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ABSTRACT

This report describes the yearlong case study based on participant observation at a school which used ThinkAbout, a series of 60 15-minute instructional television programs designed to strengthen the reasoning skills of fifth and sixth graders, and to review and reinforce language arts, mathematics, and study skills. Discussion covers the patterns of attention, classroom discussion, special projects, and values that the series promoted, and recommends tasks for television producers, teachers, and researchers to increase the value of this and other school television programs. The following findings are examined: (1) many types of sessions entailed the teaching of problem solving, and several types of teaching sessions seemed to stimulate students to solve problems as much as, or more than, those using the television series; (2) public education avoids controversial topics that may be the subject matter of a television series; (3) education practice is based on the assumptions that children's attention spans are short, that time segments for each subject must be short, and that teachers' patience for innovation, "unstructured" settings, and student responsibility is short; and (4) the curriculum is crowded with "programs," each providing its own means and ends, which restrict the integration of new curriculum introductions. (Author/LMM)

Volume III

Toward a Clear Picture of ThinkAbout: An Account of Classroom Use

SYLVIA HART-LANDSBERG

agency for instructional television

RESEARCH ON THE INTRODUCTION, USE, AND IMPACT OF THE THINKABOUT INSTRUCTIONAL TELEVISION SERIES

Principal Investigators:

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Evaluation Center

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Volume III

TOWARD A CLEAR PICTURE OF THINKABOUT: AN ACCOUNT OF CLASSROOM USE

Sylvia Hart-Landsberg

January 1982

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FOREWORD

Dr. Sylvia Hart-Landsberg is a free-lance anthropologist who teaches courses in education, anthropology, and sociology at Lewis and Clark College and Portland State University, both in Portland, Oregon. Dr. Hart-Landsberg investigated the use of ThinkAbout in several school districts by visiting classrooms and talking to viewers. The setting of her yearlong case study was a school that serves moderate income families of various ethnic backgrounds (mostly white). Her data collection approach was participant observation for television sessions during the school day and for the teaching of other subjects during the school day. She made a point of lending a hand to teachers and students when invited to do so during the period when she was interviewing teachers and students.

In her attempt to understand as much as possible of the context of ThinkAbout use, she broadened her scope to include the entire curriculum and several teachers. She found that many types of sessions entailed the teaching of problem solving, an instructional aim of the series, and that several types of teaching sessions seemed to stimulate students to solve problems as much as, or more than, did the teaching sessions using the ThinkAbout television series. She reported the patterns of attention, discussion, special projects, and values that ThinkAbout promoted, and recommended tasks for televison producers, teachers, and researchers to increase the value of this and other school television programs. Of particular interest were her observations that public education avoids controversial topics that may be the subject matter of television series; that education practice is based on three assumptions of "shortness"--

that children's attention spans are short, that time segments for each subject must be short, and that teachers' patience for innovation, "unstructured" settings, and student responsibility is short; and that the curriculum is crowded with "programs," each providing its own means and ends, which restrict the integration of new curriculum introductions.

J. R. S. and S, R. S.
January 1982

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MARIE WILSON DETERMINES TO USE THINKABOUT

Ironically, Marie Wilson had to put off showing ThinkAbout to her fifth grade class for the first time because she had laryngitis and could barely talk. (ThinkAbout in this case did not talk "for" the teacher because she felt it required explanation.) I had phoned her in late October after hearing from the district media specialist that she was one of the handful of teachers who had requested a program guide. Marie, on her own initiative, had read promotional material on ThinkAbout she had received in the mail and planned to try out the show.

Marie's initiative remained strong. When I first left a message for her that I wanted to talk about ThinkAbout, she returned my call promptly (and continued to respond this way throughout the school year). But on the appointed day of my first visit to the class, she phoned me an hour before show time, demonstrating with rasping voice her incapability of introducing the show on this day. Another concern had discouraged Marie from using the show until this time; she had not yet received her requested guide.

The laryngitis problem lasted for a week; Marie finally showed ThinkAbout for the first time in early November, before receiving the guide from the district. Further inconveniences kept the class from viewing the show again until mid-November. Marie was committed to the Monday and Wednesday 1:30 broadcast rather than the Tuesday and Thursday 10:15 broadcast; the class missed a program because the afternoon was scheduled for teacher-parent conferences. Another viewing was aborted when the day turned out to be a holiday Marie had not foreseen.

Once received, the guide continued to be an inconvenience in the early stage of ThinkAbout use. In mid-November, before showing the class ThinkAbout for the second time, Marie used the guide for a fifteen-minute preparation for a program about UFO's (Program 17). She was way off; the program broadcast was about the use of mnemonic devices in tai chi and public speaking. She said later that she had mistakenly overlooked the Tip program description (on a gray page in the guide).[1]

Circulating around the class before the program, I introduced myself and my purpose to several students and asked them what they thought of the one ThinkAbout program they had seen—on time capsules (Program 15). They said it was "boring," and those around them nodded in agreement, but none would say anything specific about it, i.e., what he/she disliked. This avowal of boredom may have been an early

[1]This was the only time she made such a mistake. Throughout the year she was frequently led to introduce the wrong show due to errors in the broadcast schedule until she ceased such introduction as too apt to be incorrect.

instance of this class's continual striving to create "interesting" situations, often by not going along with adults, including a researcher who they probably thought expected to hear cheerful praise of "her" series.

Marie had two strong reasons to continue using ThinkAbout even though its introduction was rocky. She had taught lower grades in the past and therefore had not built up a backlog of "units" and projects in the subject areas which demand more teacher choice than do reading and math. She was looking for "something to do" for the children in the afternoon, a time devoted to these concerns. In addition, she considered this particular class "hyper" and wanted something unusual which would add strength to her efforts to keep them occupied--she felt a television show could serve this purpose.

BASIC ELEMENTS OF ONE THINKABOUT ENVIRONMENT:

CLASS AND SETTING

The Class

Here I take time out from the chronology of ThinkAbout use to introduce the viewers--the class--and their school and city settings and teacher. The viewers are one fifth grade class of Conestoga School "Coyotes." Coyote is a pseudo-mascot, as all names herein are pseudonyms. I have selected this particular mascot to express my perception of the class as an assertive group comprised of many wily individuals. The school name, "Conestoga," expresses something of the ambience and heritage in this and other schools in the western United States: 1920's red brick construction, asphalt playground, cafeteria food smells, and sounds of children being asked to walk in the halls. Most students in the class are white; two are Oriental (one American and the other Vietnamese); one has a Polynesian parent; one is native American; and one student is of East Indian descent. Most available socioeconomic information applies to Conestoga School rather than this particular class, so I will include that information in the section below on the school. It is easier, anyway, to relate an impression of this class by referring to their behaviors rather than their backgrounds.

This group is one of the most physically and verbally active elementary classes I have ever seen, with the possible exception of settings which are defined as "free" or "open" education (which this is not). Of course, this attribute reveals something about the teacher, but she, other teachers in the school, and I agree that this group

has a tendency, regardless of teacher influence, toward "hyper-activity." Behavior patterns manifest a general air of tension in the class; the students have complex social networks (including fluctuating camaraderies and conflicts), question teachers' decisions or ask for clarification, move from their seats, and do not act interested in many of the teacher's suggestions for out-of-the-ordinary pursuits. All classes are lively at times, but this group rarely seems calm to me.

Consistent with the image of coyotes, this class is an organized "pack," not an unstructured horde. Each member seems to cause and react to the total configuration in a special way. One slight girl, who rarely disturbs others and seems barely to attend to instruction, supplies wry commentary on events (keeping the researcher inwardly chuckling). Another, more extroverted girl doodles continually with flashy equipment--fuzzy pencils, fat pens with several points, markers with the fragrances of various flavors--and somehow gets girls around her to doodle too. Several boys frequently insult each other, judging from the number of times these insults claim the class's attention. One serious boy tends to question the teacher about the content of lessons: Why do Spaniards build cathedrals over Aztec temples? Why do we do the math workbook that way? Frequently, he demands more teacher instruction: "I don't understand." One student, an artistic, academic, and political "star," is apt to have his name on the board on the list of students who owe the teacher extra minutes for the disturbances they have created in class. Another rarely has his name listed, but the teacher is always directing him: take out your book, stop talking, start listening, etc.

The point of these sketches of classroom characters is that lively personalities contribute to a configuration in which each contribution magnifies the others. The result is loud and busy. (The teacher's crucial role is described separately below.) The class is not chaotic: there are routines of time and space, patterned student interaction, clearly signalled limits to the teacher's tolerance, and expectations for academic work which are largely fulfilled.

For any "pack" the static aspect of description is misleading. It is essential to realize that the children who watched ThinkAbout last fall are not all children this spring; some are now pre-adolescent boys talking increasingly about sports, cars, and (in one case) going to Harvard, or pubescent girls aspiring to be the glamorous Calico Junior Princess in the city's spring rites. It is easiest for me to see such changes among a prominent clique of girls. Several are among the academically successful students of the class and frequent volunteers in class discussion. Around March, other attributes of the clique members became notable. Most of the clique now wear high-heeled (clog-type) sandals; some wear rouge. They practice smoking with candy cigarettes and once took delight in tricking a teacher to come to a corner of the playground to see if they were really smoking. In short, they are growing up, but this development has involved some reversion: "baby talk." The teacher has refused to respond to the clique's new style of speech. ("Baby face and baby talk would be the last thing I'd choose," she responded to one girl who begged in baby talk to be called on.) But it has continued for several months. In this setting of complex and changing characters who profoundly

affect each other, an offhand comment that ThinkAbout is "boring" (as I heard in the fall) or "interesting" (as I heard in the spring after students knew me and seemed to want to please me) is impossible to interpret without the long interviews and observations I sustained to ferret out the meanings behind these words. Even with my relatively deep examination, interpretation is difficult.

Conestoga School

According to adults familiar with this class, it is peculiar at Conestoga for its "hyper" atmosphere, but no Conestoga adults ever told me that it is peculiar in terms of students' families and related social variables. Therefore, certain facts about Conestoga School may tell us more about this ThinkAbout audience.

The school is surrounded on three sides by modest, older homes which are well cared for and have small gardens. On the fourth side is a business street with warehouses, garages, and heavy traffic. The attendance area for the school is similar. It is not a district known for one industrial or commercial concern, or style or cost of residence. Most homes probably house moderate income dwellers. Some grand old houses probably entail considerable expense. Some are quite dilapidated. The "mixed" nature of the district is its outstanding attribute.

Ethnicity: The population is over 50% white. For this school year (1979-80), out of a total enrollment of 359 there were 62 (or 17%) minority students. Black students numbered 12 (or 3%).[2]

Income: Moderate income levels probably characterize the

[2]October 1979 enrollment report for the school district.

majority of families. The principal believes that there are students representing all income levels, "including some very sad cases." In Marie's class, nine students receive free hot lunches in the USDA program.

Mobility: The principal also perceives the students' families to be highly mobile. I was unable to find statistics on student turnover rate, but heard several times that it is "high."

Single-parent families: Again according to the principal, there are "many" single-parent families sending children to school. Although there are no figures on this, the number of students in divorced families does not strike me as unusually high or low for U.S. society.

Religion: Information about religious affiliations for the school's pupils is not available. Marie knows that families of her own students are active in various Catholic and Protestant churches, but does not think that any are Buddhist, Hindu or Jewish (religions I would not have been surprised to find represented in her class). A group of Chinese Baptists sponsor immigrants from China, thus contributing to the mobility of the student population, because the immigrants tend to leave the area after becoming acclimatized to U.S. life.

We can consolidate this information on homes, incomes, welfare, mobility, divorce, and religion with my own understanding of student dress, interests, and aspirations to compose a picture of a rather cosmopolitan setting in that students are not all from one class or life-style. The diversity, however, does not include a large percentage of members of any one minority group. Collectively, the members of Asian-background groups--Chinese, Japanese, and Southeast Asian--

compose the largest minority group. Although a small percentage of the total school, they are perceived as an important component by the principal and perhaps by other faculty and students as well. The school includes some wealthy and some poor students. In terms of religion, Christian denominations seem to be the only prominent ones.

Although the population served remained the same, Conestoga changed three years ago in ways which affect the class viewing ThinkAbout. Grades 6, 7 and 8 were transferred to middle schools, leaving kindergarten through fifth grade. This means Marie's class is at the highest grade and may be trying to act "grown up" to fulfill their roles as custodians of many school functions--safety patrol, office work, and student government leadership, among others. Students take their jobs in the school seriously, reading the schedules, reminding each other of tasks, and coming and going from the room (often during ThinkAbout sessions) on their own responsibility in order to fulfill them.

Another change was the termination of a nongraded primary program. Today the principal says Conestoga has classes which are "not exactly self-contained, not exactly nongraded. It's more cross-graded, especially for reading and math. There's a lot of sharing and switching of kids." He is referring to the cross-groupings in basic subjects which teachers arrange to accommodate more precisely the various ability levels represented in their rooms. Such an arrangement strongly affects the ThinkAbout viewing group (see pp. 38ff.). Although a teacher does not keep homeroom students all day every day, he/she instructs them in major subjects and oversees their schedules for recess, lunch, P.E., music, gifted students' programs, counseling

sessions, office and patrol work, and other activities.

Physically, Conestoga does not look like an ultramodern school: rooms are not glaring colors, and there are no racing stripes painted along the corridors; classrooms are not carpeted, and there are no sinks in classrooms.

My impression of the faculty, from limited contact with them, is that most are not education "faddists" interested in innovation for its own sake. Rather, they seem to be in the mainstream of modern U.S. education trends. During several visits to the faculty room at lunchtime and while most classes were underway, I have heard teachers bring up diverse professional and personal topics—library expenditures, students' personalities and progress, trick birthday cakes, and maternity underwear. At these times I have not heard about experimental education methods in use at Conestoga (or elsewhere). Of course teachers probably are trying various approaches (data do not cover this). My point is that the school atmosphere is not one in which changes are glorified or heralded as being in the vanguard of other school's changes.

With regard to the innovation under study, ThinkAbout, Marie is the only teacher who uses it. I conversed enough with several teachers for them to know about my research on the series. None of these individuals indicated to me any particular interest in hearing about or using it themselves.

The apparently stable atmosphere which I have described above is reinforced by the low faculty turnover rate. New teachers are hired only when one or two teachers retire each year. Most teachers are now in the "40 bracket" (the principal's phrase). Two younger teachers

have taken leave to have babies and have returned soon thereafter.[3]

Although the image of the school as I perceived it is not one of bustling innovation, i.e., no one I met bragged about or was preoccupied with change, the actuality is that the school encompasses many specially funded programs in the mainstream of education developments in the city, state, and nation. Using the term "special program" loosely, let me list some courses and services which make school here "modern" and mean ThinkAbout is seen in a context where new types of situations are taken for granted:

> a community school program offering activities for adults and children during and after school hours
>
> the Beehive, a room where a child-development specialist is employed to "build on the positive aspects of behavior and encourage children to accept the logical consequences of their behavior"
>
> a Title I Program providing an academic program for those with identified needs in math, reading, and language arts. The program was recently redesigned to bring students to aides rather than bringing aides to the classroom. This change was intended to increase service for students.
>
> classes for emotionally handicapped and educable mentally retarded students
>
> classes outside homerooms in instrumental music and P.E., including ADAPT, a physical activity program for kindergarteners and first graders
>
> classes for students identified as talented in art, scholarship or motor activities
>
> an English as a Second Language Center

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[3] Although tangential to my topic because ThinkAbout was not used collectively at Conestoga, it is interesting that faculty members say they work well together, cooperating easily in coordinating classes and enjoying each other's company. I was not present at cooperative events, but teachers' cordiality to me and to each other on breaks suggested that the working atmosphere was amicable.

> an Educational Resource Center offering individualized programs for helping students identified as needing help in the "basics."

The City

Conestoga is in a city of half a million people employed mostly in transporting agricultural and forest products and in banking, manufacturing, government and services. Inhabitants take pride in the spectacular natural surroundings and reputed low levels of pollution and crime. A recent editorial in the major daily paper bragged:

> It is a city largely free of graffiti, vandalism, litter, street gangs, mafiosi, racial tension, desolate slums, choking pollution, crooked politicians, colonies of freaks, phony social climbers and those legions of harassed men whose blood pressure rises whenever the Dow-Jones average dips a few points.

The city is not free from these blights, but residents believe it is "livable." Shortly after this appeared in print, two girls in the class I studied were harassed by strangers. Conestoga's attendance area may have social problems, but it is not generally known for them.

The School District

The major issue of the year in the district where Conestoga lies is school desegregation. Community groups have made demands regarding bussing, neighborhood schools, percentages of minority enrollment, and "quality education." The administration and school board have reacted to these demands and to fears of federal litigation by altering school boundaries and curriculum. Although the district is in the throes of change due to current reappraisal of the Supreme Court's 1954 decision in Brown vs. Board of Education,

Conestoga School does not manifest this upheaval. The school has mostly white students and will not be affected by a change in desegregation policy. An open enrollment policy allows Conestoga students to attend other schools and students from other areas to attend Conestoga, but few make such changes, and the policy has not altered the ethnic composition of Conestoga.[4]

One administrator, asked whether the district has a progressive image, shared with me her impression that the district is a "mosaic" of more and less progressive departments. In test development she feels it is advanced. In curriculum she said that some consider it somewhat behind the times; a thrust toward decentralization in the 1970's has increased classroom autonomy and decreased district-wide curriculum development.[5] In regard to desegregation, this administrator suggests that the district is, like other urban school systems, working hard to keep up with the tide of the times. Likewise, in development of bilingual and other kinds of special education, the system is "not keeping up, but paddling as fast as we can."[6] My point is to show a mosaic that not only is complex, but

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[4]This necessarily cursory referral, inadequate as a description or explanation of the complex desegregation situation in the district, is adequate only for indicating that the situation is vital and influences changes occurring in all spheres of education there.

[5]Again, this brief sketch of the context of ThinkAbout does not allow me to present an issue in all its complexity. For the sake of balance let me say that another administrator believes that gains made in the curricular arm of the district during the 1970's are now being strengthened by a recent recentralization of curriculum services.

[6]In the interest of anonymity for many individuals in the study, I cannot give credit by name to the district employee who shared these impressions with me, and whose opinion I value highly.

whose pieces are also controversial! The administrator cited here is not an authority on all arms of the administration, but for the sake of brevity I have not included conflicting impressions of others which might color the mosaic differently.

The district is not backward in enacting U.S. education trends. Here is one example: In the late 1960's, a high school in the city became a nationally acclaimed experiment in "open education." (The proposal for the experiment was rejected by other urban school systems before being accepted by this one.) Students took more responsibility for course choices, attendance, and school governance than in more traditional schools. Due to these changes, the school was controversial and received public attention for events that were not abnormal: disturbances termed "racial" by the press, transferring of some white students (no mass exodus), and political activism on the part of students and teachers. Policies were gradually revamped in the 1970's until the school offered about the same alternatives and excitement as other high schools. The experiment is one case of the district being willing to innovate and rework the innovation when it was judged to be unsuccessful.

Marie Wilson, the Teacher

Certainly Conestoga School and its urban environment partly determine the character of the class, but I hope my initial description of the class shows that it has some internal dynamic which seems to make it operate in its lively fashion. Marie is central in this system, and the way she treats students in direct interaction with them is the crux of her position.

Marie is in her early 30's and her ninth year of teaching. After receiving a B.A. from a small Catholic women's college in the area, she taught primary students at Catholic and state schools until she took an upper elementary grade for the first time this year. She is married to a middle school teacher who aspires to a job in education administration. They have a two-year-old daughter.

Because my opinions are an unavoidable part of the data on Marie Wilson, I want to make them clear at the outset of the report. I do this not in order to evaluate her--for I am not qualified to do so, and that is not my aim--but so that the reader can more clearly evaluate the report. I think Marie is a good teacher relative to others I have seen. I hope a portion of my descriptions of her reveal that positive feeling. Other portions reveal imperfections, mainly for two reasons. First, I am trying to examine classroom behavior for its meanings in a way which no teacher has time to do as he or she acts. Secondly, Marie's job renders her not merely an individual with certain teaching traits but an actress filling a role which requires her to behave in certain ways. She does her job well, but at times the job itself has failings. Since she is a good teacher working in an imperfect structure, she shows us more of the intricacies of using ThinkAbout than would a less competent teacher whom we could blame for any problems we see.

Marie's teaching style is vigorous. When she asks the class questions (about ThinkAbout or other subjects) she responds to their answers. That is, she asks them exactly what they mean by what they said or rewords their apparent messages more succinctly: "You're

saying that..." She is "into" the exchange. She often uses an answer to her next question: "As Laurie and Joel have just said.... Now what do you think about...?"

The teacher draws the students into the exchange, and it may be demanding for some because she does not always simplify her natural language for children's ears. In an early ThinkAbout discussion, for example, Marie asked the class whether they knew of any good "sources of information." They hesitated. She paused, as though considering whether to define the phrase. Then she went on, eliciting one source from a bright student and then several from others who caught on.

Due to her enthusiastic style, lesson content can seem lively. I believe Marie's eagerness and fast pace keep students wondering what will happen next even when routine behavior (e.g., "Get out your books") is involved.

Discipline occurring right along with ThinkAbout and all lessons can be lively too. When reprimanding an individual, Marie calls on that person to write his/her name on the board and tells precisely which behavior she does not like. She often gives an exaggerated frown, revealing humor rather than pique. After a collective reprimand the whole class is quieter for a while until sound and activity build up beyond her tolerance. Then she sets limits again. Thus there is a rhythm to the order she keeps in the room. As she starts each new measure in the rhythm, she never reveals inner annoyance. At times she becomes openly angry and shouts; other times she explains her aggravation; she uses "tricks" like turning off lights to emphasize her seriousness; but she never

lets the students see that they have succeeded in "getting under her skin" so that she is not in control of her feelings or their behavior.

Observations on Marie's teaching style will be elaborated in later sections as we "see" her lead discussions. Now I want the reader to "hear" what she said in conversations with me about relationships with her students. In our talks I reached two main conclusions about her attitudes toward the students. First, she has insight into the unique personality of each and treats each in a way she thinks suits that person. Secondly, she is more interested in social development (family influences, emotions, interpersonal relations) than cognitive development (particular skills acquired, levels of achievements, academic aspirations). I expressed these points in my January field report:

> The teacher knows her students in a way many aspire to--as "whole persons." She talks to me about their families, personal adjustment, sexual maturity, and apparent talents, aptitudes, and intelligence. She does not, however, spontaneously speak about their past school records, except certain performances in intelligence tests and district-wide competitions. Nor does she mention particular skills they have acquired, e.g., "Laura can't keep her vowels straight" (the sort of comment I have heard some teachers make). In accord with her awareness of the individuality of each child, Marie treats each differently and makes "no bones" about it. For instance, she chose a practical girl to role-play a leader, ignored the argument of a girl who "can't get along with others" so that she could learn to work things out for herself, rebukes a sullen boy more than the others, calls more frequently on students who have shown they want to participate by having ready answers. Almost every day, several of her comments to me explain how she took into account the "natural" abilities or behavioral tendencies of some individual as she responded to him or her. Some observers might find this differential treatment alarming due to its implications for tracking along lines other than "ability," but it does take into account the natures of individuals in a very personal way.

In a philosophical moment (when I had asked Marie to tell me about her teaching aims), Marie expressed the way her desire to respect her students fades into the necessity of demanding their respect for her:

> It really isn't my classroom as much as it's the kids'. . . . Their ideas might be better than the ones I have, so why not try them? When the kids do question what I do, my favorite response is to say, "I've thought about it and gone to school four years and become a teacher. When you have become a teacher, let me know and I'll change the policy." So I have allowed them to have the feeling . . . give them the chance to have their feelings, and at least they know you're aware of them and haven't shut them down.

In a less philosophical frame of mind (after lecturing the class for rampant misbehavior during a session in which their shaky student-teacher was being observed by her professor), Marie told me, "Sometimes I can't stand my kids." She has explained to me and the student-teacher that she "fakes it," that is, she plays along with childish humor in order to promote teacher-student camaraderie.

The enthusiasm and care which characterize Marie's style are evident while she asks questions about each ThinkAbout program immediately after it is viewed, as will be seen in the following section. Deep involvement in the explicit content of lessons (e.g., geography of North America, mammalian ethology, mathematics) is not evident in most of her instruction. (This, I believe, is common among elementary teachers and is due to the number of subjects they must "cover.") Carried over to ThinkAbout, this intellectual attitude means that she shows students enthusiasm about the series which does not always extend to deep concern for the problems and the problem-solving process.

In order to understand Marie's attitude toward the explicit intellectual content of lessons, let us look at her favorite subjects to teach and goals for her students. "The main thing I'm trying to teach my kids is to be responsible for their own actions, whether that's learning their math or reading, or learning how to control their own anger when they get into a fight and take the consequences." Notice that her number-one goal concerns moral rather than intellectual development. (I do not find Marie unusual in this respect.)

When pressed to state the main academic thing she tries to teach, Marie says, "Reading skills. I think if they can learn how to read and learn to appreciate reading, then the rest of the subjects are a lot easier . . . even if you drop out of school at 13 or 14 you are able to communicate." Although Marie does not want to go "back" to basics, to "the way it was when we were in school," she believes that in her particular class "basics" in math are essential:

> In math I would say the basics are very important for the kids in my class because they aren't ultra-high and it's not going to help them to go into the new special theories, story problems, and all the things that are extra. They need to know how to add, subtract, multiply and divide, and do that well, because if they can master those then they can go into something harder.

For her, application of math skills is separate from their acquisition.

Another interest Marie holds may influence her use of ThinkAbout: she enjoys teaching on a one-to-one basis students who have severe reading problems, and aspires to a position doing this as soon as possible. This will allow her to deal exclusively with reading and phonics (the latter, she says, gives students "something concrete

to learn from") and save the energy she spends on class control for her two-year-old daughter at home.

In her interests in individual responsibility, reading, basic mathematics, and learning problems, Marie does not bring to Think-About the whole spectrum of interests the show embraces (as no teacher would). However, her emphasis on certain morals and primary literary and computational abilities does not exclude other interests. She has recently taken courses in problem solving and the "Great Books" approach to literature, and she seeks to do more "affective activity" with her class each day. Not a narrow person, she necessarily limits her teaching priorities.

Some of ThinkAbout's emphases are not the same as Marie's. She does not commonly talk (in classroom conversation) about cognition, social science research, rigorous mental challenge, or the scientific method. She comes to the show in order to "get these" as supplements, because she believes these to be suitable afternoon activities. An additional reason she needs to add to her own specialties is that she has taught lower grades until this year and has no backlog of projects outside of reading and math routines to offer fifth graders.

As will be seen later in her response to the show, Marie does draw out from the show the general messages about reasoning, but does not reach farther for stimulation of science or social science endeavors--the very concerns for which she came to the show in the first place. Some social science and science, entailing textbooks and more traditional methods than ThinkAbout might inspire, are part of the curriculum regardless of ThinkAbout.

