

CHAPTER VI

ACTUALIZING AND FUNCTIONALIZING

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1. ACTUALIZING

1.1 Conceptual analysis

"Actualizing" essentially refers to the event by which "remainders" (representations, concepts, relationships, methods, etc.) from earlier learning contents and modes of learning are recalled and are again made **explicit** (Van der Stoep, 1973, p 109). This prepares the foundation for fruitfully linking up with and giving meaning to new learning content.

To be able to actualize certain principles continually have to be taken into consideration, namely, the principles of activity, individualization and tempo differentiation.

1.2 A concise elucidation of the general principles of actualization

Principle of activity: A child yearns to be active. Initially he has to be guided to choose, decide and act correctly so that eventually he will act according to expectations. (Exemplify [do for] - do something together - do something by one's self).

Principle of individualization: Each person shows a unique individuality, particularity, singularity, uniqueness, freshness and originality that has to be allowed for, namely, what-one-is and what-one-can-be, that is to say, the learners potentialities. There has to be a real attempt at actualizing ways of inter- and intra-communication (Van der Stoep, 1973, p 114). (Also compare differentiated teaching).

Principle of socialization: As a principle of actualization, it can only acquire real meaning if its point of departure is the primordial being-with-others (Mitsein). In a didactic situation, the child as well

as the adult has to be prepared to establish contact or enter a dialogue (encounter). The adult is under the imperative of his educative task while the child increasingly wants to be an independent someone himself. From "I" and "you" an "us" is born which vigorously fuses us together for activities and which enriches both of us.

Principle of tempo differentiation: The principles of actualization effectively brings into motion the planned lesson structure. The movement of the lesson structure manifests itself in the course of the lesson because necessarily there has to be a beginning, a progression and an end. In a lesson situation, the teacher and child are co-responsible for a good progression or lesson tempo. Unrealistic demands lead to frustration. A slow tempo is required for exposing a new theme and a quicker tempo for the lesson phase of functionalizing; that is, there is a variation in tempo. An inflexible timetable and unassimilated learning content might be detrimental to this principle of actualization.

A further distinction is made between the learning child's self-discovery where he enters reality in unique, naive, intuitive and original ways, i.e., **self-actualization**, and the adult's particular role of guiding and unlocking reality, i.e., **guided-actualization**. It is understandable that at first guidance will figure prominently but that the child, who himself wants to become adult, gradually will be given the opportunity to independently enter reality (Van der Stoep et al., 1973, p 117 et seq.).

1.3 Some aspects of the lesson when the principles of actualization should be implemented

1.3.1 Actualizing foreknowledge

Gauging of the content of a previous lesson or lessons is important because these insights often serve as the foundation for learning new content. This happens because the teacher controls [gauges] proficiencies and/or skills from the content, e.g., concepts, views, activities, etc., in order to determine the pupils' levels of entry. The way control [gauging] is exercised is important because if it over-emphasizes ready factual knowledge the willing readiness for contact and a sense of community can be undermined.

According to Gresse et al. (1977, p 13), foreknowledge can be actualized by an assignment, request, demand, challenge to participate and by questions (on different levels) regarding previously acquired knowledge.

Landman (1977, p 169) distinguishes the following essentials of actualizing foreknowledge, namely:

The teacher makes the pupils aware of their foreknowledge, e.g., by referring to work previously dealt with or to experiences he knows some of the pupils already have had.

The teacher evokes what the foreknowledge means to the pupils themselves. The teacher lets this becoming aware and recalling occur in such a way that the pupils agree that their foreknowledge is meaningful by, among other ways, valuing their efforts and showing his approval. The pupils' lived-experience the teacher's approval and this already stimulates their foreknowledge (Landman, 1977, p 87).

Stimulating foreknowledge, as mentioned above, leads necessarily to a meaningful progression of a lesson while non-enlivened foreknowledge allows the lesson to stagnate really before it has even begun. Enlivened foreknowledge to which the teacher continually returns is commonly stimulated anew by periodic lived-experiences of agreement. Van der Merwe (1977, p 87) distinguishes the following ways of actualizing (controlling):

First, a **relationship of language dialogue**; e.g., where the teacher narrates, where the pupils narrate to each other, where the teacher questions and the pupils answer orally/in writing and where one pupil questions and the other pupils answer; second, there is a **searching relationship** within which the pupils compete with each other, e.g., in a quiz or in playing a part in a play, all of which the teacher tactfully gauges; and third, there is a **demonstration relationship**. The insights viewed as relevant for the new content can again be made available to the pupils through one or another example, e.g., reconstructing a model or an account of an event by the pupils themselves. In actualizing foreknowledge it might become apparent to the teacher that he has to re-plan or entirely revise his lesson if the pupils are to be in a position to master the new learning content.

