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A Third Dimension Makes The Difference

Probable outcomes of an emphasis on process.

RECENT ASCD Yearbook writers and other persons interested in elementary and secondary education have taken a close, hard look at the student within the school setting. These writers have attempted to derive implications from the work of persons interested in the concept of *process* for school programs.[1] However differently various writers define the overworked word *process*, inherent in the meaning are concepts of on-goingness, openness, growth, movement and development as opposed to such concepts as staticism, rigidity and inertness.

Yet, despite the interest in vitalizing school programs with elements of this rather elusive ingredient, a relatively small body of literature exists to aid instructional leaders who wish to design in-service programs focusing upon helping teachers plan learning opportunities embodying some of the central ideas concerning process.

The purposes of this article, therefore, are to examine certain beliefs about process applying equally well to in-service programs and programs for children and youth, to describe selected ingredients of process, and to consider new relationships between teachers and students when process is given significant attention.

Process contains many ingredients which can be blended in various ways. In the paragraphs which follow the ingredients or aspects of process discussed include thinking, communicating, decision making, clarifying feelings and values, and creative production. These ingredients are not a complete list of discrete elements since decision making involves thinking and communicating; creative production can involve any of the other aspects. The point in considering these ingredients separately is that they can serve unique as well as overlapping functions.

Process is seen as an important third dimension in planning for in-service programs and programs for children and youth. Although many educators do give attention to process, it is oftentimes not treated as fully as the other two dimensions of teaching: knowledge and methodology. Views of these two dimensions and their relationships to process are logical topics for consideration, but limitations of space preclude the temptation to digress into these areas. Nonetheless, knowledge, process and methodology are inextricably related and views held about one of these topics influence attitudes toward the other two.

[1] ASCD Yearbooks of the past two years are: *Perceiving, Behaving, Becoming: A New Focus for Education*, Arthur W. Combs, editor, 1962; and *New Insights and the Curriculum*, Alexander Frazier, editor, 1963.

Basic Beliefs About Process

One who holds that planned attention should be given to process in projecting learning opportunities may base his position on four beliefs.

First: *Providing a learning situation which gives direct attention to helping individuals become aware of the various aspects of process leaves with persons tools for wise and appropriate behavior in a variety of situations.*

Basically, process is a dimension of methodology which enables persons to act with greater insight and precision because of attention to some of the central elements of human personality. These elements are common to persons of all ages; therefore, an in-service program which helps teachers understand these elements is providing teachers with kinds of knowledge and opportunities that can have far-reaching effects in elementary and secondary school classrooms.

Second: *Each subject or topic which a school system or school identifies as being important for continuity in program can be taught in a variety of ways.*

Although it is common practice for teachers to have available to them materials suggesting appropriate content and methodology for a given grade, these materials often do not give attention to process as it is defined in this article. That teachers have the freedom to and should plan for process elements in their teaching is a concept that can be developed in preservice and in-service programs.

Third: *Tools are necessary to discover the ingredients of process which an individual is utilizing.*

Among existing tools studies of interaction among teachers and pupils may be among the most powerful. Such studies provide for partial description of that which is transpiring in the teaching learning situation.[2] As attempts at refining existing tools which describe encounters among children and teachers continue to be made, means may be found to capture additional sights, sounds and smells of the classroom. Modern technology, such as eight millimeter movie cameras and tape recorders, may be used to enhance descriptions of teaching. Furthermore, instruments for describing behavior need to be made and adapted that are suitable for the analysis of student-student conversation and interaction as well as teacher-student conversation interaction.

Fourth: *In addition to continued refinement of instruments designed to describe classroom behavior, hypotheses should be formulated and tested to discover the kinds of interaction patterns that foster various aspects of process.*

For example, it can be hypothesized that a teacher interacts with an individual student in such way that he makes his own decision about how he will accomplish a given task. The student will show evidence of greater involvement in his work than if he had not had the opportunity to participate in the decision making.

Ingredients of Process

Increased attention to process should help those responsible for planning learning opportunities to determine better the relationship of methodology to

[2] Perhaps two of the most recent compilations of work on teaching and interaction are:
Arno Bellack. *Theory and Research in Teaching*. New York: Bureau of Publications, Teachers College, Columbia University, 1963.
"A Symposium on Current Research on Classroom Behavior of Teachers and Its Implications for Teacher Education." *Journal of Teacher Education* 14:235-325; September 1963.