Strong factors having to do with the class seem to keep Marie from delving into all potentials of the series. As maintained above, the class is sometimes close to incorrigible, not because of absence of control on Marie's part. She finds that short, simple exercises best suit their demeanor.

Marie, given this class at Conestoga, committed herself to regular viewing of the show. Feeling that she had established clear control of the class in the first weeks of school, she delved into the school year (not initially examining the uses and depths of ThinkAbout, but simply going ahead with it). Now I want to involve the reader in many aspects of the class's academic life, including their ThinkAbout use, in order to show ThinkAbout in its natural context.

EARLY VIEWING PERIOD (MID-NOVEMBER TO MID-FEBRUARY)

From mid-November until mid-February the class watched ThinkAbout with their own teacher whenever they could. Sometimes they could not: poor reception due to high winds, Christmas holidays, a substitute teacher, a work day for teachers, and an ice storm that closed school intervened. Notice that, in this case, interventions do not include special schedules for school assemblies, testing, or academic subjects.

Several children mentioned that they watched the show at home when they were sick. One boy asked eagerly whether it would be shown during vacation; when the teacher said, "Yes, are you going to watch it?" he toned down his enthusiasm with a diffident shrug: "Oh, I might if I'm bored." (Apparently it was not "cool" to rave about ThinkAbout.)

Attention and Viewing Conditions

Students turned their attention to the screen during ThinkAbout (as did those described by other observers) but they had a tendency to wiggle and whisper more than any other class I visited. An attention pattern which lasted all year is exemplified in the following account of students viewing the ice-skating program (Program 23).

During the first four minutes or so, many looked in various directions and moved their seats. One stared into space, seemingly daydreaming. The desks were arranged into separate "islands" with each student facing the center of the island in which he/she sat. All students in the front island near the television watched

actively, even during the few moments of Electric Company and the identifying footage of ThinkAbout. In two other islands the individuals whose desks faced the back of the room did not attend as completely, turning at times from the television to sit in their desks "naturally."

More reactions that are not atypical occurred. Students snickered during the preliminary music-and-dance routine (in which the "message" is communicated) and did not seem drawn into the program (several continuing to draw or daydream) until the ice-skating competition was introduced. At other points, however, scenes students considered silly did not divert their attention: some boys clowned, laughing at the skater imitating a gull and mimicking the skaters, but their eyes were riveted to the screen during the skating segments.[7]

These attention patterns occurred under conditions indicating that ThinkAbout was not "sacred" to this audience. The television was not a permanent "shrine" toward which all furniture was oriented, as in many living rooms. Rather, it was a piece of equipment the teacher fetched for this and occasionally one other show, Let's Draw. No one was assigned the special duty of setting it up. Apparently they did not care enough to create optimum visibility: no one drew the shades or turned off the lights. By rolling the

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[7] I observed another class viewing this program and found similar entrancement during the skating: perhaps one factor involved was the music, for in many programs attention increased during footage accompanied by music. An example is the shots of students on the Gallaudet campus in the program on sign language (Program 38). Students also seemed to like "special effects," for instance, when the boy who saves a man from a heart attack (Program 24) "sees" his hail through a blurred, off-angle lens.

television into the room, the teacher signalled the next in a series of routine activities, not a specially demarcated ritual.

A Pre-Program Discussion

Marie often introduced the program by telling students what the guide said or how the program fit into the series as a Tip, Challenge, or part of a cluster. Once she led a discussion before the program. In preparation for the show on achieving goals (Program 31) she told the students the program was to be "about success" and asked them whether they had ever set themselves goals. This was Marie's approach in many ThinkAbout discussions: without wasting many words by explaining the main "lesson" she referred to it and asked individuals to recount experiences in which they had learned or demonstrated that "lesson."

Responses to this question also foreshadowed many discussions of the ensuing weeks. About six students tended to volunteer answers under any circumstances. Marie allowed them to talk more than the students who were not eager to talk, but she also called on students who did not volunteer. Most students Marie called on who had not volunteered said that they had goals but would not specify them. Thus it was not very successful for Marie to focus attention on these students rather than the vocal ones.

On this day the "talkers" were well represented. Two recounted goals to receive certain gifts, significant responses because many experiences recounted during ThinkAbout discussions deal with material aims and rewards. On this occasion Marie asked once whether no one had considered a goal of better classroom behavior and referred to a specific reward system instituted in the class

that very day; apparently no one had. She also asked one boy whether he had a goal when he went to a remedial reading session; he did not answer. One boy did tell of a goal to excel, rather than acquire: he had aimed to hit a home run.

Students usually rambled while recounting goals. Laurie told about her goal to get a puppy and how she had waited for six years until she finally succeeded. Marie interrupted: "What did you do to achieve your goal other than write a Christmas list every year?" To Marie's attempt to elicit techniques of goal achievement, Laurie described a variety of techniques which had softened her mother, e.g., saying, "Isn't that cute?" whenever she saw a puppy.

This discussion introduces the reader to Marie's style, but it did not enlighten the students about the ThinkAbout program for that day, since the program aired (off-schedule) turned out to be about a boy planning to go to England (Program 29).[8] Pre-show discussions diminished as Marie lost faith in correspondence between the guide and broadcasts. By mid-January she simply turned on the television.

Post-Program Discussions

The teacher chided the class to convince them that ThinkAbout sessions were serious. During the early viewing period, immediately after their teacher switched off the television the class sometimes

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[8]According to the director of television services for the State Department of Education, the studio did not always receive the scheduled program on time. When this happened, the staff simply pulled out a program which had been shown within the last few weeks and showed it again.

became very active.[9] Under these circumstances, Marie established order rapidly. Once she accomplished this with a lecture on the nature of ThinkAbout sessions, saying, "This is not a free period. It might seem like one because there are no books or anything, but this is a class just like any other."[10] This was not the only time she carefully explained that ThinkAbout sessions were serious activity. To place ThinkAbout in the context of work/not-work distinctions, let me add that a similar lecture once accompanied a class meeting (for discussing class business and practicing "democratic" procedures): "This is a class meeting; it is not free time." Thus there are certain sessions with no individual responsibility for reading and writing assignments which students regard as informal and the teacher regards as formal. ThinkAbout sessions are among these.

Marie wasted no time launching a discussion which lasted between 15 minutes and an hour. Although no format guided all discussions, she used certain approaches repeatedly. Since the discussions were the only evidence of children actively using the show (offshoot projects being rare, viewing being passive, and after-school behavior being inaccessible to me), these discussions appear to be the essence of any education the show offered students. Here I describe the manners and material of

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[9]Another class, which was less independent from their teacher's directions, sat with glazed eyes for a few moments after the program, as though stunned.

[10]The many who were fiddling with geometric shapes they had made in math ceased fiddling. Two girls continued to draw and one continued to paste yarn to paper throughout the discussion.

discussions in the early viewing period and give examples. To be fair to the teacher, the reader must remember that due to broadcast mistakes, she often prepared the students for the wrong program and led the post-show discussion "cold" (having read the guide during the program and thus missing part of it).

A. "Ways To Remember" (Program 19) about remembering tai chi moves and topics in a speech. Mrs. Wilson asks students whether they have any methods of remembering like the one on the program. She calls on six students, each of whom talks about something very difficult to remember and half of whom mention some method he/she uses. Marie's approach here is typical: as she puts it, she "brings the program back to their own experience." A certain few dominate these accounts, but many attend closely, probably because they hear interesting information about classmates' personal lives (including a good deal of bragging).

After eliciting these examples of memory problems, the teacher puts on the board the initials (H.P.S.M.) used as a mnemonic device in the program. The students recall not only the sentence they stand for, but also the points in the character's speech which they helped her remember. Marie picks up on the topic of the speech, saying what qualities she liked in it. With this brief lecture on good speeches, Marie is referring to her previous instruction on speeches and going beyond the main point about memory to a secondary point about public speaking.

B. "Classifying Objects" (Program 20) about categorizing

records for a garage sale. Mrs. Wilson addresses the classification problem introduced at the end of the program--how to classify stamps. Students mention ways to do this as she writes their suggestions, scattering them over the chalkboard, accepting all and changing none. (She often does the same for problem solving in non-ThinkAbout sessions.) The result is a scattering of subjects by which one might classify stamps (presidents, animals, history) and other criteria (size, price). I believe that this exercise clarifies the meaning of the word "classification" and offers participants practice doing it. They do not discuss the merits of various systems for different purposes or the use of crosscutting categories or subcategories.

Now Marie encourages them to practice once more, this time classifying records. She starts with the category "folk music"; students object, saying that only their parents know about such dated categories. As they show off their knowledge of more modern fare, the discussion becomes intense. People call out their favorite artists and argue across the room about the proper categories for them. Involvement in the practice of the main point of the program--how to classify--is evident, but they do not examine criteria or purposes of musical categories.

The next exercise reveals students' reluctance to use categorization. Marie asks them to form three groups and classify objects in the room for a classroom sale.[11] When they

[11] Students eagerly offered ideas about earning money by selling or other means in several ThinkAbout discussions.

are finished, Marie writes all the items from each group on the board. Only one group, which she has coached, has classified the items into categorie After the teacher does all this writing (students sit quietly the whole time her back is turned) she asks them, "How could we classify these?" Answers from the class: furniture, school supplies, paper, etc. An exchange about whether paper should be one of "school supplies" or a category by itself (because "there are so many kinds of paper," says the teacher) does not lead to an abstract discussion, "What constitutes a category?" or a practical examination, "Would these groupings lead to an effective sale?" They have done simple classifying (which they do in everyday life also) rather than talking about simple or complex classifying. They have not done complex classifying (subcategorization, multiple criteria, etc.). Mrs. Wilson closes the discussion by telling the class emphatically, "I am very pleased with your enthusiasm."

C. "There Are Many Ways To Go" (Program 23) presenting three approaches to winning an ice-skating championship. Marie has the children tackle three separate problems in this session. Before the program they begin to tackle the first problem: how would they earn money for a stereo? Many responses are unrealistic ideas about getting jobs. After the program Marie has them brainstorm this problem together, apparently in order to highlight the point that each individual has his/her own way to solve a problem.

Although not the conceptual skill "starred" in this particular program, brainstorming is a key lesson of the

ThinkAbout series. Marie, who took a course on problem solving, often mentions in conversation and class this skill (and no others) she learned from the course. Whenever Marie responds to individuals' solutions to a problem by scattering them in writing across the board, she calls this "brainstorming." The class does not always follow the scattering with analysis of proposed solutions and selection of the best.[12]

Now Marie has the class tackle a second problem: which skater on the program had the best approach to winning? They vote on the approaches to determine which is best. (The overwhelming majority choose the approach involving imagination--mimicking animals.) This class has voted on other ThinkAbout "issues," thus determining the most popular solution, not necessarily the wisest. In this case the point of the show seems to be that there are several wise "ways to go" and that personal taste is one factor in a reasonable choice. It seems to me, however, that taste for an approach to skating practice should be linked to taste for the type of dance which is the outcome of that particular approach. There is no discussion of how the approaches led to the final dances and choice of

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[12] In another school, the teacher using ThinkAbout and the principal both cited one incident in which the teacher had the class brainstorm a playground conflict as evidence that the series is useful. Even after viewing the show all year, the teacher still referred to this incident as though no better example of ThinkAbout's effectiveness had arisen in six months. This teacher had introduced the class to brainstorming (from some other source) before the show introduced it. Thus ThinkAbout encouraged, but did not initiate, use of the approach.

approaches on that basis.[13]

The students tackle the last problem: how would they preserve food if the power went off during a winter storm? Individuals eagerly propose solutions by telling what they would do with snow, ice chests, and cooking. (Talk about "bringing the show back to their own experience"! During an ice storm a year ago the students experienced this emergency and now get excited about it. One month later, this exercise turns out to have been directly useful, for another ice storm cuts off power for days.)

D. "Nature's Patterns" (Program 27) about the mysterious pond pollution. The students lay out facts from the program and their own ecological knowledge, piecing them into a solution of the mystery: salt blocks contaminate water; salt kills algae; big fish eat little fish; people have no fish to catch. This episode is unique in two ways: it is the only time I watched them respond to an unanswered puzzle on the screen, and it is the only program which seems to have prodded the brightest minds in the class to probe deeply for ideas that were not immediately forthcoming.[14]

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[13]When another class discussed the same program, they voted on the dance which they thought won. (The majority thought the skater who did research won.) Like Marie's class, they did not link the approach to the dance, for they seemed to be voting on the approach, discussing only that and never mentioning qualities they liked in the dance.

[14]See Appendix A for a comparable mental challenge from the Weekly Reader which seemed to stimulate the children independently of teacher treatment.

E. "Search for the Unknown" (Program 28) on the Loch Ness monster. Marie asks the students if they have any unsolved mysteries. Janet responds by telling how she would solve the Bermuda Triangle mystery (mentioned in the program): "Go there and see it." The teacher retorts that she would "get disappeared." Janet would remedy this situation by leaving a note in a bottle telling where she had gone. Many students find fault with this and tell her so.

Mrs. Wilson turns this topic into the formal concern of the class by eliciting many solutions and jotting them in scattered fashion on the board. She says that they are doing "something like brainstorming." She calls a vote on the alternatives and gives voters a "few minutes"--actually less than one minute[15]--to contemplate the choices. Without indicating before the vote which of the alternatives on the board are to be "on the ballot," she points to several, one at a time, and counts hands raised for them. Her rule that no one can vote more than once eliminates the possibility of trying to attack the problem from several angles at once.

In criticizing each other's initial "brainstorms" the students try to think logically and weed out certain logical possibilities with high cost (in terms of human lives). They do not challenge the concept of the Bermuda Triangle as problematic, but accept it as fact. The reality presented on the

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[15]Marie and other teachers I observed this year often structured time for "thinking" into a lesson but then cut off that time shortly after they announced it.

screen is given--truth, not part of the problem--in spite of the fact that some students have never heard of the Bermuda Triangle before this session.

F. "Calm Your Jitters" (Program 34) on calming one's nerves. Students recall the times they have been nervous and the ways they managed their fears. The program focuses on nervousness about academic performance and one antidote--taking a deep breath. The conversation offers additional antidotes for nerves (e.g., thinking about something else) in tight spots having nothing to do with schoolwork.

G. "Where Do You Find Them?" (Program 36) on the boy who has to judge his two pals' racing cars. Marie announces, "I'm going to divide you into three groups." Thus the students know that they will be expected to actively participate; their attention may increase as a result. The teacher holds off the division and has them vote on which car was the best. They laugh about this because all agree one is obviously better.

Now Marie asks, "Was it easy for the judge to find criteria? Was it something he did quickly as soon as they asked him to judge?"

She calls on Rhonda, who says, "No."

Marie sometimes operates this way: she seems to have a "moral" from the program (here, one ought to work hard to establish criteria) and asks long questions demanding yes-or-no answers to express the moral.

Marie continues, "What did he do in order to find criteria?"

A few students cite places the judge went and people to whom

he spoke. Marie frequently has the class review the program this way before she sets up their own exercise of the skills involved.

Now the class hears about the three groups and their tasks: to list sources of knowledge about the criteria of good bicycles, horses, and helicopters (one topic for each group). One has to listen closely to understand that the lists should not be criteria themselves, but sources of knowledge. The teacher assigns a scribe for each group, in each case a girl who (she tells me later) can write well. Thus she promotes skills already acquired by some so that the group can succeed with the task.

I visit one group while it deliberates. Until the scribes explain otherwise, about half of the members think they are supposed to list criteria for good helicopters. Brian protests each entry on the list which involves visiting a person or place the class cannot actually visit.[16]

When the class reunites, Marie asks three girls (not the scribes) to write their groups' lists on the board. She encourages them by telling them that poor spelling doesn't matter here and that they "can come up with a great number of ways of

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[16]The group's list looked like this:

Hellacopter

library	Piolate Training School
Airport	Airforce Station
Jimmy Carter	News Station
Police Station	Navy
Coastgaurd Station	Army
Hostpital	A Hellicopter Tour
Fire Station	Exzibet

finding out about things if they need to." She usually has a neat conclusion of this order.

Comments on Early Viewing Period Discussions

Boredom

Marie's pace, gestures, and inflections were stimulating to me even when the topic was not. It appears, however, that she did not always perceive her students to be stimulated. Characteristically, she let them know her perceptions: "I know you are bored but you are being rude and you can just sit still and listen. . . . I don't care if you are bored." On another day she explained that "being bored is okay--fine with me--but you have to sit still and give the show [discussions, actually] a chance." On other occasions Marie indicated that she perceived boredom, tried to dispel it, and in the end, required respectful behavior if boredom could not be eradicated.

Intellectual Challenge

Discussions in the early viewing period offered students an array of techniques for solving problems. They did not crystallize these techniques into catchy phrases, rules about thinking, or types of thought. In other words, the teacher and students did not appear to be self-consciously thinking about thinking. Rather, they seemed to try out a few isolated modes of thought without closely evaluating their effectiveness, associating them with the types of situations they fit, or comparing them.

The exercises seem to be in line with the intent of the

individual programs, but I wonder whether they could not have carried them further. That is, could not many students, who got the point and learning from practicing it, have "stretched" their minds beyond merely "using" them? Perhaps this could have been accomplished by seeking more difficult problems along the following lines:

a. Actual dilemmas which individuals and groups face, e.g., whether to break the law in a given situation, what to do about an unfair school policy, how to react to the Iranian seizure of U.S. citizens. As a first simple exercise of mental skills these may be too complex. As advanced practice in using the same skills (still referring to the series--risks, criteria, communicating, etc.) they are not.

b. Forced solutions. It was easy for the class to suggest alternatives without determining on rational grounds the best solutions. If there is no basis for rational decision making, then the series has problems!

c. Concern with content of problems in addition to the process of solving them. Is there a Loch Ness monster? What is the Bermuda Triangle? Are UFO's the product of intelligent beings from outer space? If finding and evaluating information, etc. are only good for discussing questions without arriving at answers, then the skills the series teaches are not very important.

These possibilities are not so much suggestions as to how ThinkAbout ought to be used (since prescription is not my purpose) as indications of behavior that did not occur in Marie's classroom.[17] Of course, there is an infinite variety of behaviors which did not occur. Being very familiar with the situation, however, I can see the glaring absence of those particular kinds

[17] Or any other classroom in which I viewed ThinkAbout.

of behaviors which one might expect to find in a course on problem solving. Problems that many consider unsolvable ("real" problems), thorough attempts to reach solutions, and actual concern with the problems were underplayed. It seems that skills would be sharpened better in circumstances demanding those skills.

The atmosphere of problem solving, then, was characterized by a certain lack of intellectual intensity--a common lack in elementary schools, in my opinion. At the same time it also lacked the competition of some intellectual endeavors, including reading and math. Thus the atmosphere was pleasant and mildly interesting, never upsetting or absolutely engrossing. But to describe this atmosphere is not to explain it. Contextual factors (which are normal in this and many elementary schoolrooms) were:

short time segments

many required subjects within the homeroom

additional subjects with other teachers who cannot be kept waiting--P.E., health, etc.

students coming from and going to special classes and tasks

reputed short attention spans of students

customary avoidance of incendiary issues--problems of religion, morality, power

customary avoidance of certain personal affairs in classrooms--money, sex, love.

None of these factors prevents the class from striving to think hard about ThinkAbout, but none helps.

ABRUPT ALTERATIONS IN THE THINKABOUT ENVIRONMENT (MID-FEBRUARY TO LATE APRIL)

In the early viewing period, Marie had established the show (and researcher) as a steady part of the school year. She had led a discussion after each program viewed by drawing out an important concept and eliciting students' past experiences with that concept or by devising a hypothetical situation in which they applied the concept. Two simultaneous changes in mid-February affected this routine: a new schedule for math and a new student teacher. The math arrangement was maintained past the time ThinkAbout broadcasts ceased (late April). The student teacher stayed until only two more ThinkAbout programs remained to be broadcast. (Marie was the teacher for these.)

The Math Class

New Students and Schedule for Math

Before this radical change, all the fifth grades in the school had math in their own homeroom classes; the new schedule created cross-class ability groups. Math classes now met from 1:00 to 1:45; the last 15 minutes was the period Marie's class had been viewing ThinkAbout. (Marie said that she chose not to change the viewing time to the alternate days when ThinkAbout is shown mornings because she would rather have had them miss math than reading.)

The change meant that only about 1/3 of the students in Marie's room at ThinkAbout time were her homeroom students, who had been viewing ThinkAbout for months. The

others were there for math, but twice a week math was cut 15 minutes short so that all could view ThinkAbout. On these two days, Marie's homeroom students who were elsewhere studying math came back 15 minutes early to view ThinkAbout. After the show the math students who were not in Marie's homeroom did not stay for the discussion, but returned to their own homerooms.[18]

Below are listed some of the variations which occurred in ThinkAbout sessions due to this change:

Size: The class grew (all the "new" math students added to the "old" students). Perhaps as a result, in the first sessions in which ThinkAbout was viewed under the new plan, students' attention appeared to lessen.

Ability: The new group differed from the old in terms of math ability. Since two mid-level ability groups were in Marie's math class, there may have been a larger number of average-intelligence viewers than previously.

Motivation: The new viewers did not stay for the ThinkAbout discussion, so may have been less motivated to attend to the television and may have "gotten less out of it."

Disturbance: When they did not forget, Marie's homeroom students returned to watch television; they straggled in from

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[18] I believe such reorganizations in midyear are common in elementary schools, but cannot document this. At any rate, the sudden change set into relief some of the variations which can occur in ThinkAbout reality according to its place in the schedule.

several math classes, some arriving after the show was underway. (Sometimes one dragged a chair into place or talked to a neighbor as he/she settled down.) The minute the show was over, there was more commotion under the new plan; not only did the math students from other homerooms leave, but also Marie's students who stayed talked, got up, and left their desks. Whereas previously the teacher had turned off the tube and established order fairly quickly, she now called for order, told students where and how to sit, admonished individuals, and waited for relative calm before the discussion was underway. The time and activity during this interval indicated that most students had turned their attention to conversations (I never overheard one on ThinkAbout!) and projects (e.g., puppets, Easter eggs) lying around the room, which a few travelled from their seats to check.

A Comparison of Math and ThinkAbout

Before presenting the other change--the new student teacher--let me consider some meanings of this change, the new math arrangement. An intriguing aspect of this change was the new sequence: math immediately followed by ThinkAbout. Both subjects purportedly involve skills in logical thinking and problem solving. I sometimes came for the entire math period and either watched or helped individuals work problems. My data reveal students doing multiplication and division problems on paper without knowing the multiplication tables by heart and without understanding conceptually what they were doing as they divided, what a remainder means, or in what

situations they would use division. I present these negative findings in full realization of the limitations of my data. Nevertheless, such as my data are, these lacks are evident therein. Of course, I do not know what the high- and low-ability math students who returned to watch and discuss ThinkAbout were doing in their math classes.

Following math, I observed students with eyes glued to the tube for about 12 minutes (it took a few minutes for the glue to stick), with a few exceptions--a pair who eyed each other occasionally or passed notes, an individual who fiddled with an object for a while. In the follow-up discussion the program was usually reviewed (students answered "What happened?" questions from the teacher or student teacher), and either a hypothetical problem was presented for them to solve or they were asked to describe problems similar to the ones in the program. Almost every contribution from a child was approved with brief comment from the teacher before she called on the next child.

The juxtaposition of ThinkAbout and math revealed a contrast in kinds of problem solving. As I worked with boys and girls on math, I "heard" them thinking very hard for the brief moments they worked on number problems with me. My impression was that they were using their brains to recall correct procedures for doing problems, to figure out multiplication facts (not by memory, but by a complex combination of calculations with fingers, addition, and multiplication!) and to follow work rules (do assigned problems, show work,

check answers and show that work also, use correct numbering and spacing, copy problems down correctly, head paper correctly and turn it in).

Did ThinkAbout help students to increase these skills (mentioned as part of math problem solving), to apply them, or to see the value of using skills? Since this class did not talk about the clusters and relationships among programs or recite ThinkAbout "proverbs" (e.g., "What do I know? What do I need to know?") little memory work seemed to be involved in any problem solving ThinkAbout entailed. The mental effort which I believe was indicated from brief spurts during math problem solving was not evident during ThinkAbout questions and answers. The procedures for solving ThinkAbout problems involved knowledge of protocol, as do all class discussions--knowing unwritten rules about when to speak up and how much attention to pay.

The greatest contrasts between math and ThinkAbout are: 1) student activity and 2) application of problem-solving skills to realistic situations.

Student activity: In terms of the first contrast, students on the whole appeared to be more mentally active during math. Everyone had to work at least a few problems in the 1½-to-1-3/4-hour time period. In ThinkAbout sessions, everyone watched and probably understood something of the program's problem-solving messages. At least a few (usually the same few) actively discussed it, and perhaps most learned from the discussion. Nevertheless it was possible never to think

about any part of the show, a disengagement I believe is impossible during the moment one does a math problem.

Application of skills: In terms of the second contrast, the number problems were purely that--numbers. ThinkAbout, in trying to teach children how to use thinking skills, at least showed them that such skills are usable. Math work did not demonstrate the usability of math skills, at least in the period of observation. (The limited study does not allow a complete analysis of the math class, but the contrast helps to illuminate ThinkAbout.)

The Student Teacher

A second major change in Marie's fifth grade was the introduction in mid-February of a student teacher, who gradually took almost complete charge of the class before she left in late April. The student teacher, Pamela Schneider, chose to continue ThinkAbout use.

One of the few times I heard Pamela, a senior at a local Catholic university, enthused about anything was when she told me how she looked forward to her last day of student teaching, finishing college, and getting a job teaching next year. Her student-teaching trials were not her only ones, for she found it necessary to postpone spring marriage plans indefinitely (and the girls in the class enjoyed asking about this personal matter).

Due to her stiff posture, light voice, and serious expression, I thought Pamela simply disliked teaching until I realized how nervous she was and that her nerves might be

mitigating pleasure she would otherwise take in her profession. Accordingly, in my perception, the students thought she did not enjoy them and reacted by giving her so many problems that she never had a chance to overcome her nervousness before being overwhelmed by their unruliness. This perception, however, is highly interpretive and perhaps too simple, so let me present more objectively Pamela's characteristic ways of attempting to control the class and to deal with academic content, including ThinkAbout.

Control

During the transition period between Marie's total responsibility for the class and Pamela's assumption of much of that responsibility, the two women divided subjects to teach but shared the job of gaining class attention for all subjects. Pamela took responsibility for ThinkAbout. Gaining attention for this or anything else was difficult for her.

Before one program she said, "OK, this is a show about summarizing." Response was minimal.

Marie then thundered, "I'd like everybody to watch. There's time for art. Now it's . . ."

At the end of the show Pamela spoke very softly: "Those from other classes can leave, and those from this class can stay. We are going to talk about the show." Marie again added thunder by telling the class to behave because this was a serious session. This tandem procedure for gaining class cooperation was usual during the transition period.

In the incident above, a casual observer might think,

because the teachers had to convince the class to attend to the screen, that the students did not want to look at the program. To set this matter straight, I present another incident in which Pamela and her supervisor teacher were challenged by the class to convince them that they should not watch the show.

