THE PROCESS CURRICULUM

Volitional Competence

Goal Setting

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DEFINITION

Goal setting is the process of planning ones's future by envisioning a desired condition or event and organizing one's actions in order to reach it. Goal setting requires differentiating among possibilities which might be realized in the future, selecting certain ones while rejecting others, and formulating a sequence of actions to translate those possibilities into actuality. This process applies to short-range and long-range goals as well as goals of varying degrees of significance.

DESCRIPTION

In the organismic philosophy of Alfred North Whitehead, existence is described as a continuous and dynamic process of development through the translation of potentiality into actuality. Since this translation is the fundamental purpose of life itself, for it to take place in a way that would jeopardize survival or debase the quality of life would be self-defeating. Setting goals is the primary means of activating purpose and providing structure for the actualization process; thus the kinds of goals a child sets is of no small concern. Pursuing certain goals can put one's very survival into jeopardy or seriously undermine its quality. Ultimately, competence in goal setting depends on formulating goals that enhance the quality of survival for oneself and for others.

Psychological potentialities become actualized through learning. When an individual learns something, new possibilities immediately become apparent and invite the setting of goals. Achieving these new goals represents a successful advance into the future and increases one's confidence. The individual who loves learning continually rides the crest of a wave of discovery and makes what Whitehead calls the "creative advance into novelty"--an advance that reflects control over one's own destiny.

Experimental evidence from the field of psychology has shown that children have a natural drive to learn. Robert White (1959) suggests that there is an innate motivation to achieve mastery over the environment, for the literature shows that human infants and other primates enjoy trying to solve new and challenging problems even when they do not anticipate receiving a reward. The child's drive to achieve mastery over the environment makes him responsive to novelty and challenge. As he struggles to understand new things, new powers and abilities are generated and he is spurred to new and greater challenges.

Learning occurs through interaction with the environment. If the environment is rich and the quality of the child's interaction with it is high, the child will continually develop new powers and will be satisfied and happy. If the environment is barren and interaction with it is

limited, the child's potentialities will be surpressed and he will feel frustrated and helpless.

If a child is to become a competent learner, responsible for releasing his own potentialities, he must set goals that require interacting with those environments that will increase the quality of survival and must avoid those that do not.

A goal is an explicit and definitive conceptualization of a future event or condition. That event or condition itself often suggests what actions are necessary to realize it. Goal setting is a key to the actualization of potentiality because, through differentiating possibilities as achievable goals, and integrating actions into a sequence that leads to the goals, abstract purpose is translated into an ordered sequence of actions designed to fufill that purpose.

A plan of action brings stability and order to life because it provides a basis for making rational decisions about what to do at a given moment. It also brings a sense of security for it enables the child to anticipate what he will need to do in the future. Having a definite plan for the future makes the difference between reacting impulsively to events on the basis of the mood of the moment and controlling the course of life by making conscious decisions on the basis of how particular actions will fit into a plan designed to fulfill a specified purpose.

An example of this is the person who decides to become a doctor. This decision structures his life in several ways. The requirements for graduating from medical school will determine the course he takes and create expectations for his level of achievement. On a more specific level, he may have to decide whether to spend an afternoon going out for ice cream or studying for an exam. If spending the time in an ice cream parlour will undermine his long-range goal, he should view it as a possibility that will have negative consequences and reject it.

A series of studies conducted by Edwin Locke and Judith Bryan (1969) confirmed the hypothesis that a person's goals and intentions are related to his achievement. Locke and Bryan found that all the incentives usually used to stimulate efforts toward achievement, such as money, praise, competition, and knowledge of results, had no significant effect on motivation after the effects of goal setting had been accounted for. In another study by Charles Hughes (1965), a "goal oriented" group was found to have qualities that correlated highly with attributes of people who were motivated toward achievement. The opposite group in the study was termed "task oriented" and was characterized by a preference for working on specific tasks set by others, thus avoiding the necessity of setting goals of their own. Characteristics of this group correlated with indicators of test anxiety and a desire to avoid failure.

In one experiment, Bryan and Locke (1967) identified a group of individuals with low achievement motivation and negative attitudes and gave them a set of tasks with high and specific goals. Those in a second group, with high achievement motivation and positive attitudes, were given the same tasks but were instructed to do their best. The results of the experiment indicated that the group with specific goals achieved more and enjoyed the task more. By the end of the experiment, the two groups were preforming on similar levels. Bryan and Locke concluded that specific goals increase both achievement and satisfaction.