If the child lived-experiences meaning while actualizing his foreknowledge, he will open himself to the new learning content and be prepared to venture with the teacher during its disclosure. The pupils' intention to learn now is awakened and directed (attuned) as well as motivated to deal with the new theme.

1.3.2 Actualizing during and after presenting the new content

The pupils continually have to be actively involved in the lesson. Thus, they must not be passive listeners, but active participants. Consequently, there has to be a continual gauging (monitoring) of whether they participate and if they show insight into the essentials of the learning content. A very useful method is to ask alternating questions during and after exposing the learning content. Thus, the pupils have the opportunity to deal with and use the new insights themselves, i.e., the opportunity to practice the essentials until insight breaks through (practice to insight).

The pupils have to be able to schematize the insights, i.e., place them in a comprehensive scheme with their foreknowledge. The scheme has to include the essentials of the learning content as well as the relationships among the essentials. Naming new insights, i.e., expressing them in language is of particular importance and requires productive thinking (Van der Stoep, 1973, p 176). Landman (1977, p 78) indicates that here the didactic modalities come clearly into the foreground as follows:

1.3.2.1 The principle of activity: An appeal is directed to the pupils to do something; to respond, to decide, to express, etc.

1.3.2.2 The principle of individualization: Refers to the teacher opening himself up to each child by respecting his being different, his uniqueness, by encouraging him to achieve, to acquire a personal style of learning and implementing his modes of learning.

1.3.2.3 The principle of socialization: Refers to establishing relationships, intervening with the child's achievement, lived-experiencing a stable bonding with the class and initiating doing things together (group work).

1.3.2.4 The principle of tempo differentiation: To participate in actualizing the essentials of the lesson structure and the lesson content with an optimal personal work tempo.

2. THE CLOSING PHASE: FUNCTIONALIZING THE LEARNING CONTENTS

Insights that the pupils have achieved while the new content was presented, in this phase now has to be thoroughly firmed up and made functional (Van der Stoep, et al., 1973, p 177).

The primary aspects of how this is done are:

2.1 Practicing the new insights (content): Familiarized insights are practiced and studied in meaningful ways. This means the pupils have to be able to use these insights with understanding in similar problem areas. In contrast with practicing **to** insight during the exposition phase, now there is a practicing **of** insights or new content. The pupils are guided until they can independently deal with and solve similar problems.

2.2 Integrating the new knowledge with existing knowledge: Foreknowledge and the newly acquired knowledge have to be synthesized so they become a usable unity (Landman, 1977, p 78). Integrating the new with existing knowledge requires specific planning and reflection on the teacher's part. For example, Religious instruction in fourth grade has to take into account the work dealt with in second grade, otherwise a fourth grade lesson can merely be a repetition of the earlier lesson which, for the pupils, can lead to boredom and related disciplinary problems.

2.3 Applying the acquired knowledge:

"Functionalizing really implies applying" (Van der Stoep, et al., 1973, p 178). However, we have to distinguish between applying in the lesson situation and in the life world. Indeed, all (educative) teaching aims at proper adulthood and this adulthood is exercised in society where the child is expected to use his acquired knowledge in practice, e.g., by being able to write an appropriate business letter or say a prayer.

Thus, the teacher has to create the opportunity for the pupils to be able to practice, e.g., writing a personal essay/letter or carrying out

an assignment/task so that one day he is able to act independently and responsibly as is expected of an adult.

Should the pupils fail in the practice of applying, this gives the teacher an indication of their lack of insightful mastery of the learning content and also of the lack of success of his presentation. For example, he might find that he has to again return to practicing the new content or go back even further in the course of the lesson. This means intervening and again the child is guided by the learning aim with the purpose of ultimately independently mastering the learning content (Gresse, et al., 1977, p 23).

Various possible ways of functionalizing can be used by the teacher to make the pupils' insights functional:

- (1) Repeating insights in the pupil's own words;
- (2) Questioning that will lead to a clarification of terminology;
- (3) Completing projects to fill out and clarify insights;
- (4) Summarizing characteristics, constructions, functions, etc.;
- (5) Comparing two striking matters, e.g., Saul and David with special reference to their successes and failures;
- (6) Solving problems similar to those presented;
- (7) Completing outlines where captions are missing;
- (8) Writing sentences to illustrate language mastery;
- (9) Completing schematic representations;
- (10) Completing incomplete tables;
- (11) Classifying;
- (12) Defining;
- (13) Systematizing;
- (14) Indicating differences/ similarities; etc.