As the first few frames flashed on the screen and Pamela and her students were settling down, Marie, working at her desk, turned and asked, "Have you seen this one?" A few students admitted that they had. "OK," she ordered, "Let's turn it off then and finish your math."

Protests resounded (although during the first minutes of most programs some students worked on math): "I was absent." "I had to go to work in the office." "No, we have not seen it."

Although the show was Pamela's responsibility, Marie ended the protests. "Miss Schneider says that the majority of you have seen it. The purpose of the ThinkAbout programs is not to just sit and watch without thinking. So let's just turn it off."[19]

Thus we see that Pamela did not control the class easily. Her habit was to ask, plead, or even whine for desired behavior: "OK, will you guys...?" or "Come on, you guys...." A teacher who has supervised interns tells me that this is a common tone

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[19]Marie allowed the class to watch repeats (broadcasts off-schedule) twice but told me later that she did not think this had been worthwhile.

for beginners. With Pamela it reminded me of a teenage girl begging her little brothers not to pester her. The minute this class heard any request from her (or anyone else?) they tended to deny it. The point with regard to ThinkAbout is that with Pamela at the helm, negotiation of classroom order (before the program and before the discussion) became a large part of teacher input, and resistance became a large part of student involvement.

Content

Perhaps Pamela's dilemma of class control influenced her attitude toward the content of her lessons. Sitting at the back of her class, I did not note that she had any driving interest for any subject, including ThinkAbout. I wish to show her perfunctory style in diverse content to suggest how slight the chances were for any content of the television series to animate her.

Marie had instructed Pamela on how to have the class produce a "publication": they would go through the steps of writing, editing, proofreading, etc. without using actual printing equipment. Before one session of this endeavor, Marie explained to Pamela that each student was to take one of the entries (authored and edited by another student) and copy it neatly to serve as a "galley sheet." Pamela delivered an abbreviated explanation to the students. They seemed to have no idea what a galley sheet is; there were no models in the room. One boy strongly objected to copying someone else's piece. The class quietly performed the busywork of copying. All Pamela did was convince them to do it, without explanation

of the publishing process. She corrected papers. This was the calmest session I saw her lead.

In another session Pamela had the opportunity to show interest in several topics intrinsically more interesting than copying stories. Students read aloud and discussed the Weekly Reader.[20] After each article--about acupuncture, mass transit, dinosaurs, an Aztec temple, or boxing--Pamela asked one or two questions, listened to and commented on responses, and assigned a reader to a new story. The pattern was similar to television news programs: unrelated stories, one after the other, each pithy and important, with context and timing that do not permit pondering. Pamela did converse briefly about some of the stories, but then pressed onward to others, perhaps because she wanted many students to have a chance to read. Look at the transitions from discussions to stories:

Acupuncture

Student: On That's Incredible they had this guy put a clothespin on this guy's earlobe. He takes his drill and he doesn't feel any pain.

Teacher: That's kinda the same thing, isn't it? Let's read the story inside the first page.

Mass Transit

Teacher: It costs $.45 now for an adult. [Her information is incorrect; the cost is $.55]. How much does it cost for you guys to ride? $.30? . . . And now

[20]They did not read or mention the column "ThinkAbout" in the periodical. Marie told me that she did have the class read this when she was in charge.

it costs $.35? Is that how much it went up to? . . . Let's look on the next page. Mary, why don't you read? Pick out one you want to read.

Dinosaurs

Teacher: How do you think the asteroids hurt the dinosaurs?

Student: It made a curtain so the sun couldn't get through. They couldn't see.

Student: They starved to death.

Teacher: Donald, pick a story that you want to read on that whole page.

Aztec Temple

Student: Couldn't the Spaniards see that it was valuable or something? Instead of just shoving it away?

Teacher: Well, maybe then it wasn't as valuable as it is now. Okay, Curt, pick one and read it.

Boxing

Students: (an animated exchange about boxers being "dummies" who have the right to get hurt if they want to)

Teacher: Robbie, will you read the "Private Eye"?[21]

These transitions reveal not the total content of each topic but the abrupt endings to discussions in which some students were interested. In this episode, Pamela may have felt pressure to "cover" the whole magazine (thus realistically preparing children for magazine reading adult-style?) and to give many individuals a turn to read. This episode was not

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[21] See pp. 62-63 for the "Private Eye" discussion, which ended on a different note than the preceding ones because the students came to a solution, or "natural" conclusion, before going on to the next topic.

unusual, however, for students throughout the school day touched lightly on topics and then turned aside. Pamela added to the common curricular and time pressures her apparent lack of desire to "get to the bottom of" any intellectual dilema. A teacher who reveals no interest in asteroids, Aztecs, etc. (whether out of scheduling pressures or insecurity as a teacher--factors which may deter many teachers from intellectual thoroughness) will not be likely to delve deeply into any topic which ThinkAbout presents.

A ThinkAbout Discussion in the New Environment

Under the new math arrangement, the students from other classes left after ThinkAbout, and with Pamela presiding, the class discussed the program. A discussion which was longer and more complex than others Pamela led followed the program about the children who tried to get their money back for a walkie-talkie which did not transmit far enough for their purpose (Program 50). A nearly complete protocol follows:

Miss S.: Hey, you gu-u-uys, come o-onnn, we are going to waste all our time getting ready to talk about this when we should be talking about this.

(Commotion)

Hey, put the book away?

(Commotion)

We're not done yet. I am waiting for you guys to all get ready. We need to talk about the show a little bit, you guys, so as soon as we can get started we can talk about it and then we can have a break.

Student: I didn't get to see the whole thing.

Student: Neither did I.

Teacher: How did the characters in the program effectively communicate at the end of the episode?

Student: Talking real funny like.

Miss S.: Yeah, by using the kind of language he told them to use, huh? . . . How do you think it helped them to get their money back for the walkie-talkie by practicing on the phone with the lady from the agency? Kyle.

Student: . . . Like practicing, it helped them sort out the things that they were doing wrong.

Miss S.: They had other different ways in which the other person might react to what she was saying, huh? (Pause) How did [the walkie-talkie company] get by with saying that the walkie-talkies could cover "amazing distances"?

Student: (trying to get called on) I know! I know!

Miss S.: Was the meaning of "amazing distances" the same for both people? For the company and the people that bought the walkie-talkies? Rhonda.

Student: Well, see, no. The children thought "amazing distance" was 20 meters long, right? So they bought it, right? Then they started out 20 meters, right? So it was a rip-off, right?

Miss S.: Well it really did travel "amazing distances" according to your company. A lot of magazines use words like that, and they mean a different thing than what you think they mean. They write it so that it sounds like you're getting a really good deal, but to <u>you</u> it might not be such a deal.

Student: Like when we did that thing where we tried to bribe people, you know.

Student: He bribed his brother! He bribed his brother!

Miss S.: How do you think that knowing how to communicate, Rick (waits to gain his attention), how do you think that knowing how to communicate effectively

helps you in situations? Have you ever been in a situation where you got really mad and you blew up and it didn't do any good? But then you tried to say it more effectively and they really understood what you meant?

Students: No. No. No.

Miss S.: Anybody ever had a situation like that?

Student: Oh, I did!

Miss S.: With your sister, maybe? With your parents? You wanted to go to a party or do something and they say, "No, you can't go," and you say, "Oh, but, Mom, I want to go." But if you explain it to her maybe she would let you go, huh?

Student: It works if I explain to her because I go and Sarah goes and I want to go and I say, "Shut up," and I keep talking to my mom and I finally get the words to convince her.

Student: I talked to my mom to let me go baby-sit before . . . and she didn't know them . . . and she let me go . . . 'cause I yelled and cried.

Miss S.: Rick, did you have something to say, too?

Student: My brother did that once. What happened is, see, I'm always, you know, talking and singing and everything and my brother is always walking up, "Shut up" real loud. But then I keep doing it. One day he said, "You know, I have this headache, and it makes me feel better if you would calm it down. Maybe go in your room and holler if you are going to do that and leave me alone."

Miss S.: And that made you want to stop doing that, right? Did you stop doing that when he yelled at you, or when he asked you not to?

Student: When he asked me.

Miss S.: How do you think being organized in what you say helps you? Rick.

Student: Like if you are going for a job . . . one kid walks in, "I would like to a-a-apply, uh, go for the, uh, uh, I think I could--" Do you think that guy or the guy that comes in and says, "I saw your ad in the paper and I want to know if you got a job opening."

Miss S.: A lot of people judge by the way that they communicate what they can do.

Student: My mom organized stuff and she got a job . . . (tells about the job).

Miss S.: That's neat. [It doesn't sound as if she really thinks it's neat.] How about if you were going to call in a emergency situation, how would being organized help? Mary.

Student: The fireman told us . . . that this lady, her kid was drowning and she didn't [act hysterically] and she said, "My baby is drowning and [communicated important information]."

Miss S.: If I had an emergency at my house and I called, say I had a fire, and I called and said, "My house is on fire! My house is on fire! Come put it out," and hung up.

Students: (yelling)

Miss S.: What if I said, "I live at 4535 East 83rd. My house is on fire. Could you please come and help me?" Which call would do you think would help better?

Student: The second one.

Miss S.: Yeah, because I had a little bit of organization in what I said.

Student: The first one you didn't even give them your address.

Student: You know what they would have to do in the first one? They would have to trace the call. Then they would have to get the address, and by the time they got out there you would be dead.

Miss S.: Right.

Student: Tracing would not do any good.

Miss S.: It would not do any good unless you had been on the phone a while. There would not be much way for them to find out. Rick.

Student: When I was on that fire thing, we visited the fire station and calls came in and we listened to all these calls about fires, and finally

we heard this call about this lady who was Spanish or something and no one there knew how to speak Spanish but somebody knew how to speak numbers. I am pretty sure it was German. And she said this number and it was 17 and they went to all the 17's and they did everything and they saw smoke from where they lived, and it ended up that what had happened was that it was the name of her apartment number. The number on her apartment was 17. This guy was having a heart attack and they saved him. It was almost 15 minutes before they found the--

Student: (sarcastically) Po-or guy!

Miss S.: Does anyone else have anything they want to say? Janet.

Student: (to Mary, who told about the drowning baby) Did that kid drown?

Student: Yeah, but they saved him. The lady said, "Oh, my God, my kid's drowning."

Student: But how come she didn't pick him out?

Student: Yeah!

Student: She had already drowned. The baby, it was unconscious. It was already unconscious.

Student: You yell at me and I'm gonna hit--

Student: The ambulance did it.

Student: If it had already drowned, it would be dead.

Miss S.: Rhonda, you have something to say.

Student: Last summer I was out in my back yard, you know, and these people's house . . . right next door to ours got robbed . . . and the lady, she called the police and was panicking and everything, and since I saw it I got to go back and tell my dad, and the police didn't . . . know what had happened 'cause she was panicking and she wasn't saying anything right. And so I told my dad what had happened . . . my dad called the police. . . .

Miss S.: Okay, let's take a break.

(Commotion)

Wait! Wait, wait! Alright, enough! Mary has something to say before we go. Let's all listen to her, please.

Student: . . . We called the fire people and my mom didn't panic or anything and they knew where to come, and everybody thought our house was catching on fire, and our best friend came out of her house and was panicking.

Miss S.: Okay, would you do something in your seat? If you need to get a drink or go to the bathroom, do that. We don't have a lot of time.

Let me make a few observations about this rich discussion, which could be analyzed from many angles. One observation concerns classroom order. Although Pamela had to work to establish it (and the transcription does not reveal the volume of commotion during teacher directions or background noise during discussion), she did succeed in directing the overall exchange in which most of the students were engaged (some by listening only).

Now consider a few observations about the content of the conversation. Pamela's approach in this session, like Marie's, was to "bring the program back to their own experience."[22] By mentioning the importance of language in advertising ("amazing distances" in the walkie-talkie advertisement) she referred to their experience of advertising and probably expanded their understanding of how advertisements can mislead. In doing so, she also added the less obvious lesson about a public communication

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[22]Marie, as Pamela's supervisor, did not reach the same conclusion I did. She told me (without my asking) that Pamela "does not bring the show back to their own experience." I value Marie's opinion and think that she was responding to Pamela's lack of elaboration of students' experiences as well as to several sessions in which Pamela could not get the class to discuss very much of anything and abruptly ended the session.

style to the main lesson about interpersonal communication style.

A basic feature of this discussion is that the participants do not address the point of the program in a very "abstract" manner.[23] I am referring to the distinction between a more concrete use of communication styles (as in simulations of real situations) and more abstract analysis of components of styles and relationships between styles and situations. "Abstract" approaches are not necessarily better teaching, but information about their use or lack of their use is important for understanding teaching. In these observations ThinkAbout inspired recounting of concrete behavior rather than the principles behind that behavior.

In that light, let me make some observations about experiences which the children and teacher considered contexts for choices of communication styles. These exemplified the principles (never stated) that there are more and less effective ways to communicate and that more effective communication often is informative, well organized, and pleasant-sounding. There was not much analysis of the examples to determine which features of some circumstances make certain styles suitable. For instance, the class never examined the "fit" between the situation in the program (the desire to get money back from a company by talking over the phone) and the successful request (with formal speech, clear facts

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[23]The same is true of most discussions I heard in this and other rooms.

and grown-up tone).

I do not know whether analysis of language styles in a more abstract manner would enhance learning for most students. However, I do feel that at least the more intelligent students would benefit by doing more than mentioning new contexts for the point of the show. They might be good at discovering why it is true that some styles work in some settings and some don't, by examining the complexities of those settings. For instance, in the walkie-talkie program, they might try to correlate dress, aims, proxemics, and amount of money involved in each type of business (lunch delivery service, consumer-action agency, and walkie-talkie company) with appropriate styles of communication.[24]

Another noteworthy feature of the discussion is that the students bring up some of the more cogent observations. For example, when the teacher asks what the characters did that enabled them to get their money back, a student answers, "Talking real funny like," thus referring to the particular style of speech which was effective. The teacher responds, "By using the kind of language he told them to use," thus bringing out the principle that there are kinds of language and that the children chose the right one because they were told to, rather than showing what was right about it.

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[24] Too much for fifth graders? Whenever I am asked to lecture in elementary class on "What Is Anthropology?" I speak in the same terms and address the same topics I use in a college introductory course. Students' reactions? Close attention and exactly the same questions I hear from adults.

Another student particularizes the attributes of useful and nonuseful messages by giving examples--"saying 'Shut up' real loud" vs. "'You know, I have this headache.'" The same student later includes foreign languages as styles of communication. Whereas the students do not tend to generalize or raise principles of communication, they seem to have insights about their examples. I wonder again whether many would not benefit more from being urged to examine, rather than cite, relevant experiences.

In sum, my observations of the content of the discussion are that most of the class's responses describe situations in which communication was important. They use concrete examples to show styles and situations together. Many words establish that different styles exist. A few words describe these differences. Very few words address why or how certain styles fit certain situations.

The absence of introductions (due to errors in the broadcast schedule), concluding statements, and references to the cluster (this program being the first in a cluster) are characteristics of Pamela's approach.[25] Another lack, given the topic of the program, may be the opportunity to role-play or otherwise practice various communication styles. Pamela never in my presence had the students do anything after the show except refer to experiences in the manner shown here.

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[25]Pamela is in part a vehicle of the training and materials at her disposal. Different (or more) experience, in-service work with the show, and suggestions for its use might have changed her behavior.

A PANORAMA OF THINKABOUT IN MARIE WILSON'S CLASSROOM

The Broad Academic Landscape

In this section I halt the chronology in order to identify significant academic landmarks which illuminated the use of the series. Sequence and content of other subjects are part of the context lending meaning to ThinkAbout. Moreover, a glimpse of alternatives to ThinkAbout suggests its impact by showing what the teacher might have offered in the absence of the show.

Concerning sequencing, I noticed that activities before the program and after discussion of the program affected students' attention to it. For instance, in the early viewing period, Marie often read orally to the class before ThinkAbout, but she sometimes had them finish other work or work on special projects. A lone researcher could not measure correlations between pre- and post-viewing activities and quality of attention to the screen. I did notice, however, that calm oral reading sessions before the show were associated with more peaceful viewing. These occurred toward the end of the early viewing period, a time when Marie believed the class was very enthusiastic about the show.

In order to provide a view of lesson content, I list in Table 1 types of sessions I attended. Categories are the ones participants used; they are not broad (most consisting of no subcategories) because teachers and students tended to see each type as having distinctive features. Although the teacher may have conceptualized larger groupings, including language arts, the schedule was not organized around them as such.

Table 1

Types of Sessions Researcher Attended in Mrs. Wilson's Class[26]

Taught by the classroom teacher or student teacher:

Reading

Creative Writing

"Publishing"

Making Books

Weekly Reader

Oral Reading (by the teacher)

Free Reading (silent)

Spelling
- regular assignment
- spelling report (by individuals on the etymology of certain words)
- spell-down
- spelling game

Reports
- (by individuals who spontaneously volunteered to read or share something)

Affective Activity
- (led by classroom teacher or student teacher)

Guest Lecture

Math

Round-the-World Math Game
- (not during math period)

Science
- alternatives:
- lecture with ditto shee s
- film
- discussion
- research

ThinkAbout Television Show

Social Studies

Class Meeting

Quiz Game on Current Events

Art

Let's Draw Television Show

Film
- (for the sake of art or entertainment)

Projects
- making puppets
- Easter eggs
- Christmas wall hangings

(continued)

[26]The table does not include informal sessions (breaks, etc.) or the many sessions individuals continually depart for and arrive from which cannot be called classes (counseling, testing, cafeteria duty, etc.)

Table 1 (continued)

Sessions taught by teachers other than the classroom teacher and student teacher, attended by the whole class:

Library

Physical Education

Affective Activity (taught by the teacher-counselor)

Beehive (emphasizing personal relations)

Sessions, also taught by other teachers, which met outside the classroom or, in some cases, outside Conestoga School (only some individuals from the class attended each):

Title I Reading Program (for "slow" readers)

"Great Books" (discussion of literature)

Talented and Gifted Classes for the Artistically Gifted

Talented and Gifted Classes for the Academically Gifted (including one course on problem solving)

Talented and Gifted Classes for the Athletically Gifted

The table clarifies the position of ThinkAbout as one of many types of pursuits which offer students more than a dull routine of reading, writing, and hearing one teacher's voice. ThinkAbout is not the only session in which students supposedly are encouraged to think for themselves, be creative, make decisions, examine their world. Nor is it alone in the audio-visual realm.

The list is impressive for its variety of methods of education. (I do not believe this class had an unusually varied schedule for this region. As a visitor in the sessions, however, I was not often impressed with the extent to which participants explored each method for all its educational benefits or the richness of educational content. ThinkAbout fits in here as one more educational method; in the crowded schedule, as little time and energy were devoted to it as to any method. I wondered whether there were not great advantages to be found in learning how to discuss more thoroughly, analyze more critically, research more deeply, use films more effectively, write more clearly, etc. Did the class benefit from another "thing to do" (as the teacher called ThinkAbout) more than they would have benefitted from learning much more from any one thing that they did?

Views of Problem-Solving Sessions

Having glimpsed the order and diversity of subjects which are ThinkAbout's surroundings, let us look at the content of some sessions. I have selected five sessions which reveal that ThinkAbout was not the students' only opportunity to use conceptual skills in situations loosely defined as "problems." Did

ThinkAbout elaborate, intensify, or retard skills acquired in other sessions? Did ThinkAbout provide a better means of acquiring them?

"Private Eye"

I witnessed some of the "hardest" thinking I saw in the class during the discussion of the "Private Eye" puzzle in the Weekly Reader. This was the last in a series of articles which the students read and commented on briefly with the student teacher.

Miss S.: Okay, let's look at, um--

Student: How about the "Private Eye"?

Students: Yeah, "Private Eye"!

Miss S.: Read "Private Eye." (Pauses) You read the "Private Eye." (Receives no response) Robbie, will you read the "Private Eye"?

Student: No.

Miss S.: Tim, will you read the "Private Eye"?

Student: No.

Student: I will.

Miss S.: Okay, Kyle, no one else wants to read.

Student: (reads "Private Eye" [see Appendix A])

Miss S.: Okay, what is your idea?

Student: Because probably there was nobody else in the house. He said they wouldn't be insured. Ed said to the people they wouldn't be insured because they didn't know who stold them.

Miss S.: Okay, Kyle. Curt, first, what do you think happened?

Student: People sometimes they just steal things like, so they can get the insurance. They probably stole the statues...hid the statues, and then they'd get the insurance money.

Miss S.: How did the private eye know that they were [lying]?

Student: . . . That other guy [Appleby] was helping him [Ed] open the door, so he couldn't've stole it, so it had to be someone else because the servants had the day off.

Student: And the clue is in the first part where it says they were opening the door [refers to wind and creaking].

Without telling the students what the problem was or having them rehash the story, Miss Schneider started them on the search for a solution: "Okay, what is your idea?"

Two students quickly concluded that the owner and the insurance man probably hid the statues in order to collect the insurance payment. The teacher pressed for facts which indicated this. Soon someone mentioned the clue that entering the mansion required two people and made a lot of noise. The teacher latched on to this clue and reread the opening with its mood-setting, but at first glance irrelevant, details. Some students did not see how this proved the guilt of the owner and the insurance man and demanded thorough explanation. Pamela "explained" several times, saying things about the wind blowing the door open toward the inside of the mansion. Apparently she did not visualize the wind pushing against the door, which had to be pulled open from the outside or pushed out from the inside. Finally a student caught on and explained it to the teacher and several interested students.

The exchange was enlivening to me at the end of a dull Weekly Reader session. Students requested the subject, examined the text for facts, reasoned, and demanded logical conclusions.

"Great Books"

Marie taught a weekly "Great Books" course to the "gifted" students in her grade, including those from her own class. She learned the approach in a seminar offered by the publishers of the texts. The point was to have children discuss superior literature in a structured atmosphere with interested participants, directed by adults who avoid telling them what to think. Marie explained to me that she was not supposed to ask questions to which she already knew the answers or questions referring to "outside" material; she was not supposed to provide any answers herself, but to ask questions and repeat the responses she heard from students. We could call the sessions "intellectually nondirective therapy" for encouraging students to express themselves.

The students had to abide by relatively rigid rules or they could not be in the class. They had to read the assigned story and bring the book to class or they could not say anything in the discussion. If they did not read or bring the material three times, they could not come any more. If they did not want to belong to the group they could quit.

At the risk of biasing the reader, I must add that the long transcripts on "Great Books" sessions, which had to be shortened for this report, are fascinating because they show not only some eager and idealistic reasoning on the part of students but also the development of their thoughts as they stimulate each other. The full session (one hour and thousands of words long) included more problem-solving creativity than do the few passages I have chosen for reproduction here.

Mrs. W.: Okay, we read James Thurber's modern-day fable. My lead question is, how does Thurber compare to Aesop? Janet.

Student: . . . and they say more things about their character.

Mrs. W.: So they say more things.

Janet: Yes, like when it says the owl can see in the dark, and the animals were real shocked and everything because they didn't know that he could do that. So they called him God.

Mrs. W.: Amelia.

Student: . . . they thought he was a god. Then at the end of the story he got run over by a truck.

Mrs. W.: Do you think he was a god?

Student: No.

Mrs. W.: Do you think his characteristics were the same as a god's?

Student: No, not that much.

Mrs. W.: Why did they mistake him for a god?

Student: Because when the mouse [was seen in the dark by the owl] they thought that was wise.

. . .

Student: I think that they mistaken him for God because he could do things they can't do, like, oh, "the people have lived more years than us, so they know more than we do." Like they're just saying that he is God 'cause they think that everybody knows the same thing. . . .

Student: I like the one [Thurber's fable] where the guy saw the unicorn in the garden and his wife called the police [to tell them her husband was crazy] and the man came home and [the police and psychiatrist] said, "Did you see a unicorn in the garden?" and he said, "Of course not," and they took his wife away [to the booby hatch].

Student: No, he goes, "Of course not! A unicorn is a mystical beast." And he was going to treat her [his wife] just the way she had treated him.

Mrs. W.: Why do you say that?

Student: Because she wasn't believing him, so she called the cops and told the cops that he was crazy.

. . .

Student: . . . I thought he was going to say yes, but he didn't tell [the policeman] that there was a unicorn.

. . .

Mrs. W.: Donald, did the man in the unicorn story plan to see the unicorn in the garden, or did he see the unicorn?

Student: I thought he saw it.

. . .

Mrs. W.: . . . Did you feel that at the beginning of the story he really did see it; it wasn't just his imagination? At the end, though, when they were taking his wife away, then he got his senses back and just figured that he would let them take his wife away?

Student: I would too, if she was that mean.

. . .

Student: I thought he was crazy. I don't exactly believe in unicorns but when I read the story I started to believe in unicorns a little bit and I thought he was kinda crazy and then I started thinking I was crazy for believing in unicorns.

Student: . . . She didn't even have time to look at the thing. . . . It says back there, "She was very excited, and there was a glow in her eyes." She telephoned the police and the psychiatrist. She told them to hurry to her house and bring a straightjacket. . . . It says she got dressed as fast as she could and she telephoned right immediately. But they didn't say what she did between there. But you assume that she must have got ready and she didn't even look [to see] if there was any unicorn.

. . .

Student: I think maybe that he was maybe still kinda asleep, too sleepy to realize that he was day-dreaming. . . . After he took a nap, he got less tired and he kinda remembered, "Well, I really did see a unicorn. What are you talking about?" He remembered that he told his wife and she called the police and psychiatrist. He goes, "No, I didn't see a unicorn!" So he was kinda remembering back and thinking about getting back [at his wife].

Student: If you back up a little bit where . . . it said he left the house, it didn't say why he left the house--if he was going to work. . . . If it was his plan, then he would just leave the house for a little while and go somewhere to the store or something. Then he would give his wife enough time to phone the police and have them come over.

Two sets of problems are included in this discussion: 1) whether the owl was a god, why the animals thought he was a god, and what it is about gods and animals (including people) that leads them to identify some beings as gods; and 2) whether the man planned to see a unicorn and/or really saw one. The group's general approach to solving these problems was to form logical explanations by examining the data and relating them to each other in creative ways. More specific skills they practiced were to introduce significant questions, refer to each other's comments (thus contributing to progress toward collective solutions and some consensus), cite passages from the book, recall relevant personal experiences, and put themselves in characters' places.

Crossing the Bering Straits

Students took turns reading aloud from their social studies text. Ms. Schneider asked them questions about some of the passages. After one passage they tried to understand why ancient Asian-Americans crossed the Bering Straits as slowly as they did.

Student: (reads passage about the migration of animals and people across a "narrow ice-free strip"[27] to the Great Plains region of what is now the United States)

Miss S.: Okay, it is called Bering, on the Bering Sea, the Bering Straits. Somebody, Janet, find it on the globe.

(Commotion)

(The teacher settles an argument between two boys. Then a student accuses her of calling on him and then not paying attention. She apologizes.)

Student: They probably, when the Indians were following the animals, they probably thought it was good enough [land for the animals and other people].