T. A. Ryan (1970) suggests that goals increase achievement by helping the individual focus attention on the most relevant aspects of the task. This enables one to organize and integrate actions in ways that are consistent with completion of the task. In addition, since achievement is a source of satisfaction, the habit of setting goals can increase one's ability to sustain certain actions over longer and longer periods of time rather that yield to the temptation to act simply to obtain immediate gratification even though the result will be of no real significance.

Key factors in Goal Setting

As stated earlier, a fundamental requirement for competent goal setting is knowing what kinds of goals are destructive to oneself or to others. This means that goals which impair the fulfillment of biological, psychological, and spiritual needs must be avoided. For example, one who aspires to be an Olympic pole-vaulter could not allow the desire to practice to interfere with the need to eat and sleep because this would undermine the primary goal. Thus, making certain that goals serve the ultimate purpose is important if the overall result is to be constructive.

An important factor in guaranteeing that the choices one makes will lead to constructive action is basing decisions on moral principles derived from ultimate purpose. Moral principles are guidelines that direct one toward good and safeguard one from evil. Goodness is judged according to the degree to which a thought or action is consistent with man's ultimate purpose of actualizing potentiality and enhancing the quality of survival, while evil is determined by evaluating the degree to which thoughts or actions undermine survival or suppress one's own or another's potential. Moral principles derived from this definition of good and evil can guide one in making choices about the relative value of each possibility under consideration.

Goals should be specific rather than vague and must balance the need for challenge against the need for success. Bryan and Locke (1967) found that having a specific goal improved achievement and task enjoyment even if

the goal seemed to be unattainable. The high level of aspiration was not frustrating because success could be obtained by articulating sub-goals that could be completed thereby bringing one closer and closer to the goal, or by improving one's performance.

In balancing the need for challenge against the need for success, the effects of failure must also be considered. Franken and Morphy (1970) found that repeated failure proved frustrating and led to setting goals that were either too low or unrealistically high. One may set goals that are too low to protect oneself from failure, or goals that are unrealistically high so that one can dismiss the goals as being unattainable without discrediting oneself. However, it is also possible that some degree of failure can be useful in refining the goal-setting process and in cultivating individual growth. This is supported by research findings which show that individuals who have high need for achievement choose goals of moderate risk where the chances of success and failure are just about equal. This research also suggests that apathy stems from a lack of opportunity for success, and that boredom can arise when there is no possibility of failure.

Steps in Goal Setting

Competent goal setting requires both the ability to make effective decisions and a moral and purposeful orientation toward life. It is a process which begins in childhood and continues to be refined well into adulthood.

Goal setting depends upon an understanding of causation in personal terms--that one's behavior has consequences and that one is responsible for those consequences. Such an awareness is acquired through feedback from the environment and must be cultivated from infancy because the child learns from the reactions of adults in his environment what behavior and therefore what goals are acceptable or unacceptable, consistent reactions of the child's parents and teachers are particularly important.

Another important aspect of learning how to set goals is being able to see the difference between one's present condition and the condition one hopes to achieve. In a study conducted by Sara Winter (1968), people who had difficulty imagining types of behaviour other than their present behavior had difficulty initiating self-directed change. Being able to discern the discrepancy between how one acts and how one wants to act is essential to being able to set specific goals designed to move one from one state to the other.

Choosing and setting goals starts with imagining the future and culminates in committing oneself to a definite course of action. The following steps are involved:

1. directing attention toward the future (At this stage the plans have not been formulated.)

2. identifying different possibilities that may be realized in the future

3. assessing the consequences of each possibility

4. determining whether the consequences are consistent with the ultimate purpose

5. eliminating possibilities that are not consistent with the larger purpose and choosing the best among remaining positive alternatives (This involves personal preference and aesthetic judgment as well as decisions about long-range efficiency and value.)

6. determining the feasibility of a particular goal by assessing its prerequisites

7. establishing sub-goals and integrating them into a coherent plan of action (This step is critical because it involves determining the exact course of action. Failure to organize clear and realistic sub-goals will lead to inefficient use of energy and may ultimately make achievement of the goal impossible. Successfully achieving the little goals brings a sense of accomplishment that increases motivation.)

8. committing oneself to the goal and the specific plan of action (Commitment means assigning priority to the plan and discontinuing actions that detract from it.)