Landman and Roos (1974, p 178) explain the following about functionalizing: "Acquiring insights serves their application. A person cannot practice insights not acquired! Insights first have to be acquired before they can be used". Further, they also say that from their application of insights it becomes evident whether their previous acquisition was genuine and thorough enough. And this indicates whether or not the pupils can engage in productive thinking and also if these insights are remembered correctly. Functionalizing and exercising insights refer to an internalizing, a deeper understanding, a clear striving for improved achievements, a being formed which is functional and is a preparation for dealing with other situations, independent lived-experiences, applications

and creations. Van Dyk and Van der Stoep (1977, p 208) summarize the matter of functionalizing as follows: "Functionalizing confirms a striving to not only master and make available particular subject-related knowledge and skills with insight but also to be able to make operative applications by which new potentialities and abilities emerge and the way is traversed to attributing ones own meaning".

2.4 Evaluating the learning content: Finally, brief reference is made to evaluating as functionalizing. The word "evaluate" comes from the Latin word ex + valere which has the following meaning:

ex = from

valere = being strong, authoritative (Hannah, 1977, p 1).

Hannah (1977, p 1) declares that evaluation means "to bring something vividly to light". Originally the two concepts "evaluating" and "valuing" had the same meaning and the difference between them is that valuing emphasizes more attributing values while evaluating refers to uncovering values (Hannah, 1977, p 2). Etymologically, then, the word evaluation implies discovering and determining the value of something for teaching, for the learning effect (learning gains) in its broadest sense, namely the cognitive, affective and psychomotor (Bloom, 1974, pp 6-7). The teacher strives daily to improve his teaching by evaluating it (De Corte, 1975). "It is obvious that the teacher has to prepare the content and form of the testing or evaluating with particular thoroughness. In the first place, he has to know precisely what he wants to test or evaluate. The test has to be structured in such a way that he can be sure that the quality of the pupils' insights into and handling of the essentials of the learning material will be reflected in it. The form in which the test is going to be cast also requires special attention, e.g., is he going to test in terms of completing a list of questions, an essay, a prescribed practice test, a systematic explanation of content, a qualitative analysis of the pupils' own construction of an object, etc.?"

Under this heading, the teacher provides a complete explanation of both the form and content of the testing and evaluating of insights.

"During this phase of the lesson, there is especially mention of self-activity, differentiation and tempo variation. From the nature of the matter, the pupil himself is given responsibility for his insights into

the essentials of the new learning material. Responsibility is nothing other than self-activity--the pupil initiates, mobilizes and directs his insights to solving related problems. **Assignment** is at the foundation of testing and evaluating in the sense that the teacher gives the pupils the assignment in order to use their insights to solve a particular problem, to make particular applications, to look for specific relationships, to draw certain conclusions, etc. By virtue of the teacher's knowledge of the individual pupils' potentialities, he differentiates the assignments, e.g., by giving the slower or weaker pupils easier assignments but more opportunities to exercise their insights; for the stronger pupils he gives them assignments requiring more extensive and deeper insights. In this way there is differentiation and individualization. The nature of the learning material and the form of testing or evaluating determine whether the teacher sets a minimum time limit and whether the pupils follow their own tempo in carrying out the assignments" (Van der Stoep, et al., 1973, pp 180-181).

De Corte distinguishes the following aims of didactic evaluation:

- 1. Product evaluation:** This has to do with the degree to which the aims of the teaching have been attained, i.e., the results of the teaching. Compare post-lesson "tests" to determine how well the pupils know the work. The product or change resulting from the teaching intervention thus is evaluated.
- 2. Process evaluation:** This is a direct evaluation of the different phases of the lesson, more particularly of the teaching aims and of the learning content contained in the didactic methods and aids as well as the circumstances under which the results were obtained (Hannah, 1977, p 38).

Hannah (1977, pp 44 et seq.) distinguishes two sorts of evaluation:

- 1. Norm directed or summative (Tuckman):** This type of test compares the results of individual pupils with information based on a group of similar individuals. This type of test is especially useful for selecting pupils and for statistical evaluations.
- 2. Criterion directed or formative (Tuckman):** Accordingly, the pupils' achievement is related to a specific prescribed activity (behavior) that they should exercise or show as an indication that the aim has been attained. The judgment about the merit or quality

of the individual pupil's achievement is made on the basis of criteria determined beforehand, independent of the achievement of any other individual taking the test, e.g., 50% is accepted as passing for this test. This type of evaluation tries to assess the effectiveness of the teaching as such.

Finally, test items that are selected have to meet each of the following criteria: validity, reliability and usability (Hannah, 1977, pp 123 et seq.).

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