Miss S.: Yeah, probably. (Unenthused) The animals came and they followed them because they figured maybe the animals knew that it was good land. There used to be a piece of land right here (indicates land bridge on map), and supposedly from here to here (indicates distance travelled) is about 60 miles. That's about [the same distance as] from here to Salem. And it took them thousands of years to walk that far. It was all ice and it was really cold.

Student: You mean to walk 60 miles it takes thousands of years?

Miss S.: When you think of it, it's not that far, is it? From here to Salem is not that far.

Student: They would have to be walking like this (walks two fingers over desk top) to get there in thousands of years.

Miss S.: They probably didn't walk solid, do you think? They probably stopped and walked and stopped and walked.

Student: And they probably had to bury the ones that died.

Student: No. They throwed them in the ocean! Was there a ocean?

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[27]Most archaeologists believe the strip was hundreds or even thousands of miles wide.

Student: There was no ocean.

Miss S.: (to student waving her hand) Okay, Rhonda, you'll get a turn. Don't worry.

The students, not the teacher, found the facts about migration problematic. Judging from their "solution" (about walking slowly and dying along the way) they lacked information (on foraging, technology, life-style, climate) and not imagination.

"Movie Flashes"

The assignment of this session was part of the reading work for several days. It was a problem in the sense that some of the challenges faced by characters in ThinkAbout programs were problems: a child had to fulfill a required task for school. This particular task required imagination and the ability to communicate one's visions in writing. The assignment stood on the board:

Movie Flashes

1) Choose a story from your reader.

2) Select real movie stars to play the roles of the story characters.

3) Choose and describe four main scenes--illustrate and write one sentence about it.

4) Choose a movie location for filming the story.

In this session I observed less and participated more than in the others. Seeing Rita raise her hand, I asked her if I could help. Unhesitating, she said, "Yes." I worked with her on "Movie Flashes" for the rest of the period.

Rita is a quiet girl of average intelligence. She had chosen a story about Androcles, who saved a lion by taking a thorn out of its foot. Together we divided the story into four movie scenes, but she independently described the setting of each and chose the actors (Kris

Kristofferson as Androcles and Lucille Ball as the Lion). Since Rita has no television at home (one of three students in the class who do not) she conferred with others about suitable actors.

This problem, like some which are the subjects of ThinkAbout discussions, was approached "in the concrete." Students practiced visualizing written language as moving pictures but did not "abstract" the principles involved.

"Little Red Riding Hood"

Immediately before the session which is the subject here, the students rampantly misbehaved while the student teacher's professor evaluated her performance. Many smeared paint over hands and desks, yelled across the room, ran to the bathrooms for towels and water, and ignored Pamela's instructions.

Following this fiasco (for Pamela), Marie vented her anger with the class in a long tirade directed at them. Chuck Winthrop, the teacher-counselor, arrived to lead the affective activity session and heard the tirade. He changed his topic to fit the situation as he perceived it. Oddly, he decided not to carry out his intended lesson about resolving conflict, although the students had already worked on this skill in previous sessions and had certainly caused and faced many conflicts by their misbehavior. Instead, he chose a story from a book he happened to have with him: apparently he thought it promoted a conceptual skill students could have used in the evaluator's presence--understanding another person's (poor Pamela's) point of view.

Mr. Winthrop read the story of "Little Red Riding Hood" from the wolf's point of view, making out the wolf to have good intentions which were misconstrued by the other characters. By looking at Chuck's

questions and remarks without the student responses, we see his way of requesting that many individuals express his moral and reinforcing them for expressing it.

Mr. W: Have you ever heard "Little Red Riding Hood" told that way before?

[Student responses are deleted.]

Well, now that you have heard it, how do you feel about it now? It might not be true. That's important . . . but there are two ways to everything.

. . .

So for years and years you've heard the wolf's point of view. Did you ever talk about it with other people and tell them, "Hey, the wolf has the story to tell, too"?

. . .

Now how did you feel about "Little Red Riding Hood" before you heard the wolf's point of view? Anybody, how did you feel? Do you think, when you heard the wolf's part--how did you feel then?

. . .

And not being fair to the third person in the story. Have you ever looked at some situations in your life, but then after you have heard another point of view you see it with her eyes? Has that ever happened to anybody? You just get one side of the story and all of a sudden, "Wait a minute! I guess I didn't get all the facts." Has that ever happened to anybody?

. . .

Mary, it really sounds like you are starting to get into the wolf's head and understand the wolf's feelings.

. . .

Boys and girls, I have an appointment . . . but let me leave you with this one thought. What we are seeing right now, 29 other people are not seeing. What I see I see out of my own eyes; I

> process it in my own brain. Brian is sitting in a different place, he has different eyes, he is processing things differently. There are 4½ billion people in the world, and 4½ billion minus one see things differently. The way that you see things is a good way because it is your way. The way that someone else sees things is a good way because it is their way. There is no wrong way to see things, but there are 4½ billion different ways the world is seen every day by people who live in it. Whether it is wolves and Red Riding Hood or workers and bosses, everybody sees things differently. If you would like to continue this discussion, check with your teacher, but I've got to go.

After each student response, Chuck asked the class how they felt. There was no progression in this problem solving, for each student simply heard the information and responded to it by changing his/her perspective in accordance with it. The problem at hand, the adults' shock at the class's misbehavior, did not come up again, and with all his repetition about others' viewpoints, Chuck never related the story to the classroom (perhaps because the parallel was not very exact--it is possible that the students did understand how important the evaluation was to the student teacher and misbehaved on account of it).

ThinkAbout with Marie Wilson

At the end of the early viewing period, Marie led a discussion of "How Do You Change Them?" (Program 37), about co-stars on a girls' basketball team who are rivals for team captain. The title refers to changing criteria for a suitable captain as the situation demands.

The discussion fell into three parts. In the first, Marie asked questions about the show, eliciting the answer that the girl chosen according to new criteria was the best captain. In taking notes I could not record all the teacher's many words, but I could easily write down most of the students' answers.

In the second part, Marie's questions departed from the television as she asked the class whether anyone had ever experienced a conflict similar to the one in the program. Several boys described their arguments and fights on a basketball team. The conclusion to the dilemma was that the problem could be solved, "because teamwork...leadership can help by leaders...'cuz they can lead your team." This verbatim quote does not shortchange the extent to which the class articulated the problem-solving approach presented in the program.

In the final part of the discussion, Marie set up a situation for students to role-play: "What would you do in that situation if your team was screwing off?" She told me later that she purposely chose a good leader to play captain: Laura. "On stage," Laura first told her teammates to stop arguing and "shape up." When that didn't work, she put antagonists on the same practice teams so that they had the same interests. Immediately after the play, Marie asserted that the captain "had the criterion of leadership." She asked, "Did Danielle listen to her?"

Class Members: No.

Marie: What did the captain end up doing? She put enemies on the same team in practice to promote cooperation. She is always right there with practicality. . . . Is it good, then, to change criteria every once in a while?

Class Members: Yes.

After three responses, each including the word "leadership," to several questions from the teacher, the ThinkAbout session ended.

In terms of content, leadership seemed to be the focus of discussion. Criteria reordering was the main problem-solving approach

in the show.[28]

In terms of Marie's approach, she had the students role-play an episode similar to the one depicted in the program. She also used role playing for affective activity, suggesting that she perceived this particular session to emphasize affective content. Aside from role playing, she verbalized the point she wanted to make in the form of a question and elicited a one-word response from the class agreeing with that point.

ThinkAbout with Pamela Schneider

In the beginning of her internship, Pamela led a discussion of "Get Ahead with Goals" (Program 43), about an aspiring bicycle racer who trains strenuously but decides to compete in a local race rather than a regional race. The program illustrates the use of realistic goals.

The student teacher's first question to the class was, "What was Leon's goal?" She called on one student and got no reply. "Does anyone know?" she pleaded. A student cooperated by telling her the goal.

Next Pamela queried, "What's the difference between long-range and short-range goals?" Again she got no answer from the individual called on, but this time she called on someone to help. The helper, Laura, gave a long example of each type of goal.

Miss Schneider quizzed the class on short-range goals:

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[28] See pp. 109ff. for a case of a teacher who focused on the interpersonal relations depicted in ThinkAbout rather than the conceptual skills for solving various kinds of problems, as Marie did in this episode.

Miss S.: Do you have a short-range goal?

Donald: Yes, learning to bike-ride. When I started out to ride my bike I'd ride just a little while.

Miss S.: What was your goal?

Donald: To ride 25 miles a day.

Miss S.: What kind of things do you have to do to get ready to ride your bike 25 miles a week [sic]?

Donald: . . . practice . . .

Miss S.: (calls on Laura to tell about her goal)

Laura: I try to clean my room every day.

Miss S.: What do you have to do to achieve your goal?

Laura: (explains how she tries to pick up clothes, making clean and dirty piles)

Miss S.: So you have to do a lot of little things to accomplish your goal.

Miss Schneider turned the topic to long-range goals.

Bobby: Winning. Being in the championship this year. . . .

Miss S.: What is an even longer-range goal? Something when you grow up?

Kate: (explains how she wants to be a veterinarian)

Miss S.: (tells how this goal requires a lot of schooling before it can be reached)

Danielle: (says she wants to be a model)

Miss S.: What do you have to do?

Danielle: Stay skinny and go to modeling school.

Then Pamela asked the class at large, "Do you think it is easy to achieve a goal?" Many say, "No." Pamela continued to query, "What would happen if all goals you set were too easy?" Donald immediately chimed up, "It wouldn t mean nothing." Pamela asked (not as though she really wanted to know the answer) what you could do in such a

situation. Donald told her that you could set another goal.

Everyone paused. Pamela looked very embarrassed. She had nothing more to say, and neither did the students. She turned to Marie, who abruptly took the pressure off the novice teacher by telling the class to take a break.

The interplay among motivation, endeavor, time, and talent which lead to useful goals is not the topic of Pamela's lesson, as it is of the ThinkAbout show. Rather, she seems to have suggested that goals are good and that there are two kinds--long-range and short-range.

A comparison of Marie's and Pamela's teaching styles, which the last two sections lead one to make, is complex because the two women's positions are not the same. Aside from their different statuses and roles, Marie actively decided to use ThinkAbout because she wanted something interesting that would be a change for the class, whereas Pamela used it primarily because Marie had already introduced it. Marie established the class's appropriate demeanor for the show. Pamela, who had a disastrous spring dealing with demeanor, often relied on Marie to assert authority.

Both teachers appear to be innovative by sidestepping the main problem-solving messages of the programs. Marie is more lively; if I included all my observations on teacher enthusiasm and class response, the reader would judge her the more engaging teacher. Innovativeness and enthusiasm, however, do not necessarily promote problem solving.

Comments on Problem-Solving Sessions

The preceding passages offer material for anyone with his/her own questions about thinking out in relation to other school subjects.

Therefore I make only a few points below, approaching answers to the questions: Did ThinkAbout elaborate, intensify or retard skills acquired in other sessions? and, Did ThinkAbout provide a better means of acquiring them?

A. ThinkAbout inspires participants to practice mental activities not inspired by the other sessions by citing personal experiences and role-playing social problem situations. The mental processes promoted in the seven problem-solving sessions are:

"Private Eye"--mental acuity: Students solve a mental puzzle (mystery) for which the "pieces" (clues) are given in writing. They select pertinent facts and piece them together logically. Individuals seem to build ideas on each other's observations and reasoning, thus coming to a collective solution. Some communicate this solution to others.

"Great Books"--interpretation of literature: Students communicate personal meanings. They also respond to the teacher's questions by reasoning with written facts and personal experience. They not only build on each other's ideas in order to come to a collective conclusion, but also initiate their own questions and challenge each others' answers.

The Bering Straits--understanding the text: Students question how the written facts can be true and apply reason to meagre material in the book and personal experience. In the process, some teach others additional facts and come to a "collective confusion."

"Movie Flashes"--transforming one art form into another: Each student individually interprets a story, visualizes it on screen, plans and communicates (in writing) an expression of that vision. Students choose significant elements (scenes, actions, characters, actors)

and arrange them. Although they confer with others for ideas, they make all "production decisions" themselves.

"Little Red Riding Hood"--expressing another person's point of view: Many individuals express agreement with the teacher that the written facts (read orally) reveal that there is a viewpoint other than the generally accepted one.

ThinkAbout with Marie Wilson--citing personal experience and role-playing a social problem: First students cite relevant life experiences. Then several act out a new solution to the problem seen on the screen. One actress devises a new social structure for the imaginary situation in order to elicit desired behavior (cooperation).

ThinkAbout with Pamela Schneider--citing personal experience: Students individually communicate associations between their own lives and the teacher's questions (which are related to, but not about, the situation seen on the screen).

We are dealing with only two ThinkAbout sessions in these passages, but in many others (some cited in this report, others not cited) the ability to tell about one's own experience of the skill depicted on a program is practiced. ThinkAbout sessions are the only ones in which students do this.

B. ThinkAbout programs present many skills which are used in other sessions. I observed the students using many conceptual skills which the show touted as useful: e.g., selecting pertinent information, evaluating validity of information, conferring with others, seeing another's viewpoint, and communicating clearly. Thus the show "plugs in" to other activities, although the teachers do not often make the connections explicit (perhaps because skills in ThinkAbout

are so much a part of everyday life in the classroom that they are easy to miss).

C. ThinkAbout participation is relatively passive. In each description of a session, "Student do X" means that some do it and others either observe or ignore them. In "Great Books" and "Movie Flashes" almost everyone participates a great deal,[29] but in the other sessions most do not. There seems to be a distinction between paying attention and actively participating: after ThinkAbout most students definitely "prick up their ears" at accounts of others' experiences, but they are not necessarily applying the ideas of the programs to their own lives.

D. ThinkAbout discussions are relatively individualistic. The other three sessions which are stricly discussion ("Private Eye," "Great Books," and the Bering Straits) entail collective solutions in that students use each other's ideas and information to reach understandings, although differences in opinion and ability to understand remain. Students listen to each other during ThinkAbout discussions, yet there is no evidence of progression of ideas from the beginning to the end of the sessions.

E. In students' terms, ThinkAbout discussions are not very hard. Students confronting "Private Eye," "Great Books," "Movie Flashes," and reading about the Bering Straits migration seem to reach beyond immediately obvious reality to "figure out" something. In the role playing led by Marie, the girl assigned to role-play team captain

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[29] This is partly because "Great Books" is a small class for good readers and "Movie Flashes" is an assignment for all.

had to do some quick thinking and effect a solution; perhaps empathetic onlookers did also. However, in the remainder of the ThinkAbout discussions presented in this section and the many others in which students are required to recall or invent circumstances for using skills shown in the program, they do not seem challenged. There is little evidence that they create new solutions or apply them in difficult ways.

F. Students don't initiate the questions in ThinkAbout sessions. In four of the five non-ThinkAbout sessions, students are dissatisfied --with an unsolved mystery, imcomplete literary interpretation, unexplained facts, or an unfinished movie script. They raise questions and seek answers. ThinkAbout discussions, unlike these others, do not inspire them to probe the topics independently or "figure out" anything.

G. ThinkAbout sessions are like other sessions in that words are the only "tools" for solving problems. In all problems selected for this report (or course, that selection may bias this point) words are the vehicles for arriving at answers and expressing them. ThinkAbout suggests additional means for dealing with diverse problems: quantification, library research, survey research, disciplined practice, tape recordings, and many more. Of course, these skills are not entirely absent in the class. However, they are absent in those episodes in which students obviously try to solve intellectual problems, suggesting that they are not ready to go in the class's "bag of tricks" for dealing with problems. The fact that I saw only a few of the ThinkAbout approaches in months of frequent visiting also supports his interpretation. ThinkAbout's suggested conceptual tools

could be applied to the problems discussed here or to additional problems introduced into the room in order to reap the show's benefits.

H. ThinkAbout stands alone in its strong value message: "Together" kids seek and solve challenging problems. Materials for each session provide the basis for solving something, but only the television show "says" that it is good to inquire into and resolve dilemmas. Whether this message actually encourages children to think conceptual skills are desirable is another question.

I. ThinkAbout is no more "teacher-proof" than other materials. All stories, articles, and ThinkAbout programs depend on the teacher to provide order, focus, and spirit. But several activities have inherent features which give the teacher's job some direction. "Private Eye" puzzles students with a specific question. "Great Books" is not only a set of good readings, but also a program for using them. "Movie Flashes" (which Marie adopted from a workbook) is a specific task with a series of steps and a final product.

ThinkAbout almost fits into this list of materials which narrow the probable range of responses, because the teacher's guide offers some direction (which Marie and Pamela often followed in directing discussion). But the show and guide leave both the problem to be addressed and the approach up to the users. Some ThinkAbout programs offer specific challenges or puzzles; many do not.

In offering a wide array of possible reactions, the show is like the social studies text on the Bering Straits. In that session the door was wide open for many kinds of research (in libraries and museums, talking to specialists, measuring walking paces, making

tools), but the response was a few comments on the text.[30] Similarly, ThinkAbout offers opportunity for many intellectual endeavors, but the easiest is to discuss. In use in the classroom, a flexible approach which offers little structure may be a disadvantage if one's purpose is to have the teacher sharpen specific mental skills through application.

J. ThinkAbout sessions, like other problem-solving sessions, emphasize the material presented to the students rather than encouraging them to "take off with it." ThinkAbout and the other sessions primarily encourage students to "digest," however quickly, material they have just "ingested." The teachers don't have pupils merely read, watch, or listen to anything; rather, they have them review, analyze, or evaluate it before going on to the next activity. If the purpose of ThinkAbout is to instigate an independent lesson in problem solving, the class cannot be said to fulfill that purpose. They respond to it as though the program itself were the lesson and they must talk for a few minutes in order to process it.

The teachers' choices not to do more than discuss ThinkAbout and the class's uncooperative behavior regarding special projects were partial determinants of this use of the show. However, I feel that another strong determinant is the show itself. In the context of a curriculum crowded with many educational methods and "packages" (science units, "Great Books" programs, problem-solving dittos, etc.)

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[30]There were probably many reasons for this response, including time, interest and materials. My point is not that the student teacher should have led intensive research on this particular paragraph from the text. Rather, I want to show how the text does not structure a particular response.

ThinkAbout is a glossy, pleasant, thought-provoking segment of the day. It is regarded as a high-quality product that stands by itself at least as well as, and perhaps better than, other curricular materials stand by themselves.

Meanings of ThinkAbout

So far in this section I have presented a researcher's perspective on ThinkAbout in its academic surroundings. Now I give the students and teacher a chance to present their views, though these views are filtered through my own lenses.

Meanings to Students

Of course, I could not "get into the heads" of the students to examine meanings, but I was able to interview eight students two times each. For both interviews, I "pulled out of class" the same eight individuals, one at a time. I chose them because they represented a wide range of schoolwork performance levels. My attitude was friendly and easygoing. I explained many of the questions without reading from my sheets.

In the first interview (Appendix B) I asked the students to "solve out loud" problems from pre- and post-tests used in the ThinkAbout research project. Without mentioning ThinkAbout, I asked them how they learned to solve such problems, what they thought about as they proceeded, what techniques they used for thinking, etc. My objective was to find evidence of ThinkAbout skills and awareness of ThinkAbout. In regard to the skills, I did not see any student obviously use skills taught in ThinkAbout; that does not mean none had acquired or sharpened those skills in ThinkAbout sessions.

In regard to awareness, I heard one student--Rick, an exceptionally

bright boy, interested in his surroundings--say that ThinkAbout helped him solve a problem concerning whales "'cause that's all they do is solve problems in that show." "The program about fish and salt" ("Nature's Patterns," Program 27) had helped him understand the problem, he said. The other seven students never mentioned the series when asked whether they had done anything in school this year which helped them solve the problem. A typical answer was, "When we did the Weekly Reader and discussed the whale and seal problem, I learned different points of view." Another student listed subjects which helped solve a problem concerning burnt cookies: "Cooking class, reading, math, art--that's all."

In the second interview (Appendix C) I administered a set of problems which I had devised to see if particular skills mentioned in ThinkAbout programs were on the tips of students' tongues. Each problem hinted that a ThinkAbout skill was involved by using a phrase directly from a program (e.g., "calm your jitters"). After presenting the problems, I asked students whether they had seen the corresponding programs. Most had seen most of the pertinent programs. I ignored responses on problems for which the individuals had not seen the corresponding programs.

In spite of reminders of ThinkAbout skills embedded in the questions, most students did not obviously use those skills in most of the answers. For instance, only Rick mentioned the suggestion to take a deep breath in order to "calm your jitters" (in the program by that name). No one remembered the word "symbol" (although all gave good examples of symbols, once given the word). Confronted with a problem which "you think at first" doesn't "have enough information,"

no one would have re-examined it to see if the information was actually there (as did the boy in "More than You Think," Program 57). Given the crude instrument--information interviews with one researcher--these instances do not prove that students learned few skills from the series. But the interview gave eight people six opportunities each (48 chances in all) to reveal this effect; no one clearly did so. A possible research outcome was that ThinkAbout skills were at the tips of their tongues or obviously at work in their heads; they were not.

Another part of the interview (Appendix C, I-IV) allowed me to hear about students' understandings of the show and its importance to them. Did students perceive the main points of particular programs? In one question, I asked each interviewee the main thing he/she had learned from "Making a Presentation" (Program 52). Most responded to the value content rather than the conceptual skill. One girl learned "not to make in front of [make fun of] other people that ain't just the same color you are." Another girl did refer to the skills of public speaking rather than the value: she learned "how to get organized and how to prove some stuff."

Were the programs of a cluster connected in the students' minds? As we talked about programs in "Communicating Effectively" (Cluster 12), the students revealed considerable insight into the relationships among the ideas in the programs. It was impossible to say whether these relationships had occurred to them before our conversations.

Did certain programs interest students enough that they told others about them? In a few cases an individual reported telling family members about one or two specific programs, perhaps indicating interest (or desire to please me). Most had not mentioned the two

shows to family or friends, even in school after the ThinkAbout session concluded.

Did certain programs generate questions in students' minds? "Styles in Communication" (Program 50) did not leave any students with any questions. However, three students seemed interested in planning presentations. They said that they had no new questions simply because they already knew how to do it or because the show covered it so thoroughly.

In response to questions about their opinions of the show and discussions, most interviewees said that they liked ThinkAbout. Some reasons were:

> Because it gets me out of school work!
>
> Because there's no work and it teaches me stuff I can use at home.
>
> I like how it puts the point across.
>
> I think it's interesting. It teaches stuff like you shouldn't panic or you should get rabies shots for your animals--about different people and their problems.

A few students said that some programs were boring.

Students were less enthusiastic about ThinkAbout discussions. One said, "Well, I don't particularly like them. I think they get a little boring sometimes because people keep going on and on after Mrs. Wilson or Miss Schneider asks the questions. And they get into fights and say, 'This happened.' And someone says, 'No, it didn't.'" Most were less negative. As one put it, "Nothing wrong with 'em. They're teaching us."

One question was an attempt to see how closely students related to characters by asking them whether they ever tried to be like any

of them. My hunch was that the personalities and values they embodied had at least as much impact on children as did the conceptual skills. The probe did not confirm my hunch, for seven students said that they only wanted to be "myself." One boy was inspired by the bike racer in "Get Ahead with Goals" (Program 43).

Finally, when asked if ThinkAbout had ever helped them solve real problems, most students gave an example in which they said they had used one of the programs we had just talked about. Others described hypothetical situations in which they said they would use ideas from programs. Previous interview responses to specific problems suggested that students might not resort to ThinkAbout skills when faced with real problems. This response, however, suggests that they understood and retained enough of the programs to apply some ideas from them (not necessarily the intended skills lessons) when asked to do so.

No case studier who follows the complexity of "total" classroom patterns will be surprised that ThinkAbout is not the beginning and end of the students' concerns. However, the extreme unimportance of ThinkAbout surprised me. Students at first asked me whenever I entered the room, "Are we seeing ThinkAbout today?" (They stopped asking because I joined so many sorts of sessions.) Thus I know they were aware of my emphasis. In addition, they largely enjoyed the interviews (seeming to feel privileged to be interviewed) and spoke freely to me. They had opportunities to bring up ThinkAbout and to talk about it after I brought it up. Further, Marie believed the class to include an unusual number of highly intelligent students, and I chose almost half of my interviewees from ones she considered bright, so their lack of ThinkAbout awareness was probably not due

to lack of understanding of the show's or my purpose.

The interview data strongly reinforced the idea that ThinkAbout is just another thing to do in school. (Is it perhaps less interesting to students than are other activities?) I do not know how salient skills teaching must be in order to be effective, but doubt that salience could detract from learning skills which are to be applied in everyday situations. The students might learn from the show on a relatively low level of consciousness, but surely conscious remembering and application of its lessons would enhance such learning.

In addition to the interviews, which were an attempt to uncover some meanings of the series in particular, Marie Wilson and I developed two assignments to explore some meanings of television in general. First we approached the topic indirectly by asking each individual to write a schedule or description of everything he/she had done on the previous day. We did not mention television viewing, but said we wanted to know about all trivial and important activities. Three had no television. Most had watched some television. Several had watched it before school, after school, and after supper until they went to bed, apparently rather late.

Weeks later we asked students to write about what they learn from watching television. Answers were so diverse they cannot be capsulized. Boys were apt to mention learning about sports, other people's lives, and how to be funny. One girl wrote, "I can learn all the new hair-do's and all the coming up fashions in pants and dresses. And sometimes about God." Another girl's insights were:

> I learn that other people in this crazy world have the same problems as I do and I learn how to cope with them by seeing how they handle them on T.V.

> I learn how to act mature wich sometimes I don't act the [way] I should but I am getting there. Since I've started to watch T.V. more I am now chooseing better friends. When I watch that boob-tube sitting in the liveingroom the more I want to be the person watched on the set. . . . After-school specials are what realy enspire me to be a better person and they are what really help me in all the dissitions I have to make.

Evidently students are open to learning many crucial values and specific courses of action from television at home. This may make them equally receptive to instructional television.

Meanings to the Teacher

"Yes!" said Marie Wilson, when I asked her if she will use ThinkAbout again next year. She voiced no complaints about the series or any programs (but many about the disrupted schedule). In this section I present her views of its actual use this year and its potential.

Purpose. Marie's foremost avowed purpose in using the show was to develop her students' minds. "It gives them a lot of thinking skills in things that come up in everyday matters at school and home. Even if they don't remember the skills, I can use it as a tool and . . . refer back to it. It shows things that would happen to them normally."

Her second avowed purpose is to increase her teaching repertoire. "It's also nice not to have to stand up and talk about it. The shows have order so I don't have to outline [all the skills] from all the books myself. It's already set up to add to if you want to."

Specific mental abilities which the show cultivates did not often come up in Marie's comments to me. (Perhaps she thought they were obvious to anyone with a copy of the guide.) She did say that she

used the show "to teach the child that there is another way to present an idea or control feelings." Thus she apparently does not concern herself a great deal with the specific skills and when she does refer to them, she includes the importance of lessons about feelings as well as lessons about ideas.

