1989b; Graham et al. 1989) whenever they are required to write a multiple-paragraph essay.

Throughout instruction, students need to see evidence that the strategies they are learning really do lead to improved performance. Nothing motivates students to use a strategy like seeing that the strategy increases competent completion of an important task (Pressley et al. 1984a, 1984c, 1988a).

But simply being motivated to use a strategy is not enough. Students must learn where and when a strategy can be deployed profitably (e.g. O'Sullivan and Pressley 1984). Such information can often be provided by teachers or peers, although students

sometimes discover this type of metacognitive information about strategies on their own (Pressley et al. 1984b, 1985). Teachers should do everything possible to encourage the development of this knowledge. They can prompt students to apply strategies or provide assistance to students in adjusting the strategy. Use of the strategy throughout the school day and across the curriculum can be encouraged by cueing strategy use, by re-explaining strategic techniques, and through additional teacher modeling of strategy use, in other words, by "coaching" (Schon 1987).

What's Next?

Although we have learned a great deal about how to teach strategies, we are on the verge of new discoveries. Teachers like the ones we mentioned in Pennsylvania, Wisconsin, and Michigan are providing new information about which strategies are really useful to students, how students master particular strategies, and how misunderstandings can be corrected when they occur. Many more specific recommendations will follow as research on strategies proceeds.² But we know enough now to begin to offer students these profitable and helpful avenues to learning.

Notes

1 A set of procedures, components, and characteristics common to effective strategy instruction can be seen in the work of such researchers as Donald Deshler, Jean Schumaker, and their associates at the University of Kansas; Laura Roehler, Gerald Duffy, and their colleagues at Michigan State University; Karen Harris, Steve Graham, and their coworkers at the University of Maryland; Michael Pressley at the University of Maryland; John Borkowski of Notre Dame; and Wolfgang Schneider at the Max Planck Institute.

2 See Pressley et al. (in press) for an example of such research as well as

further discussion about how such inquiries can affect future instruction.

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JACK CANFIELD

Improving Students' Self-Esteem

Using a 10-step system, teachers can help strengthen their students' self-esteem and increase their chances for success in life.

Teachers intuitively know that when kids feel better about themselves, they do better in school. The simple fact is, though, that youngsters today are not receiving enough positive, nurturing attention from adults, either at home or at school. The reasons are numerous and complex, but the result is that more and more

students have low levels of self-esteem.

To raise the self-esteem, you must start with the school staff. The main way students learn is through modeling and imitation. If teachers have low self-esteem, they are likely to pass it on to their students. We must ensure, through preservice and inser-

vice training, that teacher-student interactions are positive, validating, affirming and encouraging.¹

The challenge facing schools is great, but there are day-to-day things educators can do to increase children's self-esteem and, in so doing, improve their prospects for success (see "Does Self-Esteem Af-

Does Self-Esteem Affect Achievement?

Let's see what happens when a school makes a concerted effort in the area of self-esteem. One of the most detailed studies ever done was conducted by Gail Dusa (current president of the National Council for Self-Esteem) and her associates at Silver Creek High School in San Jose, California. (For more information, contact Gail Dusa, NCSE, 6641 Leyland Park Dr., San Jose, CA 95120.)

She divided the freshman class into three groups. The self-esteem group (93 students) was taught by teachers who adhered to three operating principles. They (1) treated all students with unconditional positive regard, (2) encouraged all students to be all they could be, and (3) encouraged a 40-minute activity to build self-esteem every second Friday throughout their freshman year. The control group (also 93 students) received no treatment but was monitored along with the self-esteem group for four years. The third group was not involved in the study. At the end of four years, Dusa's findings were as follows:

	<i>Self-Esteem Group</i>	<i>Control Group</i>
Days of absenteeism per semester	1	16
Percentage of students who completed 90 percent or more of their homework	75%	25%
Percentage of students who participated in 20 more extracurricular activities	25%	2%
Percentage of class offices held by groups between freshmen and senior years	75%	0%
Percentage of students who graduated from high school	83%	50%