9. coordinating the goal with many other goals which operate at the same time (The way in which goals are coordinated and given priority will largely determine the extent to which any one goal will be realized and will influence one's overall effectiveness.)

Although this specificiation deals only with the process of goal setting, it is important that children learn how to intitiate action to accomplish a goal they have set. Many people are good at setting goals but poor at accomplishing them. Therefore, this speicification must be implemented in conjunction with specifications that deal with other processes in the category of volitional competence. These processes are briefly set forth here, so that implementation of the goal-setting

specification can be undertaken in a way that does not exclude the process, even though they may not be the points of emphasis.

The volitional process that figures most prominently in the realization of goals is will. Will is concerned with the initiation and maintenance of activity until the goal is accomplished. It consists of three sub-processes: self-arousal, perserverance, and effecting closure. Self-arousal refers to the ability to move from a state of rest to a state of action. Preserverance is the process of directing appropriate amounts of energy toward the realization of the goal. Perserverance plays an important role in overcoming obstacles that arise in the course of striving. Effecting closure refers to the ability to perform those actions necessary to complete the goal (Conway, 1973).

Another volitional process that influences the ability to meet goals is fantasy. Fantasy, an aspect of the process of attention, involves imagining what it will be like to complete the goal. Fantasizing about the final result stimulates an unobstructed flow of action directed toward the projected state of actualization.

An important aspect of volitional competence that is related to goal setting is evaluating the progress one is making in meeting a goal. Evaluating progress involves analysing how energies are being used and deciding whether or not modifications are needed. Flexibility is important if an evaluation is to be effective, because one must be able to set a new sub-goal or alter or abandon the goal itself if new developments or information indicate that the goal cannot be accomplished or is no longer useful. This aspect of goal setting will be more fully discussed as an aspect of the process of perserverance.

For an example that includes all of the steps outlined above, consider the individual who decides to find a new job after working at a rather dull job for two years. First he considers various possibilities: exploring the Amazon, working for the FBI, hitch-hiking to Alaska, or opening a hospital in Zambia. Because he realizes that he wants to work closely with others and help people in some way, he decides that working in a hospital seems to be the best choice. While his academic background precludes the possibility of entering medical school, and while he feels that Zambia is too far away, he thinks that a job as a medical assistant might be possible. Knowing that others have obtained training at night school, he decides to become a medical technician at a nearby hospital. With this goal in mind, he asks about requirements for the position and chooses a course of study that fits into his work schedule. Once he realizes that he has a good possibility of achieving his goal, he has the incentive to continue at his present job so he can pay his tuition and to work hard at the studies necessary to achieve his goal.

In conclusion, it should be remembered that throughout the process of goal setting the relationship between goals and ideals must be held clearly in mind.   Goals that are consistent with noble ideals, that call for the dedication and inspire the individual to greater accomplishments and aspirations, will actualize potential at an optimum rate and structure the use of energy most effectively.

THEORETICAL JUSTIFICATION: ANISA

Goal setting lies at the core of an individual's effort to translate his hopes and aspirations into reality.   Competent goal setting is an indispensible step in consciously directing the process of actualization at an optimum rate.   It thus plays a major role in becoming a competent learner.

As discussed in the preceding section, setting a specific goal can encourage a maximum level of achievement.   It aids in channeling energy and coordinating actions.   By setting a goal an individual can assume responsibility for guiding the process of his own becoming, thereby ensuring that his energy will be used in ways that will foster growth and avoid stagnation, boredom, or frustration.   Goal setting thus plays a major role in the development of learning competence—it requires the conscious ability to differentiate and integrate experience into meaningful patterns which are generalizable.

Setting goals is implicated in the actualization of all other potentialities because the goals one sets determine what will be attended to and where energy will be invested.   If a child's goal is to learn how to read, then that goal predisposes him to react positively to everything that reading entails.   This gives significance to the task and increases motivation to master the processes that comprise reading.   Goal setting can thus motivate children to become adept at letter and word recognition and sequence comprehension.

Goal setting is one of the processes that make up volitional competence.   While goal setting depends on attention (i.e., focusing on possibilities and fantasizing about the future), once the goal is set, the goal itself becomes a major force in directing attention by defining exactly which elements in a particular activity are relevant to the purposes of the individual.   Furthermore, the volitional processes that make up will (arousal, perserverance, and effecting closure) presuppose that a direction has been chosen and that there is a desire to channel energy toward achieving a particular goal.