These purposes of the show were fulfilled, according to Marie, except during the student teacher's leadership. Pamela, she said, "plans and does no activities. . . . It is just another lesson she has to do. . . . Discussion isn't always the best thing to do . . . not enough involvement." (Although Marie led no special projects which took many sessions and unusual equipment, she wrote lists on the board and assigned students to write, draw, role-play, and work in groups in response to programs.) In this conversation, her criteria for having fulfilled the purpose of the show were that they had "referred to it and done activities."

On what the children learned from the series, Marie said, "Basically they learned that there are different ways to handle situations. Whether they do it or not is another question. I keep finding out that kids have great ideas, but when it comes to applying those ideas, like just right now, without thinking, they don't. . . . It's more of a discussion-type thing than a doing-type thing. In order to make ThinkAbout work you've got to go back over those things."

Marie (like most of the teachers I talked to) did not find any disadvantages in teaching modes of thought with film media. She said that "students remember things they see on film better than things they read . . . because they have an impression. . . . They need material they can grasp, not just an idea." (Several students told me that of

course they learned more from watching than from reading, as though the question were "dumb.") She has used film to teach drawing and math, and especially likes it for science. Which visual medium she uses is not important to her, however. Television is slightly easier than videotape "because there is no hassle turning anything back [to the district office]." She orders and uses films freely.

From Marie's considerations of purpose I get a picture of a professional without a great deal of time to spend in special preparation, who nevertheless recognizes the need for quality curricular materials in lively forms. Being open to innovation and having participated in the education trend toward "problem solving" by taking a course, she felt ThinkAbout suited her purpose. I also believe, and hope some of the basis of this belief is documented in this report, that Marie found the program rich enough and is responsive enough to use it to greater benefit next year than during this tumultuous year.

ThinkAbout Projects and Assignments

After their first ThinkAbout viewing, the class wanted to bury a time capsule and received permission from the principal to bury it in the school yard. They never carried out the project. I asked Mrs. Wilson what happened. "That was first quarter when they were bears. When it came time to do it, [the project] caused so much commotion that they couldn't handle the responsibility. On purpose I dropped it. But they had made a list of things and got permission, so they still got the idea." These reasons were similar to reasons she gave for aborting several other plans involving considerable time and equipment.

One aborted plan was to carry out a plan. Following Program 33 on the campers who followed a schedule to construct a papier-mâché monster, Marie added a schedule to a non-ThinkAbout project already underway. Students, however, failed to bring materials. The teacher kept their schedule on the wall for weeks before taking it down. Several non-ThinkAbout projects sank in like fashion. In this case a ThinkAbout-inspired schedule could not keep a project afloat.

Certain intentions or suggestions arising from ThinkAbout, less grandiose than "projects," also failed. One was the teacher's suggestion after the program on classifying (Program 20) that students subject their notebooks to some categorizing and "cleaning up." No one took her up on this idea.

Another activity, planned and never executed, was a performance of a story in sign language by two girls. Mrs. Wilson accepted the challenge of the program on sign language (Program 38) by creating three groups to make up signs for words and story. Noting that most students were inhibited, the teacher tried to encourage them. Then she was called from the room. While she was gone, most students became very involved in creating signs. Upon her return she retracted the second part of the challenge (signing a story) because she had detected too much inhibition. Luckier than she in being able to remain in the room, I felt that many were ready to take on the challenge. Mrs. Wilson did say that anyone who wanted to do it could practice a signed story during free time. Two of the quietest girls in the class volunteered. Asked later about the outcome of the episode, Marie said that they had created a signed story and the class had seen them practicing it, but due to special classes which

took both girls away for long periods, they never formally performed it.

Other suggestions for using ThinkAbout arose and were not carried out. The series obviously inspired such ideas but may not have been necessary, since a textbook, the Weekly Reader, another teacher, the student teacher, and Marie herself also offered project ideas. The series did not, however, inspire any ideas which actually led to initiation beyond the planning stage, let alone completion, of any project. Since the teacher's response to the unruly class was to avoid elaborate projects, perhaps only a very strong suggestion and guide through a particular project could have overcome her reticence and their rambunctiousness. The class did, however, successfully undertake a few non-ThinkAbout projects, proving that they could do projects. Therefore, ThinkAbout may not have inspired enough interest in any topic to lead to a project. For example, they spent weeks on each of two artistic projects: wall hangings for Christmas gifts, and puppets which claimed long sessions of attention to detail.

Several ThinkAbout follow-up sessions, while not spawning projects, integrated assignments into the usual discussions. (I have included accounts of such assignments with accounts of discussions.) Therefore, it should be noted that Marie did have students actively deal with programs for which she gave these assignments. Examples are the lists of sources for criteria (see p. 34), drawings of class symbols (following Program 39 on symbols), and individual plans for Valentine's Day parties. The last example reveals the lack of care students often put into assignments. Marie and I had created the assignment together about a week after the show about making a

schedule (Program 33), to see how much they had retained. The students had practiced the skill after the program by making a schedule for another non-ThinkAbout project. Most party plans, in spite of the program and practice, were one short paragraph describing the resulting party without details of planning time, equipment, financing, or permission.

The Teacher's Guide

Marie Wilson used the guide to learn the schedule, content and discussion ideas for the individual programs. After experience taught her that reading it before the program was apt to cause her to introduce a program other than the one broadcast, she often read it during the program. Once, the format of the guide, rather than broadcast irregularity, caused her to fail to introduce a Tip program. During some discussions, Marie glanced at the guide once or twice. Her orientations toward many programs seem to have come from the guide.

Marie did not frequently use the guide to develop students' conception of the show as a series of related skills. Although she referred to clusters in the beginning, she soon dropped this topic. When she did point out cluster relationships she did not emphasize the relationships among mental skills as much as the temporal sequence of programs. (Irregular broadcasts were a factor here.)

Pamela Schneider, the student teacher, used the guide as Marie did. She seemed to rely on it to tell her schedule, content, and discussion ideas. Pamela, who often had ideas for special projects for the class to do, apparently did not get any of these ideas from the guide.

The students did not use the guide.[31] Therefore, they never saw the programs named, explained, clustered, or sequenced in print. Accordingly, they never participated in choosing or scheduling follow-up activities. (Had they had their own guides, or had the guide not been named "Teacher's Guide" (underline added), this might have been different.

[31] In another class for exceptionally bright students (see pp. 112ff.), the teacher made the guide available to all.

AFTERMATH OF THE STUDENT TEACHER (LATE APRIL TO JUNE)

General Classroom Conditions

Pamela completed her internship at the end of April. To honor her and celebrate spring, the class made an excursion to a rural pioneer museum. The year's only field trip, this caused considerable excitement.

The atmosphere remained lively through the last weeks of school. A visit to the middle school which the majority of students will attend next year reminded them of their upcoming change in status. A film shown only to girls on another change--the onset of menstruation--sparked conversation and jokes among both sexes for days.

A set of events outside the classroom caused some students' upset. One of the girls was sexually molested by a stranger who broke into her home. When another girl was chased by a man, the teacher decided the area in which some students live and many girls' precocious development called for a talk to the girls on appropriate behavior toward strangers.[32]

Class members contributed to the exciting events. Money was stolen from Marie's purse two times; although some evidence pointed to a certain girl as the thief, Marie made no accusation because proof was insufficient. Two girls who frequently argued got into a physical fight. In short, puberty and the end of elementary

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[32]The point here is not to characterize the region, school, class, or "growing up" by such unpleasant occurrences! Rather, I wish to record the flow of actual events in this particular class in order to highlight the complex context of the series under study. Doubtless these events are unique to this case, but in every case distractions occur which lend to or detract from the significance of ThinkAbout.

school intensified events and meanings.

Marie believed that her fall efforts to control the class had little effect in the spring after months of poor discipline by Pamela. Her energies were sapped by the year she considered to be the hardest of her teaching life.

Conditions Closely Affecting ThinkAbout

Some conditions of television viewing which had been present in the early viewing period under Marie had become exaggerated under Pamela's leadership:

A. Seating during the program had always been negotiable (to allow for heights and eyesight differences), but most children stayed in their own desks. By the end of Pamela's stay, however, many students changed seats, stood, or sat on desks and tables. This increased movement continued after Marie took over again.

B. "Order" had to be restored between the program and the discussion. Due to the math arrangement instituted during Pamela's time, members of the class returned late to watch ThinkAbout, and students from other homeroom classes left after ThinkAbout. This math arrangement continued after Marie replaced Pamela, and Marie had to work, as Pamela had done, to quiet students so that she could lead the discussion.

C. Interruptions by adults--usually teachers--increased. When Pamela taught, adults consulted Marie and avoided disturbing the class. After Pamela left, as Marie directed the class, someone often would come to the door and whisper to the teacher, or even take her from the room.

The Final ThinkAbout Session

Although conditions occurring during Pamela's teaching did not all revert to pre-Pamela states after she left, the vigor of ThinkAbout discussions did return. But only two programs remained: the class watched the first and skipped the second. My field notes on the final session show: 1) characteristics of Marie's approach, 2) the conclusion of six months' dedication to ThinkAbout, and 3) how more programs might have been treated if the series were longer.

> Monday, April 28. Marie Wilson's fifth grade on the first day after the student teacher left. (Program 59: "Hanging in There.") Helen (a student) and I fetched the TV from the teachers' lounge. Marie announced that this was a continuation of Wednesday's program. Students perked up: "Oh, good!" One asked what that program had been, but the only answer, shouted by someone, was "About a plane crash." As usual, the lights stayed on and the window shades stayed up. Several students did math for the first four minutes, then watched. The drama was about girls seeking rescue: one transmits radio signals and two mistakenly walk to an abandoned town for help.

After the program, Marie did most of the talking. Her "text" was that we should not hesitate to try to solve problems even if mistakes result, because we can learn from our mistakes. She covered three illustrations from the program, two from her own life, and had two students offer illustrations from their lives. A detailed account from field notes follows:

> Marie started to regain order after the program, before it was completely lost. "Rich, you didn't come for ThinkAbout! It's your job to remember!" She reprimanded Mary for coloring the furniture, "Does your mother let you draw on her tables?" Then, "I cannot continue until everyone is quiet and settled!"
>
> Marie opened by asking about the comment by the rescue worker that at least they knew where the crash victims weren't. She made the point, with the students' responses, that this was useful information.

Next she asked, "How common is a plane wreck?" Only one student thought that this would ever happen to him. She said, "Okay, but let's take what happened [in the program] and put it into a regular problem. I'm going to start." A teacher interrupted, whispering in her ear in front of the class.

Marie said that when she was a beginning teacher she had difficulty explaining division to third graders. After failing, she learned her mistakes--introducing two-digit division before they had mastered one-digit division, and introducing division before they had acquired multiplication skills.

Then she used another problem as an example of learning from one's mistakes. In playing racquetball, she said, she learns from her bad moves what not to do.

Next she referred to the mistake the girls "in the movie" had made: hiking to a town on the map which turned out to be a ghost town. She asked the class what was good about this mistake. Calling on individuals, she elicited the following answers: Now they knew it was a ghost town. They could sleep there. It was near a freeway. Now they knew where they were. The last answer was the one Marie was looking for, and she elaborated it. Another teacher walked into the room, talking loudly, then left.

"How about you?" Marie challenged the class. "Have you had a problem someplace where you did something really weird to solve it and learn from your mistake because then you knew what not to do again?" She called on a habitual volunteer, Janet, without waiting for her to raise her hand.

Janet's anecdote was that her dog "had to (pause) go to the bathroom," and she took it into the back yard. When she brought it back into the house, it "went" there. She learned to take it into the front yard.

Another habitual volunteer, Laura, talked about talking the wrong San Francisco BART car, getting off at a strange station, and starting to cry. The teacher supplied the "moral": "So you knew not to go that way again."

Marie gave one more illustration from the show: the danger signal transmitted as OSO instead of SOS. "That was stupid, huh? Would it have been better not to have done it?" Members of the class agreed that the signal, although incorrect, had helped solve the problem. Marie said that the girls could have "just sat there and done nothing": she implied that this would have been foolish.[33]

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[33] Another class discussing the program found waiting to be a wiser alternative than the hike the two girls took.

Next Marie directed attention to an assignment she had printed on a side blackboard during the program:

1) Choose a problem.
2) Brainstorm ideas for solutions.
3) Choose a solution.
4) How to go about reaching a solution.
5) Possible setbacks.
6) How to use all possibilities.

She explained each step. I have abbreviated her remarks below:

1) "Make up any problem you have--maybe right now a problem you have to find a solution to. They are all to be written. I am only explaining this one time."

2) "Brainstorm as many ideas as possible. Scatter them all over the paper--any ideas that pop into your head, no matter how ridiculous."

3) "Get rid of ideas you don't think are any good."

4) To explain how to reach a solution, she referred to the way the girls in the program reached their solution.

5) To explain possible setbacks, she referred to the ghost-town setback the girls in the program had weathered.

6) "Tell how this solution is going to help you."

Marie began to think out loud. "I could make some dittos. Would you like me to?" Many said yes. "I could make some from a set I got in a class I took." She said that she would pass them out tomorrow, delaying the starting time of the assignment. She warned that they might have to spend time on this task at home ("but that doesn't matter since you don't have much homework") and that they could work on it during reading period (when their reading work is done) and during free time. She said that it was due on Thursday and the grade was to be recorded. A couple of students groaned.

Marie abruptly turned to a new order of business, saying, "Take out a black marking pen. We have to go to health and we've got to go immediately."

Problem Solving after the Series Ends

Marie did not notice that the series was scheduled to end when it did. After a week's absence from the class, I asked her about the end. "The kids are still real hyper," she said. "We turned it on one day and--'What is this?' The kids were ready for it to be over. They don't seem to miss it."

The class did not drop its study of problem solving with the end of the series. They no longer devoted 15 minutes of their math period, two days a week, to watching television, but Marie instituted a daily problem-solving session (as the morning social studies period). This involved the transformation of the assignment written on the board during the final viewing into the use of "Creative Problem Solving" dittos from the course she had taken. She divided the class into teams of three or four and gave each team two sheets of butcher paper. On each side they were to write one member's problem and then jot down the solutions they brainstormed.

During the second session of the brainstorming stage they tackled personal problems, including:

How to get Kyle to stop picking on Janet.
How to get my brother to stop picking on me.
How to train my dog to be a dog detective.
Laurie wants her own room.
How to get a skylight in my room.
How to become a better baseball player.

The teacher's problem, which she pondered as an example, was how to find enough time and energy to relax at home and do more of the things she enjoys doing there.

The session was scheduled for half an hour. Marie talked and organized for 10 minutes. Students spent several minutes

seeking their teammates and butcher paper, then sprawled on the floor. They brainstormed: probably 95 percent of their ideas were facetious, yet logical--on the order of "Kill Kyle," for the first problem above. Raucous behavior included Rhonda swiping Kyle's marker and Kyle marking her jeans ("$30 jeans!" she moaned). After Rhonda "tattled" on Kyle, Marie cancelled the session, saying that she had been proud of their previous brainstorming work but not today's. When they were in their seats she read a story aloud for five minutes until lunch. If some students spent time conceptualizing solutions, it could not have been more than five minutes.

OTHER CLASSES USING THINKABOUT

The choices Marie Wilson and her class made and the "feeling" of their circumstances are seen more clearly in light of other ThinkAbout circumstances. Here I describe four fifth grade classes at other schools and three classes which are probably atypical for ThinkAbout viewers--one of emotionally handicapped students, one of seventh graders, and one of gifted upper elementary students.

Mrs. Harper's Fifth Grade Class[34]

Mrs. Harper's principal[35] introduced her to ThinkAbout. The principal told me how she (the principal) was attracted by the bright color and pleasing layout of a promotional brochure she received in the spring (1979) and was immediately caught up in the concept of the program. "I am very interested in the concept of problem solving. I think this high-level thinking is very important. The show sounded like it is based on very thorough principles."

In the fall, after receiving another brochure, she contacted the district media specialist, who promised tapes, viewing equipment, and guide. Then she phoned the state coordinator of television services to ask for an administration kit, receiving the impression that he didn't know much about ThinkAbout because he had to "rummage around" to find a description of the kit.

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[34] I visited this class several times, including interviews with the teacher and principal and three viewing and discussion periods.

[35] Positions of district personnel other than the teacher are underlined below to emphasize the complexity of the associations involved in information dispersal.

Having made initial inquiries, the principal recommended the show to Mrs. Harper (the only fifth or sixth grade teacher in the school, since sixth graders go to middle schools), who was "very receptive." The principal believed that at this point she was the only person in the district genuinely interested in the show. The curriculum superintendent cooperated by having a curricular assistant show the promotional tape to the teacher. The media specialist showed it to the principal.

Mrs. Harper's class viewed the show mornings, sitting on the carpet in front of a color television in the library. (The media specialist provided tapes only when they could not watch at broadcast time.) Due to the schedule of other subjects they did not discuss the show until after lunch.

In this class, a highly disciplined atmosphere pervaded ThinkAbout use. The students readied lights, shades, and television on command and sat very quietly during the program and discussion. After the program, Mrs. Harper had them review the main points, reciting catch phrases like "Hey, Wait, Think, See, So?" and "What do I know? What do I need to know?" (A poster displaying these phrases remained on the board all year.)

Although more free-flowing discussions followed the initial program review, no question or topic from a student's lips ever guided this class. Miming was the highlight of the follow-up to "Making It Come Alive" (Program 54), about expressing oneself in presentations. One girl mimed eating a meal so that the class could interpret her feelings about the meal from the way she expressed herself.

When the state boards of education held a convention in the fall, they included a session demonstrating the use of ThinkAbout. Mrs. Harper's class, the only user-class known to the district media specialist, was invited to view and discuss a program with their teacher in front of about 40 adults. The adults first saw the promotional tape narrated by Steve Allen. Then the class filed in and all watched "What Should I Do?" (Program 18) about cafeteria research. Nervous Mrs. Harper asked the class uninspired questions (e.g., the proper sequence of information seeking: "What do I know? . . ."). The audience loved the show (by ThinkAbout and children). Several asked questions about the logistics of using it, and at least a few said that they wanted to introduce it in their districts.

Mr. Bosworth's Fifth Grade Class[36]

Mr. Bosworth and another fifth grade teacher showed ThinkAbout to their students all year. They tried showing it separately, one with the school's only color television and the other with the only black-and-white television. They combined the classes after students objected to black and white. Mr. Bosworth found the screen too small for the combined classes (60 students). After learning the cost of alternate media, he resigned himself to the small screen.

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[36] I visited Mr. Bosworth's class once. Before I arrived he had reservations about my visit. One was that he had a busy schedule for the end of the year and a hard time fitting in ThinkAbout. The other was that he was afraid that his district would spend thousands of dollars on ThinkAbout films, tapes and video equipment; he felt that teachers should use the television broadcasts.

The two classes separated after watching the program, and Mr. Bosworth led his class in a discussion which was the most thorough I observed all year in that students described and analyzed only events depicted on the screen. First the teacher encouraged them to verbalize the "moral" of "Hanging In There" (Program 59) and then elicited a description and analysis of each problem: freezing, food scarcity, and more. For some problems they evaluated the solution taken. Mr. Bosworth also referred to students' experiences: research reports and a school assembly.

I had the impression that ThinkAbout related to several activities in Mr. Bosworth's room, but of course was not able to observe whether he referred to the show during them. (I mention this in order to show how inspired use of the show may have escaped my observation in this case and may often escape researchers' one-shot attempts to see the "natural" setting.) Evidence of activities which could have been related to the series included: a census of students' families, a list of modern composers with checks indicating that someone listened to them, and the teacher's invitation to me to talk about anthropology. Thus the material to which conceptual skills may be applied already exists in the room.

Mrs. Spider's Fifth Grade Class[37]

Mrs. Spider and Mr. Flash, the subject of the next section, teach at the same school and heard about the show from the school

[37] I visited this class for one ThinkAbout session.

media specialist (in charge of library books and other media). The specialist ordered films and tapes from the State Department of Education for them. She told me that she did this in her own self-interest--to relieve her boredom with the superficial research she saw students doing year after year in the library (e.g., reporting on countries by reading the children's encyclopedia). Hoping to remedy this situation, she encouraged teachers to use ThinkAbout by obtaining the films and tapes for them.

This arrangement created a problem on the day of my visit. The librarian sent back the tape the class was scheduled to see, so they saw the next tape instead. Mrs. Spider had already read the guide entry for the first tape; she tried to snatch a few moments during a break to read the entry for the second one. Two students were also involved in the arrangements; they were responsible for fetching the tape from the library. Having divided the task according to whether the medium of the day was film or tape, although they had no way of predicting which it would be, one of them finally brought the tape to class late. The teacher was not disconcerted by schedule irregularities: "If you know anything about schools you will see this is part of the usual planning."

Half the class left for "strings." Mrs. Spider introduced the program to the class so thoroughly that I was bored, but she did not mention the cluster sequence or the sequencing problem with the tapes. In spite of the teacher's account of every scene except the final one, all students appeared to attend to the program. The teacher left for most of the period to check the temperature of the kiln.

After the program Mrs. Spider led a discussion similar to Mr. Bosworth's (previous section) in that students reviewed the events on the screen more than they "brought it back to their own experience." They described the ways of "Summarizing" (Program 41) just viewed. The teacher added that their textbooks had summaries and that in the newspaper project they were currently working on, the leads to articles were summaries.

Mr. Flash's Fifth Grade Class[38]

Mr. Flash received tapes or films from the media specialist as did Mrs. Spider of the preceding section. His class also watched ThinkAbout a few times on a television which is permanently in the room. Members of the class seemed to take responsibility for the mechanics of viewing by setting up the film, turning out lights, and pulling shades without being reminded.

The students experienced an example of the skill from the upcoming program as Mr. Flash quieted them down to watch it. He stood stock-still in the front of the room, then asked them why they had responded by becoming quiet. They said, "Because you always stand there like that when you want us to be quiet." He remarked that his stance served as a kind of communication without language.

Then "Design a Language" (Program 38), about sign language for the deaf, elaborated the teacher's point. His first instruction afterwards put the burden on them to select significant ideas:

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[38] I visited this class twice. The first time, the projector broke and we didn't see the show; the second time, I stayed for viewing and discussion.

"Name things you learned in the show about the world of the deaf." Other questions analyzed the activity of signing: "Can you express emotions with signs?" "Are there basic rules in sign language like the ones we learned this morning--like the possessive in English?" "What other ways did the deaf man communicate [aside from using his hands]?" "Notice that you give meaning to words with your body." The discussion combined student-determined topics and articulation of the elements of signing activity.

Students who were not called on to mimic the mime in the program were sorely disappointed. Mr. Flash took advantage of their eagerness to participate by copying the exercise on the film. Three children made up signs for the same word; they were not allowed to see each other's signs until they had shown their own. The class saw that they independently signed similarly for "school." A final exercise "brought down the house." The class pantomimed "Do you like pizza?" for a girl who struggled to interpret about twenty versions of circles drawn in the air with crisscrosses running through them.

Students participated physically and mentally in the lesson and seemed to enjoy it. As short as most discussions I observed (less than half an hour), it took no equipment and probably involved minimum preparation time.

Mrs. Baggs' Emotionally Handicapped Class[39]

A class of emotionally handicapped students between the ages

[39] I visited this class once in the fall and talked to the teacher in the spring.

of 10 and 14 used ThinkAbout during the fall. In transition from "total institutions" to the public schools, they constituted a class of fluctuating size (four when I observed) who stayed together most of the school day. At ThinkAbout time a teacher aide escorted two boys to a supply room where the television was kept (but could be moved to the classrooms). As they watched television, the aide asked the boys questions about what was happening in the program, including questions calling forth past experience. For instance, during "Where Are You Coming from?" (Program 14) about boys in a private school, she asked where the boys were sleeping. (Correct answer: dormitory.) After the program the three went back to the classroom.

In the course of the year three factors influenced Mrs. Baggs to stop using the show. She had learned about the show from a brochure received in the mail and decided to have some of her students and an aide use it regularly. Later she saw it herself for the first time. From viewing "The Bigger Picture" (Program 13), about a boy who runs away from home and learns the importance of context in understanding a situation, she concluded that the series dealt more with affective coping skills than with the academic skills it was advertised to teach. Perhaps, as a teacher of emotionally handicapped students, she was reluctant to broach material which is more "emotional" than "cognitive." At any rate, the depiction of interpersonal relations in this program was a negative factor for her.

The second factor was that the principal decided that children should no longer watch television in the supply room where it was

kept. Therefore, Mrs. Baggs had her students watch it in her classroom. Since only some of her students were ThinkAbout watchers, she found this new arrangement inconvenient.

The third factor influencing the decision to discontinue use was that "there is no place to plug the show in." Asked whether there were generally too many things to do, or whether one particular activity took precedence over ThinkAbout, she said that neither was the case. Rather, the broadcast schedule (Mondays and Wednesdays at 1:30 and Tuesdays and Thursdays at 10:15) was the problem.

Mr. Merced's Seventh Grade Class[40]

The district media specialist told me that Mr. Merced had requested a guide for ThinkAbout. When I contacted him in the fall he said that he would show it just so that I could visit. Thus I created the circumstances to study. Nevertheless, they turned out to be informative.

The fall ThinkAbout session was a test of the series' ability to hold attention, for it was preceded by a black-and-white "educational" film about volcanoes. Students' apparent inattention to the more traditional fare contrasted sharply to their attention to ThinkAbout. But most did not appear to want to discuss either show. After the discussion on volcanoes lagged, the teacher threatened, "I know a teacher who's going to erupt if he doesn't get some answers." After the discussion on ThinkAbout lagged, he promised, "This [discussion] is going to end if I can have just

[40] I visited this class once in the fall and interviewed the teacher in the spring.

have two more uses of research" (as in Program 18, "What Should I Do?" about researching students' tastes).

In April Mr. Merced told me that his class had viewed one additional program (but he could not remember what it was about). His first reason for not continuing the series was that "the time slot was wrong and there were other things to do." He elaborated his second reason: his class had too many overpowering emotional and social concerns. According to him, his seventh graders in an "inner-city" school, with low average income and diverse ethnicity, did not need a rigid schedule (as ThinkAbout on television entailed). He wanted to be free to deal with "whatever comes up." An example of a matter which came up and claimed immediate attention: three students in the class had drunk alcohol and initiated sexual relations one evening; the next morning the class talked about the problems involved. In contrast to the "academic" problems with priority in Mrs. Paggs' rooms, these are the sorts of problems with priority in Mr. Merced's room.

Mrs. Levin's Fourth, Fifth and Sixth Grade Gifted Class

This class, a pilot project in its first full year, emphasized "creative problem solving" throughout its curriculum. It was composed of upper elementary children from five schools who scored in the top 3% to 5% of the nation on standardized tests. They came to the class once a week for a full school day.

The director of the program explained to me that it was intended to teach "intellectual creativity" and encourage motivations and attitudes considered to be suitable for intelligent children. Three displays on the board reveal the kinds of intellectual

endeavors the class undertakes (see Figure 1).

