CHAPTER VIII
ORDERING AND PARTICULARIZING LEARNING CONTENT

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1. WHAT ARE LEARNING MATERIALS OR CONTENTS?

1.1 In the primary life situation, the child's life world is a small, limited, uncomplicated and simple world. And because a person is an "initiator of relationships" he is faced with the imperative to increasingly explore and act in order to acquire his own standpoint in the world. To later be able to live, play and work in the world successfully also means he has to acquire particular contents. It is expected that the contents will later become part of his frame of reference and that his initial open, spontaneous and receptive relationship to the world and persons, by acquiring contents that later will become beacons or fixation points on his life horizon, gradually becomes a relationship of a more closed and qualified character.

We are all aware that the life world with its contents is large and extensive and if the child merely is delivered to it, it also is hazardous. Therefore, his parents and educators arrange it so that in his first years of life he is faced with the everyday, conspicuous forms of life, skills and deeds of persons. However, his educators will not keep him in this simple, everyday sphere of contents, and therefore they select contents that are future-directed, directly confront the child with them and explicitly or implicitly indicate the multiple or complex lifestyle which later will be expected of him in the adult world.

However, the contents of the life world are not disordered and kaleidoscopic but are ordered and become ordered into contents that have to contribute to the child's being educated. This fact also puts a person in contact with the designated norms to be made available to the child in terms of which his activities then should be governed in the small community of his family and the immediate neighborhood, but also later in the complex relationships with persons and the larger "environment". From this it is clear that
the child only really can establish a "personal world" if there are lasting and normative relationships with persons (Mitwelt) and objects (Umwelt).

1.2 The secondary situation

Since the life world is an encyclopedia of knowledge, skills and proficiencies which are too many and too extensive for the child to master, the adult chooses those aspects of the life world contents that correspond to the child's stage of becoming and that will and should have meaning for him. In school these activities are presented where curriculum compilers and teachers have chosen particular slices from reality that will be unlocked (presented) as 'elementals' for the pupils in systematic and ordered ways. The pupil now is under the imperative to open himself to reality and learn the contents so they later will function in his own frame of reference as 'fundamentals'. Through actualizing teaching and learning activities categorical forming then ought to occur.

About this, Van der Stoep (1973, p 20) says the following: "The subject sciences that we know today are nothing more than an accurate, radical and systematic study of certain aspects of reality. In order to strengthen a person’s grasp of them, for the sake of convenience, they are divided into particular subject areas with the aim of making them surveyable and coherent". This provides the opportunity to differentiate reality into the historical, geographic, physical, biological, religious and more. Later we nuance (vary) these aspects into school subjects such as history, biology, and general science.

De Corte (1974, p 118) describes learning material (learning content) as follows: "By learning material one means that part of the present cultural goods, more particularly the so-called systems of cultural forms [e.g., reading, writing--G.Y.], which are presented to the pupils with the aim of attaining the stated teaching aim". The contents of the school subjects thus represent the subject knowledge that humans have established for themselves. For this reason we can understand that as educating progresses an increasing emphasis is placed on instructing. Consequently, Van der Stoep and Louw (1976, p 114) say: "Because the learning content selected and offered by the adults represents the whole of reality, this means that the teacher in his presentation (lesson design) represents an aspect of known reality that influences the child's forms
of living and that eventually make decisions possible regarding his lifestyle". Each responsible teacher thus also will strive in his lessons to actualize in his teaching activities the educative ideal and change the pupil's situation of not being aware or knowing to one of being aware and of knowing. Therefore, the aim of the learning contents should never be thought of apart from the child's destiny [becoming an adult].

2. THE ROLE OF CONTENTS IN RELATIONSHIP TO THE OTHER PERSPECTIVES ON DIDASKEIN (TEACHING)

Didactic categories are used to describe the essentials of didaskein (teaching) and if one of these categories is absent, what remains is no longer didaskein. S. J. Gous (1972, p 20) has ordered these categories into coherent groups. Such a group of categories acquires mutual coherence from the perspective that together they shape. However, this does not mean merely a sum total of mutually independent categories and, therefore, there is mention of a categorical structure (see Figure 1).