- Jack Canfield

We must ensure, through preservice and inservice training, that teacher-student interactions are positive, validating, affirming and encouraging.

fect Achievement?"). I use 10-step model to help students become winners in life.²

1. *Assume an attitude of 100 percent responsibility.* I introduce the following formula: E (events) + R (your response to them) = O (outcomes). When people don't get the outcomes they want, I urge them not to blame external events and other people but to take responsibility for changing their responses. For example, if I ask a class how many of them think it will raise Peter's self-esteem if I tell him he is the biggest idiot I ever met in my whole life, very few of them will raise their hands. I then tell them that it is not what I say to Peter but what Peter says to himself afterward that ultimately affects his self-esteem. If Peter says, "Mr Canfield has only known me for a few days, how did he find out so fast?", his self-esteem will probably go down. But if he says to himself, "Mr Canfield just picked me out for his example because he knows I can take a little kidding," then his self-esteem will not be damaged.

I also emphasized that we are responsible for our behavioral responses. For example, hit someone who yells at you, and you go to the

principal's office. Respond with humour or by ignoring the person, and you stay out of trouble. Surprisingly, most kids don't understand that they have choices, let alone what those different choices are.

2. *Focus on the positive.* In order to feel successful, you have to have experienced success. Many students, because they feel they have never done anything successful, need to be coached. Often this is because they equate "success" with, say, winning a medal or getting rich. I spend a lot of time having students recall, write about, draw, and share their past achievements. With some probing and discussion, students often iden-

tify successful aspects of their lives that they have not recognized before.

3. *Learn to monitor your self-talk.* Each of us thinks 50,000 thoughts per day, and many of them are about ourselves. We all need to learn to replace negative thoughts - I can't dance, I'm not smart, I don't like my face - with positive self-talk. I can learn to do anything I want, I am smart, I love and accept myself the way I am. I teach students to say, "Cancel, cancel," when they hear themselves or another person saying something negative about them and to replace the negative remark with a positive one. This technique takes time and practice, but it really makes a difference. Also, whenever others put them down, they

Resources for Increasing Students' Self-Esteem

The Alliance for Invitational Education, Room 216, Curry Building, University of North Carolina, Greensboro, NC 27412. The alliance publishes a comprehensive newsletter on self-esteem and invitational education and sponsors one national conference and several regional conferences yearly.

The California Task Force to Promote Self-Esteem and Personal and Social Responsibility, 1130 K St., Suite 300, Sacramento, CA 95814. This 25-member task force was appointed by the California governor and legislature to determine how to raise the self-esteem of at-risk groups in the state. Hawaii, Maryland, and Virginia have also created or begun to create similar task forces. For a copy of California's final report, *Toward a State of Esteem* (January 1990), send \$4.50 to the Bureau of Publications, California State Department of Education, P.O. Box 271, Sacramento, CA 95802-0271. A 200-page Appendix, which includes an extensive bibliography on self-esteem and personal and social responsibility, is also available for \$7.50.

The Center for Self-Esteem, P.O. Box 1532, Santa Cruz, CA 95060; (408) 426-6850. The center sponsors an annual conference; publishes a free newsletter; distributes curriculums, books, and tapes; and provides consultants and workshop leaders.

The Foundation for Self-Esteem, 6035 Bristol Pkwy., Culver City, CA 90230; (213) 568-1505. The foundation has published The GOALS Program, a three-and-a-half hour video training program being used in adult schools, correctional facilities, and with welfare recipients. It also sponsors an annual conference, provides consultants and workshop leaders, and distributes curriculums, books, and tapes.

The National Council for Self-Esteem, c/o Gail Dusa, President, 6641 Leyland Park Dr., San Jose, CA 95120. The council publishes a newsletter and a resource packet and sponsors a national conference and about 20 regional conferences yearly. Write for a free copy of the newsletter and an information packet. Annual dues, \$25.