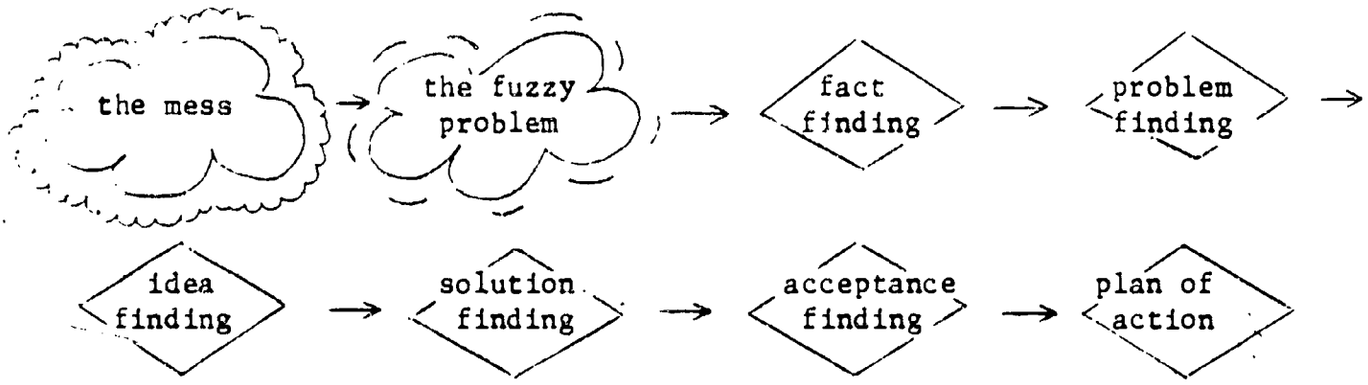
A question-answering session was the day's beginning routine. Students put questions into a box any time during the day; these were pulled out and discussed mornings. The question I pulled out was "What would you do if you had 15 minutes?"

Mrs. Levin gathered the students around the television for ThinkAbout. They sat on tall stools; there were no desks in the room. Some students had seen the previous programs on "Solving Problems" (Cluster 13 about a plane crash) in their regular classrooms. They explained the plot to the others. The teacher helped them stay on the correct show because some had also seen the show about to be viewed and started to gi.e away the ending. She also injected problem-solving practice into the review by asking students to list risks that the girls in the plane crash had taken.

In my ThinkAbout experience the teacher's next move was unprecedented. She told the students that she was going to read the main points of the show to them from the guide. She explained that the show taught risk taking as a problem-solving skill and that it included the mathematical concept that one can measure without a standardized measuring tool. Later she referred them to the guide by telling those who could not view the final program to read about it in her guide.

The students related the plane crash to their own lives when she asked them to name life-and-death situations they had been in. She seemed to make them eager to face critical problems in their futures so that they could cleverly solve them.

The post-program discussion was unusual because the class had



Display A

Display B

It's OK to state your feelings.
It's OK to be original and different.
It's OK to take your own time.
It's OK to make mistakes.
It's OK to try and try again.
It's special to be you.
It's OK to try something new.
It's OK to learn in the style that's best for you.
It's OK to risk looking foolish.
It's OK to make a mess when you are willing to clean it up.
. . . .

Display C

Figure 1. Diagrams of intellectual processes in gifted class.

been working on "solving problems" independently of the series and had a chart next to the television schematizing mental processes (see Figure 2). The teacher had them schematize the plane crash in the same way (see Figure 3). On the chart a tree trunk represented the main problem; branches represented the alternative solutions; subsidiary branches represented consequences of the solutions (with positive consequences on the top and negative consequences on the bottom); and leaves represented the possible reactions to the consequences.

The teacher's style was serious, clear, and quick. Some might have found her cold and clipped; I found her refreshing. She strongly directed conversation by classifying responses, ignoring some, and adding her own points as though she were engaged in solving the problems herself. She did not "let students off" from difficult questions as I have seen some teachers do. They followed through on thinking about solutions they suggested. She never told a student that he/she had a good idea when the idea was obviously fuzzy.

Several times Mrs. Levin commanded, "Okay, stretch!" meaning they were to seek nonobvious solutions. Innovative ideas did emerge from this approach. To obtain rescue, individuals said that the girls could have waved bright things, climbed trees, used the wreckage to build something, fixed the engine, stayed at the crash site and reduced the risk of further catastrophes.[41]

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[41] In Marie Wilson's class, students had more modest solutions to the same problem.

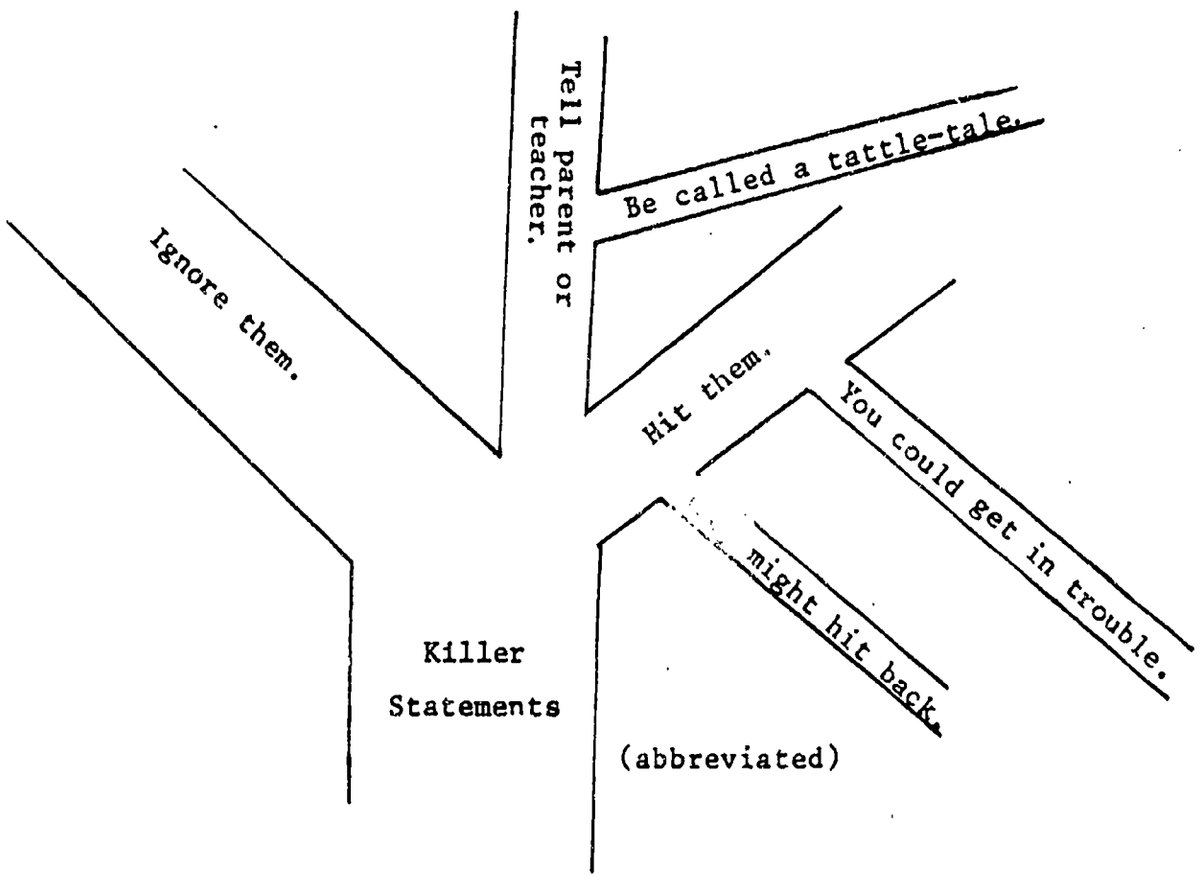

Figure 2. Scheme for problem solving on chart in front of class.

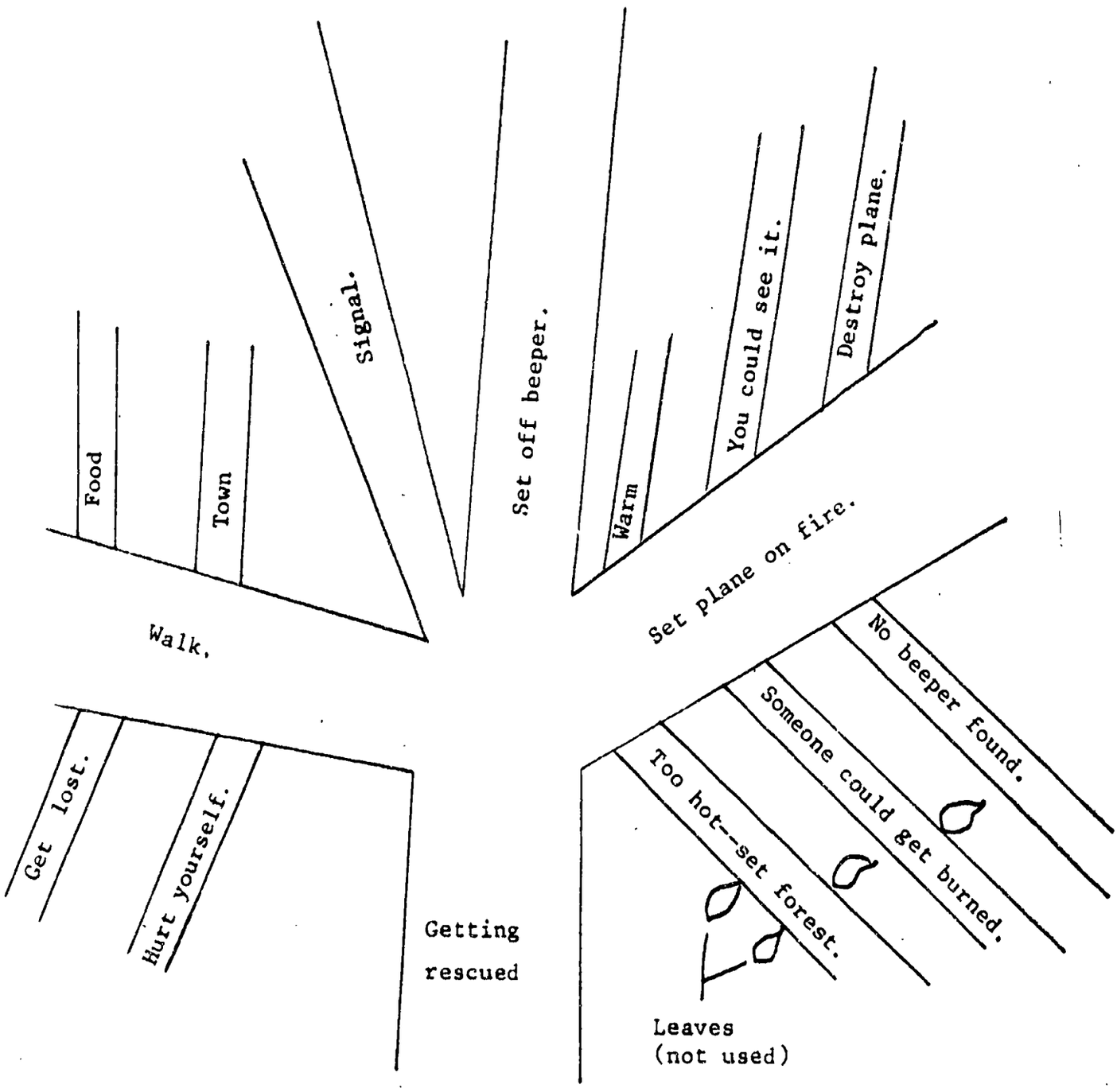

Figure 3. Scheme worked out by class for solving ThinkAbout problems.

Comments on Classes Using ThinkAbout

Let me conclude the foregoing accounts with a few observations, relying not only on the events described in this section but also on my other experiences and contemplation of ThinkAbout.

A. Attention to ThinkAbout is rapt. In most classes, whether highly disciplined or not, most students watch the screen (with moving eyeballs indicating active minds) most of the time.

B. Television, movie projector, and video machine are used in this area. One district supplies tapes only for missed shows. Another supplies all tapes or films; they must be ordered and returned. Therefore television reception is simplest. Most schools have about two televisions, but some classes have their own in their rooms. Students complain if they can't watch in color; several classes have to watch in black and white.

C. Media specialists ("librarians" in old-fashioned parlance) are in a position to promote ThinkAbout. Part of their job is to investigate innovative materials, select some, and encourage teachers to use them.

D. Members of local school boards are receptive to ThinkAbout. They are in a position to promote its use.

E. Problem solving is a trend in education. Educators in a variety of positions talk about and study "processual thinking," independent student research, and problem solving as a skill with separate steps which can be taught. This interest makes them receptive to ThinkAbout.

F. "Problem" means interpersonal conflict to many. Looking at the "real-life" situations of ThinkAbout, many students think

that emotions and human relations are the stuff of the series. More important, at least one adult I spoke with thinks that the series propounds "relating" skills (in the affective domain of the psyche) and not "mental" skills (more in the realm of cognition). Some adults perceive the two as inseparable and the show as combining them. (Marie Wilson is an exmaple of these adults, I believe.)

G. Diverse types of classes watch ThinkAbout. In addition to fifth and sixth graders, primary and junior high school students watch it. (To no avail I followed up a rumor that a high school class watches it.)

H. Post-program discussions lasting about twenty minutes are a common way to end ThinkAbout sessions. Data on other responses to the show are scanty, which may mean that other responses are scanty. Discussion usually involves reviewing the main point, referring to personal or class experience associated with it, and/or analyzing the dilemma and solution in the program. Few viewers talk much about the clusters of related skills.

DISTRICT SUPPORT OF THINKABOUT

A Teacher's First View of ThinkAbout[42]

The teachers I talked to learned about ThinkAbout from the promotionals sent through the mail (one in the spring, one in the fall) or from faculty in their buildings. In looking into the series on his/her own, a teacher had to leave his/her name with the district media specialist or her secretary in order to receive a preliminary guide through the mail several weeks later. If more than one faculty member were involved, they worked together to get the guide.

In most cases the teacher "previewed" the show by turning on the regular broadcast. The class usually previewed it at the same time, since school and series were already underway at this stage. Although one teacher saw the promotional tape upon request, the others, as far as I know, attended no introductions or workshops in the fall.

For a teacher who waited until receiving the guide to watch the show, the guide was the first real introduction which explained the principles behind it and illustrated the specific programs. He/she confronted the series in a complex layout of gray and white pages which stuck together. For those who showed it to the class before receiving the guide, the introduction was a program which had to stand on its own to be adopted--although it probably caught

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[42] Since I interviewed more teachers who decided to use ThinkAbout than teachers who decided not to use it, these data may not describe the first view for those who decided negatively.

the class's attention, its underlying themes and relationships to other programs were not spelled out in print.

A Teacher Keeps Looking at ThinkAbout[43]

Some teachers initiated use of the show without assistance, and others worked with other faculty members to initiate it. Yet no teacher I spoke with cooperated with others to plan or carry out ThinkAbout follow-up activities.

The only reminder to a teacher (and class) to keep watching ThinkAbout as the year wore on was the Weekly Reader (where present). In the user-classes I visited, although schedules were frequently disrupted and ThinkAbout missed, the teachers did not forget ThinkAbout and turned it on when it fit in.

In midwinter, when the preliminary guide was no longer current, a teacher needed to obtain a full guide. One teacher had not noticed that the preliminary guide would soon be useless and kept forgetting to take down the address flashed on the screen so that she could order a full guide. She went without one until I sent for one for her.[44] (Perhaps she could have received one more quickly by phoning the district media specialist.)

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[43] Most (not all) teachers interviewed had continued to use ThinkAbout. Therefore the data may not tell as much about those who discontinued use.

[44] The State Department of Education sent me not only a guide but also a catalog of all the instructional television programs, and charged me for it. If I were a teacher, would this "extra" make me reluctant to send for any future ThinkAbout offerings?

ThinkAbout Workshops[45]

In April (two and three weeks before the final broadcast) a teacher had two chances to preview ThinkAbout (or talk about it if he/she had already used it) when the city school district and the county education service district each offered a ThinkAbout workshop.[46] Announcements were sent to almost every teacher. One mailer (see Appendix D) listed a series of twelve in-service training sessions (including the one on ThinkAbout) and offered college credit for attendance at six. Shortly before the ThinkAbout workshop, another mailer announcing only that session was sent.

The workshops were held on weekdays after school during "spring fever" weather. Locations were central for the districts but required long drives for many individuals. Present at one workshop were:

> Three administrators (the workshop instructor, the workshop coordinator, and a district resource person)
> One anthropologist (myself)
> Six people who appeared to be teachers.

At the other workshop were:

> Four administrators (instructor, coordinator, district media specialist, and curriculum specialist)
> One anthropologist
> One school media specialist
> One teacher aide
> Three classroom teachers.

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[45] In poor anthropological fashion, this section does not cover the ThinkAbout workshops in the larger contexts of the workshop series, other in-service courses, and teacher education in general. Perhaps this account short-changes them as a result. My aim is not to critique, but to present aspects which may have impact on ThinkAbout--information dissemination, adoption, and approach.

[46] All except one school described in this report were in one or both of these districts.

The workshop instructor came from the State Department of Education to present the same material in each workshop (as he had done for districts all over the state). He tried to inject levity into the business by dressing up and talking like a half-witted hillbilly hired by the "Feds" to promote newfangled educational material. Halfway through these sessions he stopped talking about "what I'm s'poz'd to say about ThinkAbout" and gave more straightforward information.

Although some participants were languid in the spring afternoon, a friendly atmosphere arose from the cookies, coffee, drawing for a door prize (a ThinkAbout T-shirt), and instructor's humor. He tried to add to the comfort by ending on time, but most of the group stayed to hear more questions and answers.

The intellectual content of these two sessions belied the term "workshop."[47] They were not active "work" in the sense of practice sessions or sounding boards for relating teaching methods to ThinkAbout. Rather, they were an opportunity to see the promotional and one program on tape, hear background information on the production of ThinkAbout and the instructor's opinions, listen to a few teachers' experiences with it, and ask questions. Most questions were about schedule, sequence, equipment, and costs—logistics. If a teacher had never viewed the show, he/she heard that "the show is nothing without the teacher" but did not confront various ways of dealing with it. If he/she came after having used it, he/she did

[47] The same is true of most workshops which I teach or attend. Here I use "workshop" narrowly to help describe what went on.

not share or improve teaching methods.

The instructor, who was very positive about the series, did not stress its main characteristics--conceptual skills applied in realistic dramatizations (perhaps because these speak for themselves). Instead, he pointed out less obvious features: non-stereotyped roles (e.g., a father doing dishes), incidental learning values (e.g., a boy obeying his father[48]), and learning from "extraneous features" (e.g., about UFO's). He said that he had heard only two negative comments about the show. One was that the broadcast mistakes were frustrating, but he assured the audience that they will be corrected next year. The other was that "some shows are better than others," to which he added, "If a program is weak you'll just have to figure out if you want to use it next year or not."

The positive attitude might have encouraged some people to use the show. It also might have "turned off" some teachers who were questioning the value of instructional television in general, the suitability of this medium for teaching conceptual skills in particular, or the quality of this particular series. There was no arena for these concerns.

Participants who spoke up were also positive, saying that they and their classes liked most of the programs. But one episode illustrated the difficulty of recruiting committed viewers, in spite of favorable opinions. The district media specialist held a drawing

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[48] In the scene the instructor cited as an example of incidental learning values, the boy did not obey his father by immediately cutting off a long-distance call, but defied his father until he received a second command.

for a color television set; any classroom teacher present who was committed to using ThinkAbout next year could enter. The teacher aide, although interested, was ineligible. Only one classroom teacher was willing to commit herself. Without any drawing, she received the set for her classroom.

Perhaps the tapes, opinions, and time invested in attending would encourage a teacher to adopt ThinkAbout, especially if he/she came looking for problem-solving curriculum, a new instructional television series, or "something to do" with a class. Other factors, however, might discourage such a teacher: time of year (too late for 1979-80 broadcasts, enough time to forget before next fall), time of day (when teachers are tired), lack of discussion of pedagogical principles behind the series, and lack of specific suggestions for its use.

CONCLUSIONS

Adopting the perspective of participant-observer in one classroom and field-worker in other settings, I have come to understand ThinkAbout not merely as an instructional television series but as an approach to teaching certain skills and outlooks which entails using the series and guide. This understanding is also based on ideas about the nature of instructional television and U.S. public elementary education. Therefore, in this section, in addition to capsulizing the observations from the field report and offering recommendations based on them, I express some of these broader ideas. All are rooted in my own research. Whereas the limited range of my research makes the data insufficient for widely generalizable conclusions, the depth of my experience (in terms of time, participation, and diversity of situations) is necessary for any meaningful conclusions.

Concluding Observations

A. Attention. Students usually watch the entire show. A few who are not concentrating rarely disturb the more attentive ones (sometimes because the attentive ones demand silence so that they can watch).

B. Viewing conditions. Quality of television reception varies. Some classes pull shades and extinguish lights, creating a special environment for television which improves visibility. Others do not darken the room, thus not separating ThinkAbout widely from surrounding activities (and perhaps making viewing more like daytime viewing at home).

C. Equipment. Some classrooms have color sets; others have

black-and-white. For teachers who take individual initiative in using the show, television broadcasts are the easiest means of reception; no such teacher that I spoke to ordered films or tapes. For those who have help obtaining tapes or films, these alternatives provide flexibility in scheduling ThinkAbout.

D. Scheduling. Teachers who use ThinkAbout as a permanent part of a class's curriculum do not show it when the school schedule intervenes (e.g., with assemblies, holidays). But they do not often let classroom activities temporarily "push it aside." Disruptions in the broadcast schedule frustrate these teachers and keep them from offering pre-programming activities and introductions, but do not seem to keep them from using the show.

E. Discussions. As their primary use of the show, teachers almost always lead discussions, often following suggestions in the guide, "After the Program--Talk About." Usually students fulfill the teacher's requests by answering questions about the program or recounting pertinent biographical episodes. Less frequently a class plays a game or role-plays to bring the point across. The focus of discussions does not stray far afield from the program. Problem solving is not apt to be highly abstracted: students talk about solving concrete problems rather than expounding the procedures for doing so or generalizing across searches for solutions.

ThinkAbout sessions are like many others in the formal academic subjects (reading, spelling, social studies, science, etc.) in that the main vehicles of expression and thought are words (not crayons, measuring instruments, music, etc.). Although there are many other sessions in which people mainly talk, ThinkAbout sessions

may have a discussion style all their own. The topic (conceptual skills), series, guide, and television medium seem to contribute to discussions which are very different from discussions of other materials. Other discussions involve problem solving; ThinkAbout presents skills and attitudes to which participants could refer in that problem solving. Such reference is not common.

Students appear to be fairly passive in discussions. They do not choose the discussion topics or raise many questions. These discussions allow greater passivity on the part of many students than do at least two "basic" subjects--reading and math. However, a few students--the same few repeatedly in each room--have to be active for the teacher's requests to be fulfilled. Many seem interested in the discussions because they provide the opportunity to hear peers' experiences. Others act bored.

Problem solving in ThinkAbout sessions is not very challenging. Many problems discussed are either hypothetical, individual-oriented, or petty--traits which may make the process of solving them less invigorating than it would be otherwise. In addition, classes do not customarily examine proposed solutions thoroughly in order to determine the most effective course of action. Concern with the content of problems under consideration (e.g., the mystery of the Loch Ness monster) seems superficial--another quality of discussions which may keep minds from "stretching" to seek hard questions and good answers.

ThinkAbout sessions may not employ logic, symbolism, memory, evaluation, class relations, and other specific mental skills more than do other sessions. Perhaps math, social science, and other

subjects encourage these mental activities more. Furthermore, ThinkAbout sessions may not entail any more application of these skills than do the other subjects.

F. Projects and assignments. Special projects featuring ThinkAbout skills, subjects or concepts are not common. The series, however, is relevant to other projects evident in classrooms and offers teachers the opportunity (whether taken or not) to reinforce instruction on the screen. Teachers do not assign many formal tasks (to be written and turned in or formally presented to the class) in response to ThinkAbout.

G. Clusters. Teachers only occasionally review the sequence of programs within a cluster. When they do, they usually emphasize the order of programs rather than the conceptual relationships among the skills depicted. For many programs, some teachers never mention their occurrence in clusters at all. Sometimes this is due to the inability of a class to view all programs in a cluster or to an incorrect broadcast schedule.[49]

H Values. ThinkAbout sessions are unique in their accent on the value of applying conceptual skills in everyday life.[50] Twice a week for a school year ThinkAbout students confront a message which is absent or hidden in the rest of the curriculum: thinking clearly, researching, caring about results, and seeking a union of morality and rationality not only are desirable but also can be developed

[49] Perhaps, in regard to clusters, teachers are revealing limited training in teaching conceptual skills, in-service training, or supporting materials on how to use the series.

[50] Isn't this a little like an advertisement for hugging your children?

by the ordinary individual. Normal daily tasks and free periods neither explicitly state this set of values nor implicitly demonstrate it.

I. Individualism. In ThinkAbout sessions, viewing and discussing are individualistic. Of course all view the same material, but no cooperation is involved.[51] A discussion often extends this orientation by being a series of exchanges between the teacher and a few students who are habitual volunteers. Although students exchange ideas indirectly in this manner, they do not converse directly with peers on intellectual matters.

J. Lack of competition. ThinkAbout activities are more "low-key" for the student than are many traditional school activities. "Active" participation is rarely required; there are no prerequisites, grades, or contests; discussions and other follow-up exercises do not lend themselves to comparison.

K. The teacher's role. If students can learn conceptual skills from watching 15-minute segments and discussing them, then the teacher's use of the guide and style probably largely determine the quality of that learning. Teachers are apt to follow some suggestions from the guide for leading discussions but choose nothing from the more complicated follow-up projects it recommends. Styles of interacting with the class over this material differ greatly. One teacher is scared and uninterested in the content; another has students analyze every scene on the screen. One rules a peaceful room by strongly controlling all

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[51] In Children and television: Lessons from Sesame Street (New York: Random House, 1974), Gerald S. Lesser looks on "television as shared experience." Granted that the stimulus is the same for all viewers, watching the screen together is a limited sort of sharing.

input to the discussion, thus orchestrating a dull conversation; another allows near-chaos but orchestrates a lively debate.

L. Meanings. To the students, television and relatively free discussions signal a period of not-work. Teachers counteract this by articulating and demonstrating the association between television, learning, and serious demeanor.

Students do not consciously consider ThinkAbout to be very important. They do not often tell others about it, consciously use it to solve problems, or discuss it together during ThinkAbout sessions (being more apt to discuss it with the teacher) or immediately afterwards.

Comprehension of the overall purpose of the series varies greatly among children, but most seem to understand the dramatizations and learning procedures presented in each program. Many consider the significant content to be the moral messages about characters' attitudes and aims, rather than the specific skills they employ to realize their aims.

Teachers usually understand and try to promote the problem-solving goals of ThinkAbout but also respond to the material about interpersonal relations. Perhaps this material is not a drawing card for some. (One asked me rhetorically, "There are already enough shows on that, aren't there?") For others, interpersonal problems are the ones on which conceptual skills are best employed.