As far as the perspective on content is concerned, it need only be briefly mentioned that didaskein (teaching, instructing, learning) is absolutely unthinkable without learning content. The teacher and pupils encounter each other through the dynamic interactive event surrounding the learning content. And because didaskein begins in the child's experiential world (cognitive world), the pupil has to be
encountered in the situation where he is (beginning situation) and not where he is presumed to be, hoped to be or ought to be. Thus, his world of meaning has to be understood by the teacher. These learning contents also are selected so that they contribute to his entering the life world of the adults with and among whom he has to live. A cognitive mastery of the world, however, also transforms it into a verbalized and conceptualized world and, therefore, the naive life world becomes objectified, formalized and reduced. As indicated above, school subjects arise from the ordinary life world. Lastly*, Gous (1972, p 47) indicates that each person also cannot avoid asking about the ultimate aim (the last aim of all of us) and about eschatology (final and deepest foundation of reality). The answer to the ultimate question of meaning is sought and answered in the Transcendent and Absolute reality. The answer includes faith and a view of life that is compelling and has ultimate validity for the educator and that, therefore, also figures prominently in the learning content (see Maree and De Lange, 1976, p 27).

3. THE PLACE OF CONTENTS IN CURRICULUM DEVELOPMENT

Also in designing and planning curricula, i.e., on a macro as well as micro field of tasks, selecting and ordering contents play essential roles because the acquisition of these contents provides a strong guarantee for future adulthood and occupational independence. The importance of learning content as a component of the curriculum along with other components such as aims, learning experiences, learning opportunities and evaluation should not be undervalued. Indeed, all curriculum compilers have to pay strict attention to and consider the criteria used to select the learning contents, to create learning experiences and opportunities as well as to integrate these aspects with the content. Wheeler (1967, p 39) agrees with this when he says: "When subject matter is the focus of attention, it is inevitable that subject matter will provide the criteria for the selection process necessary in developing a curriculum. Content is important only in so far as it helps to bring about intended outcomes". Others run the risk of falling into the same stereotypic activity about which De Corte (1974, p 120) says: "Committee work that traditionally consists of deleting some

* What follows is a reflection of the educational context in South Africa with a commitment to Christian Nationalism. Consequently, these ideas have to do with philosophy of life content and may not be relevant to an American audience. (G.Y.)
learning material in order to include others as a consequence of an evolution within a particular area of knowledge will be based on other criteria than the 'content' of the area of knowledge itself".

Van der Stoep and Louw (1975, p 115) say: "As far as learning content is concerned, the core of the didactic-pedagogic task is in selecting, ordering and presenting it so that it will unlock the child to authentically participate in what the teacher wants to offer".

4. ORDERING LEARNING CONTENT IN THE LESSON SITUATION

Also on the level of the micro field of tasks (classes or groups of pupils he has to deal with) the teacher has to be accountable for the content component of his teaching. About this, De Graeve et al. (1973, p 66) say: "In aiming to transfer the learning material, one also aims that its logical structure be assimilated into the pupil's cognitive system. Two facets can be distinguished:

(a) the distinction between essential and detail;
(b) the internal relationships of the components of the whole".

It is especially during the middle phase of the lesson, and more particularly during exposing content, that a teacher directs his pupils to those essentials (the elementals) of the learning material to which he arrived when reducing the learning content.

Van der Merwe (1977, p 93) draws attention to three aims that the teacher has to pay careful attention to:

(a) A subject-specific or content aim;
(b) a striving for a change in relationship and also in personality; and
(c) forming that is actualized as an elevation in the child's level of involvement (ability, skills, proficiencies and techniques) with reality.