Self-Esteem Seminars, 6035 Bristol Pkwy., Culver City, CA 90230; (213) 337-9222. The organization conducts inservice training, offers an intensive Facilitators' Training Course, conducts weekend workshops for personal and professional growth, publishes a free quarterly newsletter, and offers a broad spectrum of books, tapes, and curriculum guides. Write for a free copy for their newsletter/catalogue.

An important part of expanded self-esteem is the broadened awareness of one's strengths and resources.

are to repeat the following "antidote" sentence "No matter what you say or do to me, I'm still a worthwhile person."

4. *Use support groups in the classroom.* It's possible for a kid to come to school for a whole day and never once be the center of positive attention. "Sharing dyads" and "support groups" help overcome this alienation. Each day teachers might ask their students to find a partner (preferably a different partner each day) and then give them one or two minutes each of uninterrupted time to talk about a specific topic; for example, *Who is your best friend and why? What is your favorite thing to do on the weekend? If you won a million dollar lottery, what would you do with the money?* Topics such as these can also be discussed in "buddy groups" of six kids with three sets of buddies. Sometimes youngsters meet with their buddies and sometimes with their whole group. They learn that it is a positive, healing experience to talk about their feelings, and they become bonded to their fellow students.

5. *Identify your strengths and resources.* An important part of expanded self-esteem is the broadened awareness of one's strengths and resources. One technique is to have students in their support groups write down and tell each other what they see as their positive qualities and strengths. Be-

cause their assessments need to be realistic as well as positive, it is also important to help students note those areas that need more development if they are to achieve their goals.

6. *Clarify your vision.* Without a clear vision, there is no motivation. Questions such as the following help students clarify their visions. *If you had only one year left to live, how would you spend your time? If a genie granted you three wishes, what would you wish for? If you were guaranteed success in anything you attempted and money were not a limiting factor, what would you do when you grow up?* I also use extended guided visualizations in which students construct, for example, their "perfect life" - complete with their ideal house, job, and marriage partner - and share it with their support group.

7. *Set goals and objectives.* Until our visions are broken down into specific and measurable goals - with timelines and deadlines - we are not likely to move forward very quickly. I teach students how to set measurable goals and objectives for self, family, school, and community. They then share their goals with the rest of the class, support one another as they work toward them, and celebrate any completed goals.

8. *Use visualization.* The most powerful yet underutilized tool in education is visualization. When we hold a clear vision of our goals as if they were already achieved, the action releases creativity, increases motivation, and actually alters our perceptions of ourselves and our environments. I ask students to spend five minutes per day visualizing each of their goals and objectives as if they were already achieved. This can produce radical results very quickly.

9. *Take action.* To be successful, you yourself have to "do the thing." I often cite the following example: you cannot hire someone else to do your push-ups for you and expect to develop your muscles. I constantly work with students to stretch into more and more action steps - doing things they previously did not think possible.

10. *Respond to feedback - and persevere.* I try to inspire students with stories of people like themselves who have gone on to do great things, often by working against the odds; for ex-

ample, Wilma Rudolph, the great track star who was once told as a youth that she would never walk again. I show them how to use mistakes for growth, to employ positive as well as negative feedback to their advantage, and to persevere until they accomplish their goals.

When teachers use these 10 steps in their classrooms, the improvements in students' self-esteem and achievement are rewarding. A comment from a teacher who participated in one of my workshops sums up the dramatic change that can occur in a child's life:

I used to think all I needed to do was to teach mathematics well. Now I teach children, not math... The youngster who really made me understand this was Eddie. When I asked him one day why he thought he was doing so much better than last year, he replied, "It's because I like myself now when I'm with you."

Notes

1 For more information about raising the self-esteem of faculty in a school, contact the resources listed in the box.

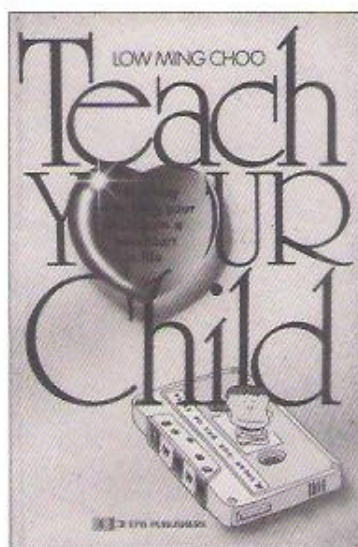
2 The 10-step model is spelled out in greater detail and with many examples in *Self-Esteem in the Classroom: A Curriculum Guide*, which is available from the author at the address given below.