M. Types of classes. Teachers of students in diverse grades and achievement levels express interest in using ThinkAbout. In this city there are about equal numbers of user-teachers with "ordinary" fifth and sixth grade classes and user-teachers with "special" classes or classes of other grades.

N. Adoption. Some teachers independently learn about and use ThinkAbout. Others work in groups of two or three faculty members (including principal, librarian, and/or another teacher) to introduce it. They do not, however, collectively plan or undertake class activities using the show.

O. Reminders. Only two "props" in the classroom remind a teacher to tune into ThinkAbout: the guide and (in many cases) the Weekly Reader. Nevertheless, teachers do not forget it.

P. Priorities. For teachers who have decided to use the series, the priority of the individual programs is high. Unless the school schedule dictates otherwise, the teachers usually switch on the show. They encourage substitutes and student teachers to use it, include it as their subject schedules change, and never (in my observations, which may have greatly influenced this behavior) let the preceding activity, no matter how engrossing or important, usurp ThinkAbout by "running over." In short, within the classroom reality nothing else comes first, but within the school reality the show may be "shoved aside."

Q. Problem-solving curricula. Several currents make ThinkAbout timely. The "back-to-basics" movement seems to be leading some teachers to examine the basics deeply for underlying mental processes and to apply these processes to situations not related to "basic" schoolwork. Evidence of their interest in conceptual skills lies in courses, curricula, and programs for special children in this topic. In some classrooms, ThinkAbout "plugs into" pre-existing plans for problem-solving instruction. In others it is the only problem-solving material; in these cases there is potential for the show to compete with other schemes for teaching this topic.

R. Workshops. Two ThinkAbout workshops in this area occurred late in the year and were poorly attended (fewer than 10 classroom teachers at each).[52] Their impact on use is difficult to assess. Through tapes, guide, and information on production, the series was allowed to speak for itself. Although the tone was encouraging, the substance of the sessions was not deep.[53]

Recommendations

The recommendations follow from the observations in the preceding section, but they are tempered by the entire field experience and my understanding of U.S. and human education. Since these recommendations hinge on the cooperation of people in many positions, some of them may be unrealistic. My main purpose, however, is not to prescribe actions but to describe the situation in which the series exists. ThinkAbout viewers and promoters might benefit from these ideas about what could be, based on my observations of what is.

For Teachers

There is no single best way to use ThinkAbout, and I do not pretend to be a judge of the best ways. Without advocating a specific approach or set of activities, however, I can point out certain attitudes and behaviors (many of which were absent in most ThinkAbout

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[52]Attendance was better in other areas of the state (mostly small-town areas).

[53]Other researchers have noted that "school systems muddle into" the use of instructional television. They are not equipped to pay great attention to methods and content of television instruction. Typically their programs are under-used. (Chu, Godwin C., and Schramm, Wilbur. Learning from television: What the research says [revised ed.]. Washington, D.C.: National Association of Broadcasters, 1970.)

sessions I visited) with potential for deeper development of students' minds.

A. Make it "hard." Passages and descriptions of discussions, as well as my comments, are testimony to the easygoing flow of most Think-About discussions. Perhaps students do benefit from becoming aware of conceptual skills in this atmosphere, but they might benefit even more from facing tough questions, examining answers, and when appropriate, rejecting them. The series is almost limitless in the difficulty of intellectual endeavor it could engender. The same is true of most curricula, but ThinkAbout has two advantages over many other materials in this regard. The first is that the professed purpose of ThinkAbout, unlike many materials, is to promote effective thinking processes rather than particular content. The second advantage is that the series includes a guide with ideas to stimulate teachers and without rigid directions that restrict creativity, whereas many materials offer either few ideas or too many directions. In spite of these advantages, I observed little evidence of students' mental effort and wonder if the teachers could not initiate such effort.

B. Share responsibility for ThinkAbout sessions with the students. Eye movements, occasional laughter, and comments after programs indicate that ThinkAbout viewers are not "passive." Nevertheless, mental activity might be greater or more focussed if students had responsibilities in addition to watching and going along with the teacher. First, children could have access to the guide to see the structure and principles of the whole series and individual programs. Some could read about shows they missed, select ones they want to see, preview the main points, and evaluate suggested activities. Secondly, even with

limited time and room in the curriculum for follow-up activities, students could choose the topic of discussion. It seems to me that personal investment in such undertakings increases individuals' rewards.

C. Outline the clusters and perhaps the entire series. Awareness of intellectual processes might improve those processes. To a certain degree, the series itself engenders awareness of problem solving as a process and encourages practice. But teachers can support this by naming skills and relations among them. Focus on the sequence of programs is one way to do this. It would allow viewers to analyze and interpret the series by classifying skills, evaluating programs, relating programs seen in the fall to ones seen in the spring, and otherwise "playing around" with the ideas.

D. "Pick and choose" programs. The guide cannot reveal the quality of particular shows, but it gives ample information on the topics for deciding whether a particular class needs a certain lesson.[54] Next year, given good memory or notes, a teacher who uses the series for the second time can be even more discriminating.

E. Split up the class. Given the choice, most students would probably watch ThinkAbout. But a few children doing math, passing notes, and staring into space suggest the possibility that some might benefit from the chance to skip some programs or enlist permanently in an alternative activity. Team teaching could support ThinkAbout in one room and another activity in another room. Since research on the impact of

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[54]For instance, one class practiced classifying in science, arranging notebooks, and other sessions during the year. The program on classifying may have reinforced the teacher's instruction, or it may have been unnecessarily repetitive.

instructional television is inconclusive, it seems reasonable to assume that some individuals are more receptive to it than others. Perhaps choice would be a criterion for sorting out receptive and unreceptive students.

Classes could also be split for follow-up activities. The usual discussions seem adequate for clarifying the points of the programs for most students, but often a few seem willing to work beyond those points. Perhaps teachers could provide the structure for a few to persevere in follow-up activities.

F. Lead the class in examining the series. Are aims, medium, and quality admirable? What are the producers trying to do? How can we help or hinder them in doing that to us?

G. Integrate the skills with other subjects. The crowded curriculum need not prevent the explicit teaching of useful mental processes. Since improving thought processes is a reason for introducing information for all fields, all information should be presented, along with guidance on applying it.

H. Introduce thinking skills as an explicit learning aim in earlier grades. Although not very useful for upper grade teachers, this recommendation highlights the fact that they are dealing with an area of knowledge not yet clearly defined, with no conventional sequence of lessons, and in which children have no background. If teachers and their fifth or sixth graders cannot avoid coming into the show "cold," at least they can be aware that, relative to more customary subjects, this is what they are doing.

Students, who laugh at "dumb" lines, identify with strong characters, and get caught up in plots, are ready to understand the show as

an aesthetic device for promoting learning. Can the teacher add to this understanding? Students are also ready to accept the competition, commercialism, and materialism in many programs. Can the teacher "pull back" the children to examine these values as reasons for, or means of, learning to think effectively? The children already admire the noble characters (e.g., the boy who saves the old man from heart attack) and want to use their own minds for noble deeds. Can the teacher connect these moral ideals to the mental excellence which enables people to realize them?

I believe that the teacher cannot do any of these things unless he/she inspects the show as a tool with inherent properties and presents it to students not as a given, but as the product of others' mental processes, which is intended to cultivate certain mental processes in them. This sounds high-flown, but it remains a simple recommendation to teachers to develop their own and their students' awareness of the aesthetic and ideological aspects and to relate these to professed purposes.

For Producers, Distributors, Administrators

A. Print a guide for students. Increased consciousness of ThinkAbout might increase any positive impact it has. With a guide, students might be conscious of ThinkAbout as a permanent part of the curriculum--even when the television is turned off. An inexpensive program schedule (including summaries and activity suggestions) in each desk or a bright poster-schedule on the wall might make the program more important and encourage children to use it more actively. (I would be insulted to attend a concert without a program or read a book without a table of contents; I don't watch television at home without referring to a guide.)

B. Simplify the guide layout. The guide strikes me as orderly yet

extremely complex. At least one teacher learned that she had to use it carefully. I wonder if teachers, who generally read it cursorily before or during programs and probably do not read all of each entry, are distracted by the juxtaposed boxes of different shades, sizes, and typefaces. If so, they are missing some suggestions and subtleties the guide points out.

C. Select key personnel as targets for information on ThinkAbout. In my research, school librarians and school board members emerged as likely proponents of the series. The active support of the latter group is not documented, but there is evidence that the former group makes important decisions about curricular materials and, perhaps more important, personally encourages teachers to use them.

D. Highlight the cognitive nature of ThinkAbout skills. The promotional material and the series stress thought processes, but there may be need to underscore these by pointing out what ThinkAbout is not: another show about personal relations. Given the concern in U.S. education about personal adjustment, the popularity of personality psychology in the last 10 years, and the interest of many teachers in promoting interpersonal skills (with Glazer circles, affective activities, rap sessions, and other school-psychology practices), it might pay to openly broach in pamphlets and workshops the complex relationships between ThinkAbout-type skills and interpersonal skills. This would have the disadvantage of confusing people who see mentality in terms of two totally separate realms, feeling and rationality. It would have the advantages of stimulating thought about ThinkAbout and its subject, associating ThinkAbout with the current concern for basic "mental" abilities, and emphasizing that ThinkAbout promotes application

of these abilities in all sorts of situations--"intellectual" and "emotional."

E. Increase effectiveness of workshops. Fall workshops can help teachers use ThinkAbout during the year if they provoke thought and planning. Spring workshops can crystallize and disseminate learning from the year's experiences and instill resolve to improve methods the next year if participants are provided with a structure for reviewing, critiquing and proposing.

Teachers might welcome a chance to act in workshops by playing the roles of teacher and students in follow-up activities, collectively devising plans for projects, reporting on ThinkAbout use in their schools, and debating opinions about instructional television and commercial television. Again, workshop structure seems the basis for energetic treatment of the shows. Essential information could be collapsed into a few minutes of comments by a speaker following a fact-sheet which participants can take home.

For Researchers

The recommendations below are questions to guide relatively short-range research with practical value for using ThinkAbout wisely. They do not include any significant studies of perception, knowledge, and communication which could illuminate the series.

A. How does ThinkAbout fit into the total curriculum? Many lessons in other subjects teach some ThinkAbout skills. Are these lessons reinforced by the show, or are they more effective on their own? (Math involves several kinds of thought processes and, in some classrooms, application of concepts to real or simulated problems. Is time better spent on math alone?) Is there a need for ThinkAbout? (Research

projects--common in upper elementary grades--require processes of questioning and finding answers without television stimulation.) If ThinkAbout has certain advantages that other subjects do not offer, research into curricula might show more precisely which aspects of ThinkAbout teachers need to stress most: articulation, practice, or the value of thought processes.

B. What discussion styles characterize ThinkAbout sessions? The effectiveness of the show may hinge on discussion styles. Comparison to discussions of other subjects might be enlightening here. Suggestions about the processes of classroom conversation, small-group formation, and presentation of ideas could improve talk about ThinkAbout.

C. Why do few special projects result from ThinkAbout watching? (Other researchers might find that projects are more common than I report.) If classes undertake non-ThinkAbout projects which happen to apply skills presented in the series, how could participants be encouraged to expand their endeavors in ways the series demonstrates?

D. What are the key positions for disseminating information about ThinkAbout? Perhaps different roles generate interest in different information: people close to teachers (principals, librarians, curriculum specialists, teacher aides) might share information on useful techniques for introducing and using it. People "higher up" might be in good positions to share information about production, distribution, and equipment (as well as incentives for using it).

Additional personnel might be hired to circulate information among all parties. In this state, an economist facilitates use of Trade-offs (an instructional television show on economics) by talking to teachers and administrators.

E. How do teachers decide to use ThinkAbout? Research of information dissemination in schools is the first step toward answering this question. In addition, understanding teacher priorities, as suggested by Harry Wolcott in field reports, is essential. Beyond that we need to know what ideas, people, publications, and educational practices encourage teachers to use instructional television in general and this show in particular.

F. Once they have adopted it, how do teachers decide how to use ThinkAbout? Do teachers rely solely on the guide for ideas about methods of instruction with ThinkAbout? Does it offer sufficient general guidance (stressing, for instance, the need to apply concepts)? Or would discussion of approach be boring or insulting? On the other hand, does the guide offer too much detail on each program? Would shortening summaries and suggestions take away a needed prop or make it easier to use? A good way to "get a handle" on the impact of the guide might be to introduce the series without the guide to a group of teachers and ask them what information and ideas they would want in it. Aside from the guide, which may be crucial in determining the quality of ThinkAbout sessions, what factors and people influence teachers to discuss, review, harangue, demonstrate, or...?

Interpretations

Schools and Problem Solving

In most classrooms, students learn problem-solving techniques in short "chunks"--dividing with two-digit divisors, looking up a country in an encyclopedia, and so forth. The techniques with which they become familiar are isolated from one another and from "real" problems.

Thus students are ripe for an opportunity to use thinking in

"realistic" situations. ThinkAbout could offer this opportunity, but the same reasons that keep students from thinking in "realistic" ways in the rest of the curriculum keep them from using ThinkAbout thinking skills in the most "realistic" ways possible. These reasons include:

A. Public education avoids controversial topics. We all know that the impossibility of presenting all sides of any issue draws teachers away from significant issues. This fact discourages provocative use of ThinkAbout skills. Imagine a teacher requiring students to attack a really crucial personal or political problem in their lives and probing until they come to the most reasonable solution. This process could lead to criticism, dissent, and unpleasantness. Then, if certain solutions were agreed upon and enacted by students, the teacher might be accused of fomenting personal and public rebellion. The material for good problem solving already exists in the classroom; the setting is the problem.

B. The structure of elementary education discourages problem solving. Education practice is based on three assumptions of "shortness": that children's attention spans are short; that time segments for each subject must be short; and that teachers' patience for innovation, "unstructured" settings, and student responsibility is short. Operating on these assumptions, curricula tend to discourage students from solving problems. In order to plan full problem solving, teachers would have to believe that students might "keep at it" for long periods of time and to gear themselves for surprises that creative thinking and acting can bring. Whether or not the assumptions are true, curricula and schedules are based on them. Expectations and school structure restrict difficult problem solving; the presence of a

series on that topic does not necessarily mitigate these restrictions.

C. The curriculum is crowded with "programs." Each of these provides its own means and ends. It is hard to incorporate another program, even one focussing on generally applicable skills, into self-contained programs. For instance, the subject "reading" is not the choice and exploration of various literary materials by teacher and students. Rather, it is a program for which the district (or state, school, or teacher) has "signed up." If a class took time to solve problems which occurred as they followed it, they would get behind in the program. Similarly, a science project is often a "unit" in a manual followed by a teacher who is not trying to resolve an intellectual dilemma but is "doing" the project. A problem-solving program can fit into a program-laden curriculum. But the structures of many programs restrict students from extended problem solving. Even a great television program does not fit easily into already programmed instruction.

None of the three reasons for the isolation of problem-solving techniques totally prevents brilliant work based on ThinkAbout. But regardless of the quality of ThinkAbout, the schools encompass beliefs and customs which tend to inhibit viewers from strenuous, significant mental exercise.

Schools and Television

As Neil Postman points out, school is becoming more like television (as distinct from literary media).[55] Both commercial television and the elementary school curriculum offer discrete units which are designed to

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[55]Postman, Neil. The first curriculum: Comparing school and television. Phi Delta Kappan, November 1979. And: Schools as thermostats: Putting culture's beam in balance. Los Angeles Times, January 27, 1980.

be fun and do not always develop in sequence.

On the screen the primary message is moral and transmitted "globally" by means of visual association at a fast pace with material which cannot be reviewed by looking back. Throughout the ages, schools have been associated with linear and logical thinking about written material which can be reviewed.[56] But today schools include not only implicit moral messages (as they always have) but also explicit moral training in personal relations, values clarification, and sex education. Ancient reliance on writing has given way to diverse means of transmitting school learning to children--dramatization, athletics, audiovisual media, and other means. Thus schools are becoming like television.

Perhaps using a television show to teach conceptual skills in television-like school is a mistake. The show shares the properties of its medium--global association, visual imagery, fast pace, no reversal--in a school world that is already pervaded by these properties. Moreover, the series is an attempt to use "global" properties of television to teach "linear" concepts which are characteristically part of the literary world. No research tells us yet which media best teach various modes of thought; here ThinkAbout is an experiment. Regardless of what it teaches, we may choose not to increase the type of experience promulgated by television. We may prefer to retain in schools the kinds of experiences associated with reading and writing (as valuable artifacts of past ages or in new forms).

On the other hand, perhaps teaching with television has become

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[56]Goody, Jack, ed. Literacy in traditional societies. London: Cambridge University Press, 1968.

imperative, in which case we must not leave out the teaching of thinking through television. Totally avoiding television in school would be ridiculous in this era. Even if television were merely "a helter-skelter offering of images,"[57] at least it is one that gains attention in a way few other media or teachers do. Statistics on television viewing[58] suggest that it is becoming the base of our cultural knowledge. To see what this means, we can look at another people with a different base of cultural knowledge--the Navajo:

> The over-used expression "mother earth" means that land is a means of teaching and thought. Land markers are a mnemonic aid, and land features, such as buttes, are associated with prayers and legends. The prayers and legends are, in turn, both the means of teaching family members what they must know in various stages of life and an evaluation of how well they have learned to live. Livestock raising [using the land] is a practical means of learning and a measure of a maturing individual's progress. . . . [The land is] the base of their cultural knowledge.[59]

The similarity between Navajo land orientation and our television orientation is striking. Television is "a means of teaching and thought . . . a mnemonic aid . . . associated with prayers and legends . . . the means of teaching family members what they must know in various stages of life and evaluation of how well they have learned to live . . . a practical means of learning." In this context there may be no other way to enculturate children into ways of thinking or anything else, for any way would be meaningless unless adapted to the base

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[57]Lesser, Gerald S. Children and television: Lessons from Sesame Street. New York: Random House, 1974.

[58]Most children spend more time watching television than they do in school. Postman, Neil. Los Angeles Times, January 27, 1980.

[59]A Navajo perspective on costs and benefits. Anthropology Resource Newsletter, March 1980.

of their cultural knowledge.

We may find another defense of the use of television in schools when we advance beyond generalizations about the medium to analysis of different forms it takes. A particular use of television does not have to subscribe to all the characteristics commonly associated with it (e.g., fast pace). Writing has taken many forms which differently affect cognition--logographs, hieroglyphics, pictographs, and more.[60] We can find fault with a medium we have to accept and still create a form we can use to advantage. If research can show that ThinkAbout's "global" images teach "linear" and other kinds of conceptual skills, we may say that the series is a useful form of television.

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[60]Goody, Jack. Literacy in traditional societies.

APPENDIX A

"PRIVATE EYE"

Ed the Eye—Private Eye, that is—pulled hard on the handle of the huge door to the Appleby mansion. He was working against the mighty March wind. He could see Captain Hirank helping to open the door on the other side.

"Doggone wind!" Hirank greeted Ed, puffing. He motioned Ed inside. The door creaked loudly as the wind slammed it shut.

Ed removed his 19-starred helmet and followed Hirank into the study. Mrs. Appleby sat talking with a short, stout man.

Mrs. Appleby turned to Ed and Captain Hirank. "My insurance man, Bosworth," she said, nodding at the short man, "thinks my rare Aztec statues were stolen."

"When were they taken?" asked Ed.

"This afternoon," the woman sighed. "Bosworth and I had gone to the kitchen for tea. It's the servants' afternoon off." She sighed again. "We sat in the kitchen enjoying the tea and the quiet house."

Bosworth spoke up. "When we came back here, the statues were gone from their shelves. In that short time someone had come in and taken them."

Ed shook his head. "No. You won't get any insurance payment from this."

Why did Ed suspect Appleby and Bosworth were lying?

See answer in Teacher's Edition.

APPENDIX B

FIRST INTERVIEW

Verbal explanation to student: "I am interested in your ideas and how you arrive at them. The purpose of my talk with you today is to see how you consider a problem out loud. Please tell me all your thoughts as you do it, including thoughts, questions, and answers which I don't suggest but which occur to you. There are no right or wrong answers because this is not a test. Please don't hurry, but try to enjoy these problems and to share with me all your ideas about them. You can read the passage out loud (or I will read it with you) and tell me what to write down as we go."

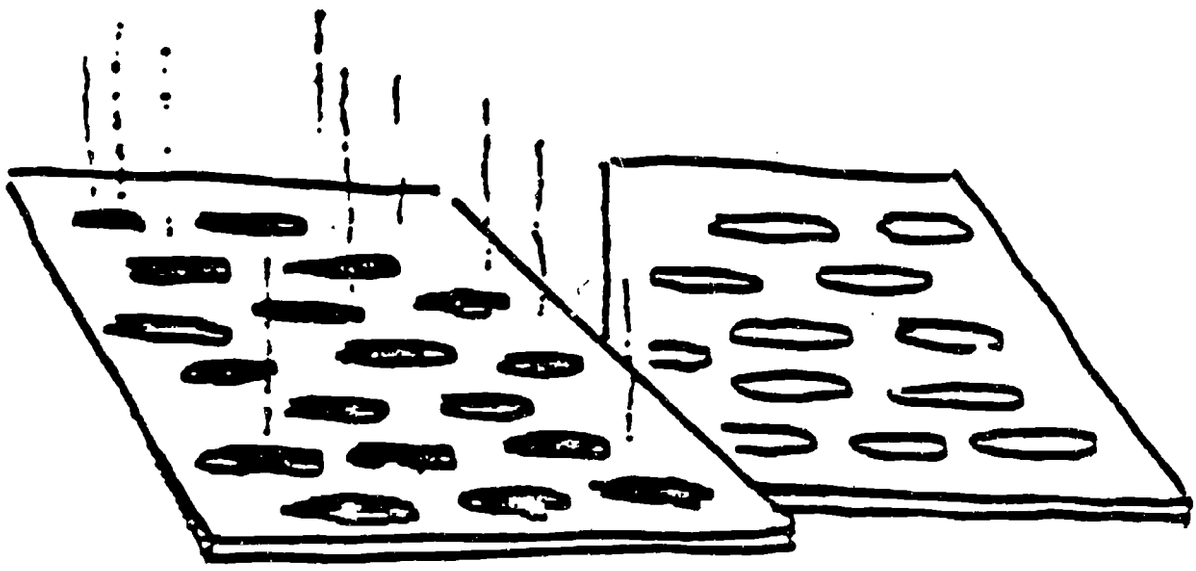
After delivering this explanation, I showed the student the three problems on the following pages and briefly described each. (Note that I adapted them from the ThinkAbout research project by adding questions about the problem-solving process.) The student chose one problem. We went through it together and talked about the problem, solutions, and solving problems in general. I did not mention ThinkAbout.

Brian's Doormats

Brian's scout troop is baking cookies to sell at the next open house. Brian's mother said she would bake for him. However, she will not get home in time to help. It is now 5:00: two hours before the open house. Brian must make the cookies himself.

Brian turns up the kitchen radio full blast. He starts making cookie dough. Forty minutes later Brian finishes. He puts two cookie pans in the hot oven, one above the other. The cookies must bake for 20 minutes. He sets the bell timer. "That was not so bad," Brian thought. "I could make another batch in half the time." Brian smiles.

A short time later, Brian's smile freezes. Many of the cookies are fine. But others are burned. They look and taste like small doormats! Below is a picture of what he sees.



When you have read the story carefully, you may go on to the next page.

What questions might you want to ask about Brian's story and the problem? Write them below.

What made you think of these questions? something in the passage or something else in your life or school experience?

12

Does Brian have enough time to make more cookies before the scout meeting? What is your estimate? Circle one of the answers below:

He does not have enough time.	He probably does does not have enough time.	I can't tell.	He probably has enough time.	He certainly has enough time.

How do you know this is the answer?

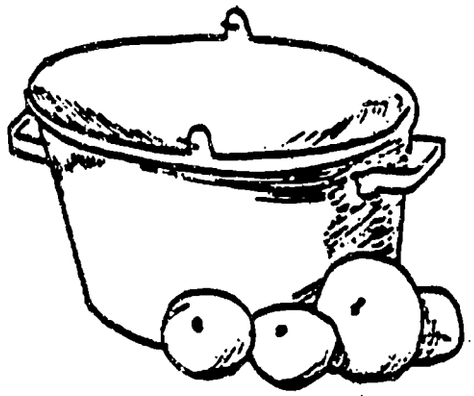
13

Below are several things Brian might think or do. Read each one. If you believe it is a good idea, draw a circle around either Very Good or Good. If the idea is poor, draw a circle around either Poor or Very Poor. Circle the question mark (?) if you cannot decide if it is a good or a poor idea.

Brian ought to give up and buy some cookies instead.	Very Poor	Poor	Good	Very Good	?	14
How did you decide if this is a good or a poor idea?						
Brian might decide there is not enough time to make more cookies.	Very Poor	Poor	Good	Very Good	?	15
Brian might scrape off the burned part and use the cookies anyway.	Very Poor	Poor	Good	Very Good	?	16
As a first step, Brian might ask his older sister to help make another batch.	Very Poor	Poor	Good	Very Good	?	17
Brian's scout troop ought to think of better ways to earn money.	Very Poor	Poor	Good	Very Good	?	18
Brian might wonder why some of the cookies are not burned.	Very Poor	Poor	Good	Very Good	?	19
	1	2	3	4	5	

Brian decides to figure out what caused some of the cookies to burn. You help Brian. Write down
a) all the reasons you can to explain this. Start each idea at a new number below:
b) the way you thought of each reason - how you arrived at it.

1.



2.

3.

4.

5.

Skip this page unless the student wants to come back to it.

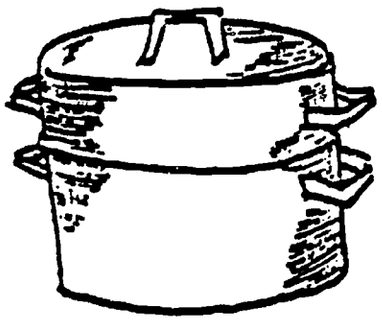
Here are some facts. They may help solve Brian's problem:

1. Putting a cookie pan too close to the top of the oven, where the heat comes from, can burn the cookies.

2. Brian put his mother's cooking thermometer in the oven. When the oven dial says 300 degrees, the correct temperature inside the oven is really 325 degrees.

3. Below are parts of the cookie recipe. On the left side are the directions. The right side tells how carefully Brian followed these directions.

Recipe Directions:	What Brian did:
Bake cookies in an oven between 300 and 325 degrees.	Brian set the oven for 300 degrees.
Bake for 20 minutes.	Brian baked for 18 minutes.
Add 1½ cups of sugar.	Brian added 1½ cups of sugar.
Add 2 cups of flour.	Brian added 2 cups of flour.