Finally, goal setting is essential to the development of moral competence because the goals one sets dictate what one's actions will be,

which in turn determine the quality of one's interactions with others. Goals that are in harmony with moral principles guarantee that actions will be socially beneficial.

DEVELOPMENTAL CONSIDERATIONS

Fostering competent goal setting requires some knowledge of how goal setting develops in the maturing individual. While little research has been done to determine the exact stages in the development of goal setting, enough information exists to suggest a general outline of how the child's volitional capacity develops and enables him to assume some control over his future.

The antecedents of goal setting lie in the primitive needs and aversions of the newborn infant. Those needs include biological ones like hunger and thirst, as well as a desire for contrast, novelty, and suprise (White, 1959; Hunt, 1965; Ryan, 1970; Buhler, 1968; Berlyne, 1960). Aversions protect the infant from discomfort and potentially damaging experience. As he matures, his ability to express his desires become more differentiated—one type of crying means he is hungry, another indicates he needs his diapers changed, and yet another means he is tired.

When cognition develops and language emerges significant change takes place. Gradually the child becomes aware of his needs and is able to express them. His growing awareness of himself and the ability to represent his needs symbolically enables him to regard them abstractly. The child's growing power of abstraction and self-awareness make him conscious of his needs, which in turn makes him capable of controlling actions to fulfill them. The ability to consciously control actions related to need fulfillment enables him to defer gratification and frees him from being bound to the present moment. The ability to anticipate satisfying needs in the future lays the foundation for goal setting because it enables the child to postulate possibilities that can be met by consciously pursuing a given course of action. Thus while the goals of the young child tend to be simple, immediate, and specific, as he learns to anticipate the more distant future and to think abstractly, his goals become increasingly more complex, long-range, and general. As the individual becomes more aware of the long-range, complex, and general goals of his life, he also becomes more proficient in breaking down those goals into more immediate, simple, and specific sub-goals which guide everyday actions.

The development of cognition and language parallels the emergence of the awareness that one's actions have consequences for which one is responsible. Piaget and his collegues (Piaget, 1932) have shown that young

children tend to act without considering how their behavior affects others. The child's increasing awareness of the consequences of his actions on others causes him to pass from the stage where his needs are primarily egocentric to a more mature level that witnesses the emergence of aspirations formulated around ideals. Maturity involves increasing competence at translating purpose into concrete actions through goal setting.

These developmental directions of goal setting must also be viewed in conjunction with other emerging psychomotor, perceptual, cognitive, affective, and volitional competencies and directly depend on an understanding of responsibility for one's actions and the role of moral principles in regulating human behaviour.

EDUCATIONAL OBJECTIVES

One of the purposes of the ANISA process curriculum is to help a child progress from having no sense of future to becoming a competent goal setter. Several other processes are closely related to the development of competency in goal setting: the development of adequate linguistic structures for dealing with the future, a sense of personal causality, and an ability to imagine different kinds of behaviour. These processes are both prerequisite to the development of goal setting and are themselves strengthened by it.

Bearing in mind these related processes, the following educational objectives can be defined based on the steps of goal setting as outlined on page 5. From the learner's point of view they include:

1. developing the ability to direct attention to the future

2. identifying possibilities for realization in the future

3. assessing the consequences of realizing the possibilities

4. determining whether the consequences of achieving those possibilities are negative or positive in terms of moral principles

5. eliminating the negative alternatives and choosing the most desirable ones

6. evaluating the feasibility of achieving a chosen goal

7. determining sub-goals and integrating them into a coherent plan of action

8.   making a commitment to carry out the chosen plan of action

9.   coordinating the goal with other goals that might be operating at the same time

10.   modifying the goal as necessary in light of current circumstances

PROTOTYPICAL LEARNING EXPERIENCES

Competence in goal setting develops through interaction with the environment. But what kinds of environments and interactions lead to goal-setting competence? The environment must invite the child to interact with a wide variety of objects (for example clay, pipe cleaners, paints, blocks, etc.) so that in the course of manipulating objects, the child can see the relationship between cause and effect. As the child matures, the environment can become more complex and diverse, and access to materials can increase as the child learns how to handle them properly. For example, the child can be taught to use a tape recorder, record player, books, pencils, and other similar materials. He can also learn where to find the materials he needs. Thus, the environment must be arranged so that choice can figure prominently in the child's experience; part of the child's time must be used in self-determined ways.