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BOOK REVIEW

by Jessie Ee



Teach Your Child
by Low Ming Choo
EPB Publishers Pte Ltd (1990)

As more parents joining the workforce, they become more aware of the need to provide quality time at home during the limited number of hours they have with their children. The book attempts to guide parents to teach their children. The book illustrates an innovative approach of using a cassette tape recorder to stretch and enhance quality time between parents and their children. It guides young parents on how to enhance responsive and effective quality time with their children even in their absence. The examples given in the book were based on the author's own experiences. Although the author attempts to help her readers employ her methods, she recognizes that "no two children are the same; no two homes are the same and definitely no two parents are alike" and hence indirectly suggests that her procedures may need to be modified to meet the needs of other parents and their children. The format of her presentation is easy to follow and the language used is simple.

The 110-page book consists of nine chapters: Introduction; Method; Subjects for Recording; Equipment; Planning; Child's Independence; Special Education; Aids to Speaking and Oral Letters. In the *Introduction*, the author stresses the need to stretch

quality time with children. Under *Method*, she lists the importance of using the tape recorder approach to give security and comfort during parents' absence. This procedure, according to her, also helps in children's acquisition of language and increases their knowledge and understanding of their parents' values, as well as developing closer family ties. The subjects that could be included in enhancing children's learning are stated under *Subjects for Recording*. Fairly sketchy procedures on how to approach various subjects such as house rules, values and good habits etc are provided. These approaches were from the author's personal experiences. Adults are also guided on how to help children learn, e.g. Directing a child's attention to items of specific interest, like, "Look, there is a yellow butterfly on the rose."; giving the child information such as "The butterfly is taking nectar from it."; warning him of danger: "There are sharp thorns on the rose plant. They can hurt you. Let Mummy show you how you can hold the flower."; helping him to appreciate nature's beautiful works of art: "The flower has so many petals. They are soft and velvety. Would you like to touch them?"

Parents could provide encouragement and responsive feedback by encouraging children to reciprocate effectively in their use of language. This chapter will be especially useful for parents using this procedure for the first time as it guides them in initiating a wide range of subjects and using various approaches such as songs, reading materials, story-telling and educational visits. For example, prior to visiting the zoo (p 41), relevant information through educational materials like brochures etc should be provided by the parents to prepare the child. Subsequently, a decision will be made to visit certain common animals and to know these specific animals more in-depth. Songs on animals can also be included to break the monotony of the continuous narration. The chapter on *Equipment* describes the basic equipment needed. Under *Planning*, the author maintains that in assisting children with language, we need to decide on what is to be taught before determining the amount of information to in-

roduced and taking into account the child's age and ability. A fairly detailed example illustrates the whole planning process. The final aim is to develop self-reliance in children so that they may learn to use the tape recorder by colour coding the control buttons. The author further shows how the tape recorder can be used in the special education setting and in aiding children to speak or in communicating with their parents who are overseas.

What then, in summary, are the most commendable features in this book? The use of simple language and ideas in introducing various subjects are commendable. It demonstrates the author's teaching experience and her ability to communicate. The author clearly illustrates how parents can use tape recorders to teach their children in their absence.

However, two precautions should be borne in mind - its approach and time factor. A parent must realise that this is only but one method of approach in developing quality time with the child. The ability to communicate and plan requires experience with children. In fact, it is one of the commoner teaching approaches that teachers use when organising group work or self-instructional materials for their students. With regard to quality time, as stressed by the author, this cannot be sacrificed at the expense of quantity time. Moreover, considering the amount of time needed to plan an effective cassette recording, it is preferable to use the time to gain more meaningful insights into the child through as many approaches as possible so that a more effective closer relationship with the child can be maintained.

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