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content. If process is given a prominent place in planning for instruction, then whether to individualize or group a class for learning, whether to centralize or decentralize teacher education, whether to lecture or use discussion, are not central concerns. A prior and more significant question is: How can teachers or instructional leaders best design learning experiences which will leave with the student tools for more effective behavior in a variety of situations? Answers to this prior question will help determine criteria for methodology and organization.

Each of the ingredients of process integral to process can and should be spelled out rather fully in order to develop process carefully and systematically in teaching-learning situations. Space allows only for a very brief comment about each of five aspects.

Thinking

One aspect of process that should be developed is thinking. Thinking "is a process moving from some initiation to some conclusion or solution rather than the process of increasing skill or perfecting the execution of the solution." [3] The skills involved in thinking have been catalogued in many ways. Guilford's well known concept of convergent and divergent thinking is a ready handle for classifying certain of the thought processes.[4] Fluency, originality, and ability to elaborate are among divergent skills. Generalizing, summarizing, and synthesizing are convergent skills. Another category included in most schemes is that of evaluative thinking.

In-service programs designed to help teachers understand and *utilize process* should include activities necessitating a wide range of thinking skills so that teachers become aware of what it "feels" like to think in ways new to them. Such attention to thinking in in-service programs would help teachers in their search for ways to give planned attention to thinking in the classroom.

If instructional leaders provide opportunities for teachers to . . .

. . . use a wide variety of thinking skills, including divergent thinking

. . . become aware of the relationship of a specific thinking skill to the accomplishment of a task

. . . identify patterns of interaction that evoke various thinking skills;

then teachers may [5] provide opportunities for children and youth to . . .

. . . become proficient in the use of an increasingly large number of thinking skills

. . . see the relationship of the improvement of a thinking skill to a task

. . . develop patterns of student-student interaction that intentionally enhances specific thinking skills.

Communicating

Communicating is a second ingredient of process that should be given planned attention in in-service programs. Communication refers to sharing, to imparting

[3] David H. Russell. *Children's Thinking.* Boston: Ginn & Co., 1956, p. 6.

[4] J. P. Guilford. *Personality.* New York: McGraw-Hill Book Company, 1959.

[5] In this statement and those to follow which show the relationship between in-service programs and programs for children and youth, the word *may* is used instead of a stronger word, such as *will*, since the latter predicts the degree to which each teacher will transfer principles utilized in in-service programs to classroom situations.

and transmitting ideas, both through verbal and non-verbal means. Again, it is important that teachers gain an awareness of communication skills so that they in turn can help children develop necessary insight.

Among elements which should be given attention are: understanding with increased precision the spoken and written word; identifying emotional overtones in words or phrases; understanding symbols used in art, music, architecture, and mathematics; being aware of the message conveyed by an individual's bearing, mannerisms, and appearance; utilizing different levels of abstraction wisely; and understanding the use of space or distance, including physical, psychological and ideational distance. In-service programs designed to help teachers plan more effective programs in communicating should help teachers understand the more elusive, intricate and subtle modes of communication as well as the superficial and obvious.[6]

If instructional leaders provide opportunities for teachers to . . .

. . . *become aware of how they are communicating*

. . . *understand the kinds of inner feelings, value and beliefs, that speech and manners betray*

. . . *realize the difference between the level of abstraction at which they ordinarily operate and the level of abstraction which will enhance the articulation of an idea;*

then teachers may provide opportunities for children and youth to . . .

. . . *become aware of strengths and weaknesses in their own modes of communication*

. . . *bring into closer harmony their inner feelings and values and their outward expression so that persons may develop increased authenticity*

. . . *become aware of the necessity to maintain a balance between the general and the specific if the message from the sender is to be heard with the intended meaning by the receiver.*

Decision Making

A third phase of process which should be given attention is that of developing conscious awareness of sources of decisions. Related to this, of course, is an understanding of the decision making process. In-service programs should help teachers understand when decisions are appropriately made by the teacher, by the teacher and others, and by others. An awareness of the sources and methodology of decision making should provide greater opportunities for teachers and children and youth to utilize wisely the freedom that is theirs to make certain kinds of judgments and to accept judgments of others when appropriate.[7]

If instructional leaders provide opportunities for teachers to . . .