As far as the subject-specific or content aim is concerned, the teacher has to try to unlock the essentials ('elementals') of the learning material for the pupils. For effective unlocking (presentation), among other things, he has to make a choice of appropriate basic didactic forms (conversation, play, example and/or assignment). In addition to this, he also has to choose a
particular strategy or method that will co-define the teaching-learning event. The strategy determines beforehand if a **heuristic** or **ostensive** approach can be followed. Any lesson usually takes its course between these two poles: sometimes the lesson is more heuristic and then preponderantly ostensive; one can actually represent the course of a lesson as a movement on a continuum between these two poles.

In addition, it also is important that the teacher order the learning contents he has selected according to certain principles. The nature of the learning content and the developmental level of the pupils will determine the principle of ordering used. When learning contents are ordered following these particular principles, the presentation (unlocking) takes a particular form. Basson (1973, pp 37 et seq.) distinguishes a number of these principles for ordering learning material and for the sake of context we represent them schematically.

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**FIGURE 2**

We now attend briefly to each of these principles:
4.1 Core learning material and supplementary programs

Basson says that the fundamental insight of this principle is in the idea of core learning material as well as in the further orientation of the entire group of pupils or only some by bringing in supplementary programs. Besides the possibility of clarity and illustrativeness, the core learning material also has to possess the quality of an example reflecting a general structure, or presenting a concept. Roth (1959, p 276) indicates that in this teaching core, points (core learning material) have to be sought on which to concentrate. This means that the 'elementals' will be concentrated on and unimportant contents will be presented early and quickly. Situations also are planned where the child’s astonishment and wonder can arise and individualization can be done justice.

4.2 The symbiotic principle

The concept symbiotic comes from the Greek sum meaning "with" and bios meaning "life". Thus, the literal translation is living-with. Consequently, symbiotic teaching means that as far as is possible and desirable, the child is brought into touch with reality itself.

4.3 The principle of local lore/knowledge*

The word home is derived from the German Heimat (home, village, locale). By the concept home, Aarts (1963 p 197) means the material and spiritual environment within which one lives and to which one relates. For teaching, this means that the child's familiar and available experiential world is the teacher's point of departure. However, this ordering of content has to correspond to the child's level of becoming and readiness to learn.

4.4 Principle of integration

This principle is directed at eliminating divisions among different fields of learning. Here the choice of themes and ways of ordering are focused on learning material that can be built up from a unit into a coherent whole. Then, the learning material shows a definite

* The meaningfulness of a reference to "home" (local lore/knowledge) is lost in the translation of this passage. At this point, the essence of this principle is captured for me in the last two sentences of this paragraph. (G.Y.)
coherence that stems from a core problem. This coherence is what the child lived-experiences in real life and, in this respect, it is related to the idea of symbiosis. The child has to discover these coherences through particular learning activities.

4.5 The concentric principle

The fundamental idea underlying concentric ordering is that a certain subject or subjects are taught over a period of several years with the level of difficulty becoming progressively more difficult. According to this principle, the content itself does not acquire an excessive autonomy because the child's preparation for learning is primarily taken into account.

4.6 The linear principle

With this principle, there is an attempt to build up to the learning aim in a direct way and it is assumed that the lesson theme can be dealt with at the same time. Now the reduction of the learning content is placed clearly in view. Here the teacher not only has to analyze the learning material but also penetrate to the essentials or fundamentals of the matter. The linear principle of ordering generally appears in programmed instruction.

4.7 The punctual principle

This means that the teacher, in designing a lesson, tries to give a systematic explanation of the topic from a selected central point (position). From a complex theme, a number of part structures are delimited, each of which is alternately dealt with and after which the main theme is returned to as point of departure.

4.8 The chronological principle

According to this principle, the learning content is exposed and dealt with successively in the same sequence that it was discovered and described by scientists through the centuries. This principle can be fruitfully applied in the natural sciences especially in helping pupils delimit the parts (part-perspectives) of a particular theory in the course of its history. By implementing this principle, the pupils can acquire insights into the sense and meaning of a particular theory from the past. After this the course of development can be
brought in if the purpose is to give the pupils a broader perspective on the subject.