The choices the child makes must serve the larger purpose of maintaining unity in the social group to which he belongs. Maintaining unity is the key factor in survival and therefore a criterion of moral behavior. Adults play a critical role in the development of the child's understanding of moral principles on which the maintenance of unity depends. The approval or disapproval they give as children pursue goals will form the only basis the child has for judging the consequences of pursuing particular kinds of goals and for learning what kinds of goals are acceptable. Consequently, adults should give clear and consistent feedback. For example, if a child is allowed to ignore ground rules and principles on some occasions but not on others, he will have difficulty knowing how to use and apply them as he sets his goals.

Another important factor is modeling competant goal setting. The way adults set and meet goals as they organize and conduct activities will significantly affect how children view the process of goal setting.

Timing of children's activities is particularly important. If enough time is not allowed for children to set goals and achieve them, they will be deprived of the intrinsic satisfaction experienced when goals are achieved. Because the satisfaction of achieving goals is a major motivating force for continuing efforts to set and pursue goals, and

because children work at different paces, teachers must take care to see that each child has as much time as he needs.

EXPERIENCE I

Objective

Decide on a specific bodily movement and direct attention toward the action required to make the accomplishment.

Materials required

Whatever may be required depending on what is to be accomplished.

Space

Any space that allows room to move freely.

Activity

Have children stand in a position that allows them to move. After instructing them not to move until given the signal, ask the children to decide on one movement they would like to make. After allowing time for them to decide, give a quick signal, like a finger snap or hand clap, and watch for exactly one movement. Children should "freeze" after each movement; this makes it stand out from their other movements. Coaching, by saying things like "get ready," "not until I say so," or "remember, only one single movement—any movement you choose, but only one," will help them understand that they must make a decision, isolate them from everything else, and perform the action.

Once the children have chosen the idea, the signal can be varied from fast to slow or from loud to soft. The kind of actions that the children are asked to preform can vary from one quick movement to one very, very slow movement.

Evaluation

If children hesitate or make uncertain movements, they probably were not really clear on their objective or goal. Coaching ("What will your leg do?" or "This time, think about moving only one arm") may help focus attention.

Variations

The same approach can be used with a crayon and paper, a ball of clay, or a small stack of blocks. Virtually any medium or material that allows a child to make a decision that creates a quick change is suitable. Eventually, time periods can be extended so that the child is asked to conceptualize what shape he will give his clay in fifteen seconds, in thirty seconds, etc. However, making a decision about what he will do is the focus of the activity.

EXPERIENCE II

Objective

Perform a service for someone by fulfilling a specific need.

Materials required

Whatever is required for the activities the children plan.

Activity

Suggest that each child choose someone to help or serve. They may decide to serve their parents, brothers, sisters, grandparents, friends, a teacher, a custodian, members of the cafeteria crew, or senior citizens. Some children may work in groups; others may work individually. The experience may take a few minutes or it may last several days.

Before any plans are made, the children should discuss what service is and how one decides what will be of service to others. After the children have demonstrated that they have a conscious awareness of the goal state, they may decide what service they will perform and should delineate the steps that have to be taken to perform the service. For example, the children might choose to serve their friends by making the cafeteria pretty, and then pick flowers and put them on the tables in the cafeteria; they may decide to help to make the custodian's job easier, and then pick up litter on the school grounds; or they may choose to help their mother prepare meals, and then set the table every night before dinner or make their own lunch each morning to take to school. The teacher can help them monitor their progress and can provide necessary guidance and encouragement when necessary. The teacher can also see that all the projects are recorded on a chart. This gives the children a feeling of unified action toward a shared purpose and builds anticipation and motivation.

Evaluation

The child's ability to conceptualize the goal state can be evaluated according to the degree to which the child's plans are based on a

consideration for what will actually help the person the child wants to serve. Another indication of how clearly goals have been conceived is the child's ability to articulate clearly the sub-goals that lead to the accomplishment of the goal.

OTHER EXPERIENCES

Virtually any activity can be used to strengthen and reinforce the child's ability to set goals. Some examples are: deciding to make a painting and the determining what materials will be needed; choosing to read a book and then specifying the number of pages; deciding to build a house and then making a design, choosing the materials and describing the steps that need to be taken to complete it. The critical factor in guiding the child in goal-setting experience is helping the child to conceptualize clearly the goal state. This step is the keystone of the goal-setting process. On it depends the formulation of sub-goals and the arousal of energy needed to initiate action.

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