Study each idea below. If the facts tell you that an idea is probably a good answer, draw a circle around Good. If the idea is probably not a good answer, circle Poor. Circle the question mark (?) if you cannot tell about an idea because there are not enough facts yet:

Maybe the oven dial was wrong enough to cause the cookies to burn.	Poor	?	Good	34
Maybe Brian left the cookies in the oven too long.	Poor	?	Good	35
Maybe some of the cookies were too close to the top of the oven.	Poor	?	Good	36
Maybe Brian got so interested in the radio that he added too much sugar, by mistake.	Poor	?	Good	37
Maybe Brian put in too many eggs.	Poor	?	Good	38
	1	2	3	

When you finish, you may go on.

Skip the first two questions on this page.

Below are two ideas to explain Brian's mystery: However, neither of these is very good!

1. Maybe the cookies burned because Brian left them in the oven too long.
   What fact tells you that this is probably not a good answer? Write it below:

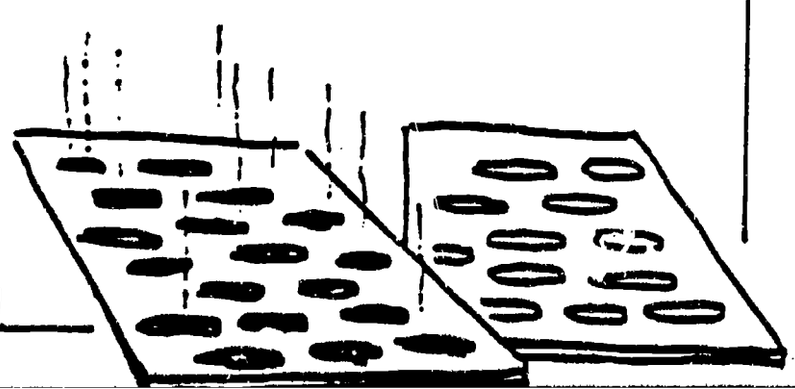
39

2. Maybe the cookies burned because the temperature in the oven was higher than what the oven dial said. What facts tell you that this is probably not a good answer? Write them below:

40

The idea that some of the cookies were too close to the top of the oven is probably the best answer. What fact in the story back on page one tells you that this is probably what happened? Write here:

41



What do you feel about this problem? Please draw a circle around the answer that tells what you feel:

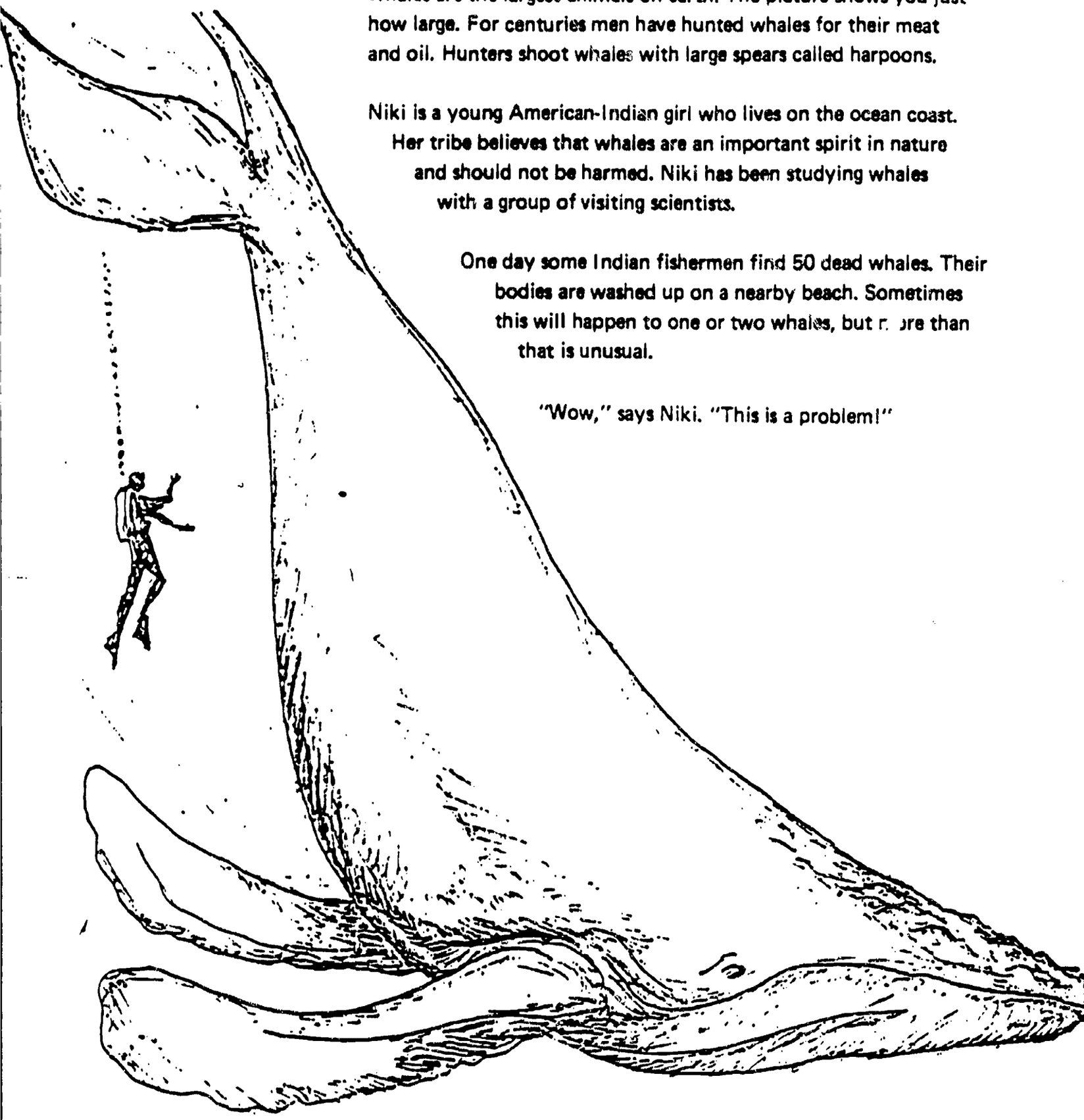
How much did you enjoy this problem?	Very Little	Little	Medium	Much	Very Much	42
How hard was this problem?	Very Easy	Easy	Medium	Hard	Very Hard	43
How smart are you at problems like these?	Very Poor	Poor	Fair	Good	Very Good	44
How much of your ability did you use?	Very Little	Little	Some	A lot	All my Ability	45
How hard did you try?	Very Little	Little	Medium	Hard	Very Hard	46
Compared to the other students how well did you do?	Very Poor	Poor	Fair	Well	Very Well	47
How happy are you with your ideas?	Very Unhappy	Unhappy	Fair	Happy	Very Happy	48
	1	2	3	4	5	

How important is each of the following things for doing well on this problem?

How hard a student tries.	Not Important	Medium Important	Very Important	49
How smart a student is.	Not Important	Medium Important	Very Important	50
How easy the problem is.	Not Important	Medium Important	Very Important	51
How lucky a student is.	Not Important	Medium Important	Very Important	52

Have you done anything in school this year which helped you with this problem? Tell me about it. (Answer on back) 1 2 3

Mystery of the Whales



Whales are the largest animals on earth. The picture shows you just how large. For centuries men have hunted whales for their meat and oil. Hunters shoot whales with large spears called harpoons.

Niki is a young American-Indian girl who lives on the ocean coast. Her tribe believes that whales are an important spirit in nature and should not be harmed. Niki has been studying whales with a group of visiting scientists.

One day some Indian fishermen find 50 dead whales. Their bodies are washed up on a nearby beach. Sometimes this will happen to one or two whales, but more than that is unusual.

"Wow," says Niki. "This is a problem!"

When you have read the story carefully, you may go on to the next page.

What is the problem? Write it below.

What are some of the different things Niki and the scientists might do to solve this problem? Write them below. Start each idea at a new number.

For each answer, write the thoughts you had which made you decide this might help.

1.

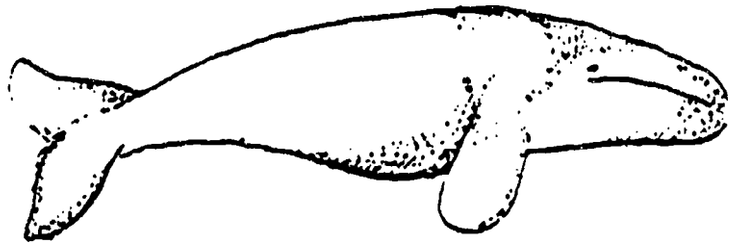
2.

3.

4.

What different things might the scientists do now to prevent other whales from dying in the same way? Write your ideas below. Start each idea at a new number.
Then tell where you got this idea.

1.



2.

3.

4.

5.

When you finish your ideas, you may go on.

Skip this page unless the student wants to come back to it.

The scientists have been thinking of ideas to explain why the whales died. But now they are stuck. So far they have thought only about ways humans might have harmed them. Below are several ideas. Some are examples of the scientists' habit of thinking only about humans harming the whales. Other ideas show entirely **different** ways of thinking about the problem. Put an X mark in front of each idea that is a **different** approach:

_____ Maybe oil from a shipwreck got in the whales' lungs and killed them. 27

_____ Maybe the whales were killed by hunters. 28

_____ Maybe the whales swam too close to shore and were trapped when the tide went out. 29

_____ Maybe a storm caused the whales to lose their way. 30

_____ Maybe the whales were frightened by killer whales and they swam the wrong way. to escape. 31

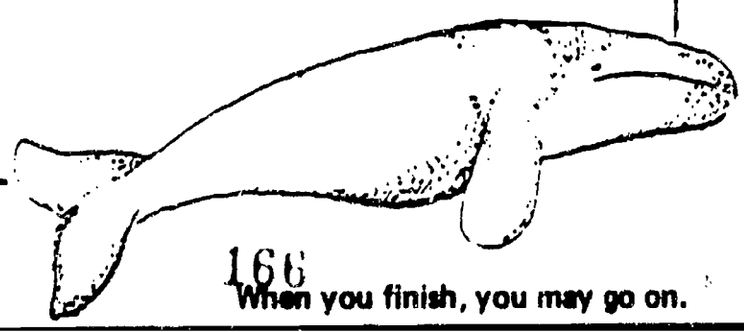
Below are two ideas explaining why the whales might have died. How might the scientists check each idea to see if it is a good answer to the mystery?

1. Maybe a storm far out at sea caused the whales to lose their way. What different things might the scientists do to check this idea? Write your answers below:

☐ 32

2. Maybe hunters killed the whales for their meat and oil. How might the scientists check this idea? Write your ideas below:

☐ 33



When you finish, you may go on.

What do you feel about this problem? Please draw a circle around the answer that tells what you feel:

How much did you enjoy this problem?	Very Little	Little	Medium	Much	Very Much	42
How hard was this problem?	Very Easy	Easy	Medium	Hard	Very Hard	43
How smart are you at problems like these?	Very Poor	Poor	Fair	Good	Very Good	44
How much of your ability did you use?	Very Little	Little	Some	A lot	All my Ability	45
How hard did you try?	Very Little	Little	Medium	Hard	Very Hard	46
Compared to the other students how well did you do?	Very Poor	Poor	Fair	Well	Very Well	47
How happy are you with your ideas?	Very Unhappy	Unhappy	Fair	Happy	Very Happy	48
	1	2	3	4	5	

How important is each of the following things for doing well on this problem?

How hard a student tries.	Not Important	Medium Important	Very Important	49
How smart a student is.	Not Important	Medium Important	Very Important	50
How easy the problem is.	Not Important	Medium Important	Very Important	51
How lucky a student is.	Not Important	Medium Important	Very Important	52

Have you done anything in school this year which helped you with this problem? Tell me about it. 1 2 3

STOP.

What is the main thing you learned from reading the story and considering the problem?

a) about scientists and their feelings?

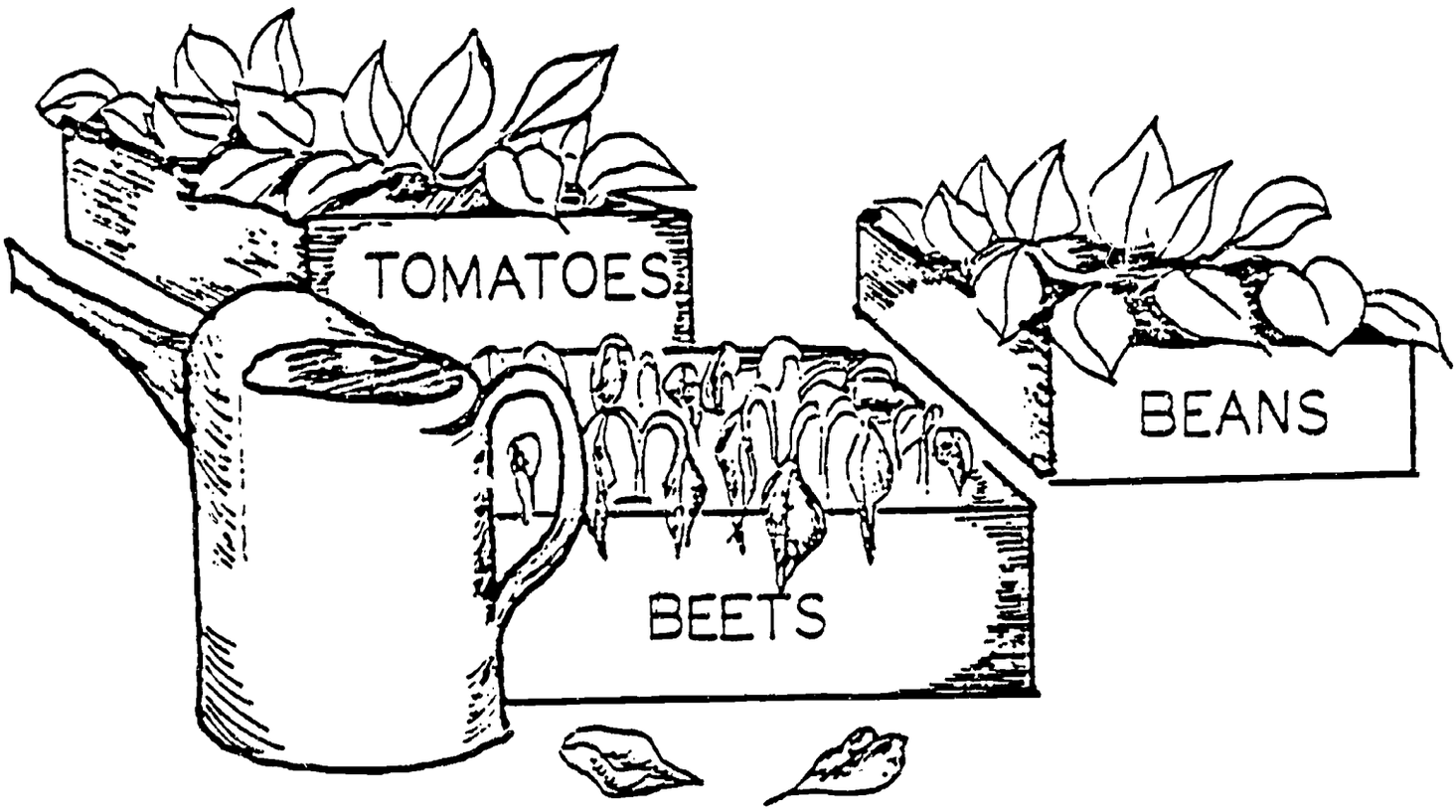
b) how to solve problems like this?

c) that solving problems is fun and worthwhile?

Maria's Vegetable Garden

Maria is 12 years old. She uses a wheel chair. Maria's father works hard but the family is always short on money. Maria decides to help by growing vegetables at home in wooden boxes. A garden will save money. Mrs. Ruiz, a neighbor, gives Maria a book on how to grow vegetables. She also helps Maria plant her garden. But from now on, Maria wants to do everything herself. The only help she needs is from her brother, Carlos. Carlos carries the vegetable boxes up to the roof on sunny days. The rest of the time the boxes are kept on the back porch. In the summer this room gets very hot. In the winter, it gets very cold.

One summer day, when the vegetables are still too small to eat, Maria looks at the plants. Some of the plants are fine. But other plants are limp, and their leaves are turning brown. Here is a picture of what she sees:

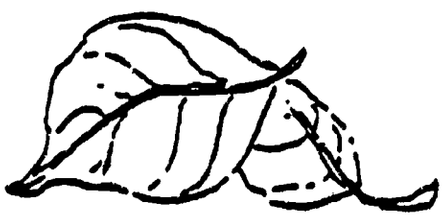


When you have read the story carefully, you may go on to the next page.

What questions might you want to ask about Maria's story and the problems?
Write them below:

12

How did you decide that these are the questions you want to ask? What experiences in school and at home made you think of these?



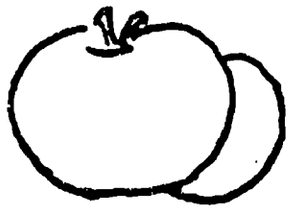
Below are several things Maria might think or do. Read each one. If you believe it is a good idea, draw a circle around either **Very Good** or **Good**. If the idea is poor, draw a circle around either **Poor** or **Very Poor**. Circle the **question mark** (?) if you cannot decide if it is a good or a poor idea.

Maria might buy some more seed and start over again	Very Poor	Poor	Good	Very Good	?	14
What makes you think this is a good or a poor idea?						
Maria might decide the beets are dead.	Very Poor	Poor	Good	Very Good	?	15
Maria's family should eat the vegetables before they rot.	Very Poor	Poor	Good	Very Good	?	16
As a first step, Maria could ask Mrs. Ruiz to figure out what is happening.	Very Poor	Poor	Good	Very Good	?	17
Maria ought to look for a better way to help her family.	Very Poor	Poor	Good	Very Good	?	18
Maria might wonder why only some plants are turning brown.	Very Poor	Poor	Good	Very Good	?	19
	1	2	3	4	5	

When you finish, you may go on.

Maria decides to figure out what might be causing the beet leaves to turn brown. You help Maria. Write down all the reasons you can to explain this. Start each idea at a new number below:
For each reason please try to tell me what in the story or your life or schoolwork made you think of it.

1.



2.

3.

4.

5.

☐ ☐ ☐ ☐ ☐ ☐ ☐
20 21 22 23 24 25 26

When you finish your ideas, you may go on.

Skip this page unless the student wants to come back to it.

Here are some facts. They may help solve Maria's problem:

1. Some vegetables, such as lettuce and beets, grow best in cool weather. Other vegetables, such as tomatoes and beans, grow best in hot, summer weather.

2. Maria looked closely at the beets. The box was not broken or damaged.

3. Mrs. Ruiz tells Maria that there should be no more than 50 beet plants in the box. Maria made four rows of plants. Each row had from 10 to 12 plants in it.

4. The chart below tells about garden pests that attack different vegetables.

Tomatoes	Beans	Beets
Cutworms 	Bean Beetles 	Snails 
Blister Beetles 	White Flies 	Generally pest-free

Study each idea below. If the facts tell you that an idea is probably a good answer, draw a circle around **Good**. If the idea is probably not a good answer, circle **Poor**. Circle the question mark (?) if you cannot tell about an idea because there are not enough facts yet.

Maybe the beets were hurt because the box was dropped.	Poor	?	Good	34
Maybe Maria planted too many beets in the box.	Poor	?	Good	35
Maybe the beets were planted during the wrong time of the year.	Poor	?	Good	36
Maybe the beets were attacked by cutworms.	Poor	?	Good	37
Maybe the soil in the box is not rich enough to grow beets.	Poor	?	Good	38

When you finish, you may go on.

Skip the first two questions.

Below are two ideas to explain Maria's mystery. However, neither of these ideas is very good!

1. Maybe the beets were hurt because the box was dropped. What fact tells you that this is probably not a good answer? Write it below:

39

2. Maybe Maria planted too many beets in the box. What facts tell you that this is probably not a good answer? Write them below:

40

The idea that the beets were planted during the wrong time of year is probably the best answer. What facts tell you that this idea is a good one? Write them below:

41

What do you feel about this problem? Please draw a circle around the answer that tells what you feel:

How much did you enjoy this problem?	Very Little	Little	Medium	Much	Very Much	42
How hard was this problem?	Very Easy	Easy	Medium	Hard	Very Hard	43
How smart are you at problems like these?	Very Poor	Poor	Fair	Good	Very Good	44
How much of your ability did you use?	Very Little	Little	Some	A lot	All my Ability	45
How hard did you try?	Very Little	Little	Medium	Hard	Very Hard	46
Compared to the other students how well did you do?	Very Poor	Poor	Fair	Well	Very Well	47
How happy are you with your ideas?	Very Unhappy	Unhappy	Fair	Happy	Very Happy	48
	1	2	3	4	5	

How important is each of the following things for doing well on this problem?

How hard a student tries.	Not Important	Medium Important	Very Important	49
How smart a student is.	Not Important	Medium Important	Very Important	50
How easy the problem is.	Not Important	Medium Important	Very Important	51
How lucky a student is.	Not Important	Medium Important	Very Important	52

Have you done anything in school this year which helped you with this problem? Please tell me about it. (Answer on back)

1 2 3

What is the main thing you learned from reading the story and considering the problem?

STOP.

What is the main thing you learned from reading the story and considering the problem?

a) about Maria and her feelings?

b) how to solve problems which come up in life?

c) that solving problems is fun and worthwhile?

APPENDIX C

SECOND INTERVIEW

In the first part of the second interview, I asked students about particular concepts they might have learned by watching particular ThinkAbout programs. Since I wanted to see whether they "naturally" recalled the show, I did not mention ThinkAbout. The questions used phrases which might have "triggered" recall of the shows. In the second part I asked them whether they had seen the particular programs which presented the concepts about which they were questioned. In the third part I asked them about specific programs and the total series to see what they thought about it and how important it seemed to them.

1. What would you do to calm your jitters if you had to give a performance in front of the whole school? Pretend that you are doing something that you are good at and have practiced - dance, reciting a poem, gymnastics, a speech - but you are scared.

2. Can you think of a word for these marks on the paper? What are these marks and other things that stand for things called?

$ + R ? 

The word is _____ (supply if necessary). Do you belong to a team/club/group with a _____? Does Abernethy School/our country/the Trailblazers basketball team have one?

What does a _____ do for people? What can you do with a _____?

3. If you had to talk (not write) to a deaf person or a person who speaks no English, how would you do it?

Are there some words or ideas you could make signs (or symbols) for?

Are there some words or ideas you could not make signs for very easily?

4. What do you do when you are given a word problem (or story problem) in math and you think at first that you don't have enough information to figure out the answer?

5. Have you ever noticed a pattern in your mother's behavior? What was it? What made you call it a pattern?

6. (Asked interviewee how he/she would find out about a topic in which he/she was interested but knew nothing about.)

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1. Did you see the show about the grown woman (architect) who returned to her elementary school and remembered how scared she used to get about math exams? In the show she learned to overcome her jitters when she was a girl because her teacher told her to take a deep breath. She finds that her old teacher is now principal and tells her not to be nervous about a meeting coming up....

2. Did you see the show about the girl who kept getting cards with symbols on them? She learned that a boy had been using the cards to write a love message in code, but at first she is wrong about who sent it....

3. Did you see the show about deaf people's sign language? A man leads a class in learning about this language. After the show your class experimented in making up your own signs and then some kids showed the class the ones they had come up with....

4. Did you see the show about the boy who thinks some necessary facts are missing from the math problem he is trying to solve for school? Then he goes to talk to a magician to learn how to do tricks and learns that a famous magician - Count Philip Frederico - actually showed the audience all the information they needed to know in order to figure out how he got out of a water torture cell.

5. Did you see the show about the boy who learned about patterns in school and then noticed an important one at home? An old man who lived in the apartment near him came out at the same time every day to go to the library. One day he didn't come out, and the boy knew that the broken pattern in the old man's behavior meant something. He found out that the man was still in his apartment because he had had a heart attack.

I. Do you remember the show about styles of communication (p. 71)? Three children have a lunch delivery service. They have a hard time collecting a bill from one of their customers. They buy a walkie-talkie that doesn't transmit across long enough distances. They learn (from the customer who doesn't pay soon for his lunches) that they have to communicate their problem to the walkie-talkie company in a certain way if they want to get their money back.

What would you like to know about styles of communication?

Did you talk with anyone you know (at school or home) about the show?
Who?
When?
What did you talk about?

II. Remember the show about the rabies epidemic? A boy and girl had to leave their dog with the vet because it might have had rabies. They worked at school to spread the word about the danger so that people would have their pets vaccinated. They used the school newspaper, intercom announcements, posters, and leaflets to tell students.

Do you think this show had anything to do with the one above? Was it about the same subject or ideas or skills?

What would you like to know about planning a presentation of important information (as the kids on the show did about rabies)?

Did you talk about the show with your friends or family?
Who?
When?
What did you talk about?

III. Can you tell me about the show you just saw? Who were the characters? What did they do? Why?

What was the show trying to teach? What did you learn from the show?

How did you like this show? What did you like about it? What did you not like?

Please tell me about a situation you have been in or might be in some day in which the ideas from this show will help you out.

Did this show have anything to do with the two shows which came before? (The shows are: Styles of Communication, Planning a Presentation, Making a Presentation, Making Your Point, and Making It Come Alive.) Are the lessons you learned from the last few shows related to each other, or alike, in any ways? Explain.

IV. What do you think about the entire ThinkAbout series?

Likes: Dislikes:

What do you think about the discussions your class has after the shows each time?

Likes: Dislikes:

Have you ever seen anyone you would like to be like on the show? What did he/she do that you would like to do or try to do?

Has the show ever helped you solve a problem that came up in your life - at home, with friends, in school? What has it helped you understand or do?

APPENDIX D

ANNOUNCEMENT OF THINKABOUT WORKSHOP ON APRIL 17

COMING WORKSHOPS

COMING T.I.C. WORKSHOPS

April

8 Alcoholism Treatment: Method for secondary health, science, home ec., social studies teachers and counselors

10 A Child's Garden of Eating Educational Program. Nutrition information for teachers of K and 1. One game kit per school available to those who attend. , instructor (Center)

10 Primary PE Skills, Rhythms and Games by ( )

15 Developing Spelling Competencies for teachers of grades 2-6 , instructor. (TSC)

17 Think About TV Workshop by Jeb Johnson, alias for teachers of grades 5 and 6. Door Prize of color TV available to those who attend. (, Room 8)

22 A Child's Garden of Eating Educational Program. Repeat of nutrition information for teachers of K and 1. One game kit per school available to those who attend. (TSC)

24 Managing Stress in the Classroom. will help all teachers identify coping strategies (TSC)

24 Math with on Place Value. Grades 1-4 (TSC)

29 Stop the Clock for Language Arts. has geared information on basic language arts skills for teachers of Grades 3-6. (School, Room 200)

May

6 Reading Literature Through the Library. Librarian, , instructor

8 SMERC Resources for Teachers. will present information on procedures for all PPS staff.

15 Classroom Burnout , instructor

Other Possible Workshops

Filmmaking with
A New Approach to Writing,
Repeat of Language Experience Workshop by

Please call , Ext. to preregister for any of the workshops you are interested in. credit is available when six workshops have been completed.

Together... serving education.