. . . *understand the factors which must be considered in the decision making process*

. . . *realize that many decisions affecting the classroom situation that teachers often think are made by sources outside themselves can and should be made by them*

. . . *take the responsibility for making decisions and to be comfortable with the consequences;*

[6] One book that tackles some of the intricacies of communication is Michael Polanyi, *Personal Knowledge: Towards a Post-Critical Philosophy*, Chicago: The University of Chicago Press, 1958. See Chapter Five, "Articulation," p. 69-131.

[7] For further reading see: Joseph D. Cooper. *The Art of Decision Making*. Garden City, N.Y.: Doubleday and Co., Inc., 1961.

then teachers may provide opportunities for children and youth to . . .

. . . realize that certain steps are taken, consciously or unconsciously, when a decision is made

. . . differentiate between decisions which can and should be made by them, those that should be made by them and others, and those that should be made by others

. . . evaluate the results of decisions, learn to live with poorly made decisions, and increase skill in the decision making process.

Value Clarification

A fourth aspect of process is that of value and feeling clarification. This is a task which may receive little planned attention in curriculum development. In-service programs can help teachers gain increased skill in this technique and can assist teachers in providing opportunities for children and youth to aid each other in clarifying values and feelings. In-service programs can give attention to the following: the nature of questions that clarify feelings and values, the kinds of learning situations that cause students to reflect upon their values and feelings and the kinds of experiences that provide the opportunity to test values.[8]

If instructional leaders provide opportunities for teachers to . . .

. . . see the relationship of their feelings and values to their mental processes

. . . clarify their own feelings and values about factors relating to their own teaching situation

. . . learn techniques for the clarifying and testing of values;

then teachers may provide opportunities for children and youth to . . .

. . . understand that feeling, valuing and thinking are inextricably bound together

. . . clarify their feelings and values about crucial issues which are appropriately handled in the school program

. . . learn techniques which persons can use to enhance understanding of the values and feelings which affect decisions.

Producing Ideas

A fifth aspect of process to which attention should be directed is creative production—producing ideas, new ways of relating, new ways of seeing persons and objects, new understandings, new patterns, new sources of courage and feeling and those dimensions which add fullness to life. In addition, attention should be given to the process of producing plans, hypotheses and decisions. If teachers are helped to feel and understand creative production during in-service work, they can more capably help children and youth know the thrill that comes from producing something new.

If instructional leaders provide opportunities for teachers to . . .

. . . experience the satisfaction of producing something new

. . . become familiar with available knowledge about the creative process

. . . learn to tolerate the conflicts, uncertainty, and other kinds of emotional

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[8] See: Louis Raths. "Sociological Knowledge and Needed Curriculum Research." James B. Macdonald, editor. *Research Frontiers in the Study of Children's Learning.* Milwaukee: School of Education, University of Wisconsin-Milwaukee, 1960, p. 21-34. Revised under the title, "Clarifying Values." Robert S. Fleming, editor. *Curriculum for Today's Boys and Girls.* Columbus, Ohio: Charles E. Merrill Books, Inc., 1963.

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strain that may accompany the birth of an idea;

then teachers may provide opportunities for children and youth to . . .

. . . know the thrill that comes from creating something new to one's self

. . . become familiar with the nature of the creative process, as such a study is suitable to the age and maturity of the child

. . . realize that to produce something new and worthwhile may be accompanied by problems with which they should learn to cope.

Many other facets of process might be discussed, but attention now is turned to new relationships that might result between teachers and children or youth when in-service programs help teachers grasp the dimension of process.

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A Matter for Speculation

Since little evidence exists to help educators know what the outcomes might be if increased attention were given to process, one can only speculate. At this point little research is available which would help in the design of an in-service program focusing upon process. However, one can guess with a degree of certainty about the result of increasing teacher and student interest in furthering their own understandings of and competencies in using certain processes.

Because the concept that an adult is a finished product or a graduate a finished teacher is not inherent in the idea of process, basic shifts in understanding should accompany process orientation within a classroom. Teachers and pupils alike are working toward common goals of utilizing effectively a wider range of thinking skills, of communicating with greater facility and understanding the most subtle of messages, of making wiser decisions, of possessing clearer values, and of producing more creatively. This set of common goals should stimulate greater pupil-teacher and pupil-pupil empathy.

It is the feeling of this writer that teachers equipped to help children and youth handle process with increased effectiveness will not develop as a result of in-service organizational schemes. Rather, teachers will develop competency in process through contact with instructional leaders who themselves have developed an awareness of this central dimension of life and who have the interest, enthusiasm and ability to communicate to others the importance of process.

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