4.9 Summary

Implementing particular principles of ordering in designing a lesson is not done in isolation. The principles always have to be selected by considering the lesson and learning aims and they have to be implemented in relation to the particular contents as well as the basic forms of the teaching strategies and other didactic modalities. Naturally, some principles lend themselves more than others to bringing about the reciprocity or interaction between form and content (Calitz, 1977 p 20).

5. PARTICULARIZING AND SUBJECT DIDACTICS

Whoever is familiar with didactic theory knows that designing a particular lesson has to proceed from an already introduced or proposed lesson structure. The lesson structure makes the mutual relationships among groups of functions easily surveyable. This surveyable, general statement is known as a macrostructure. Although each lesson structure serves as the focal point of pedagogic theory, it is only the framework within which a number of microstructures have to be worked out for the school subject and for the individual group of pupils. Above all else, this microstructure is a matter of particularizing to which subject didactics can contribute.

Thus, this also means that subject didactics has to stay very close to school practice and apply its unique formulations and insights to it. The abstract and sometimes vague terms of general didactic theory have to be superseded and particularized by subject didactics. In this act of particularizing, subject didactics offers an important contribution because it addresses the "can" of the practice more than didactic theory that is nearer to the "knowing" side. This particularizing also is especially shaped by the particular aim that has to be brought to life by nuancing it. On the basis of a meaningful integration of pedagogic as well as school subject knowledge, the teacher can penetrate to the essentials or elementals of the theme and determine the entry level that can be anticipated in a classroom of a group or of a few pupils.
In my opinion, the procedure by which a teacher particularizes is the following (See figure 3):

(1) In designing a lesson he has to be able to do a thorough **situation analysis** in order to determine what the beginning situation (level of becoming, foreknowledge, etc.) is of the pupils he is going to teach;

(2) Then in light of the teaching aim he can formulate a lesson and learning aim that also can be operationalized;

(3) **Macro-analysis:** about this Van der Merwe (1977, p 31) says: "Before unlocking new contents (concepts, relationships) the teacher first has to orient himself to the purpose, role and meaning of a particular syllabus theme in relationship to allied themes and structures in the subject in order to have a clear lesson aim in view". During this activity, above all, he has to think about a preliminary reduction of learning contents, basic forms, strategies, pupils’ learning activities, as well as teaching and learning aids;

(4) He needs to have a thorough knowledge of the **macrostructure** within which he is going to perform his task; i.e., he has to be thoroughly grounded in didactic-pedagogic theory so he can interpret subject didactic proposals, generalizations and pronouncements. Therefore, he also has to be an authority on the lesson structure and its components that, although generally valid for all subjects, have to be interpreted for his own subject area. Rich and nuanced knowledge of subject contents also has to be an important component of his frame of reference;

(5) After this analysis of his particular area he has to estimate the value of spontaneous and contemporary nuances to build up a unique **microstructure** for the particular school subject;

(6) From the **microstructure** the subject didactician (in compliance with the unique nature of the theme and his aims) can bring about multiple variations and combinations of components that will guarantee the required suppleness and mobility in implementing and managing them. Also this ought to enable him to anticipate the potentialities of his class or group of pupils;

(7) What holds for the **form** of the lesson design also holds for the **learning contents**. The subject didactician and teacher need to
be able to work broadly in terms of their subject knowledge and to distinguish and differentiate among material and meaning relationships, logical, visual and causal relationships. This dealing with the content also particularly affects the nuances of the principles of ordering the learning material and the methods he selects to reach his aim. Consequently, here there also is a **microanalysis** of the lesson theme.

What has been said above to this point is schematically represented as follows:

**Figure 3**

**PARTICULARIZING ACTIVITIES**

<table>
<thead>
<tr>
<th>SITUATION ANAL</th>
<th>BEGINNING SITUATION</th>
<th>LESSON/LEARNING AIM</th>
<th>LEARNING CONTENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>MACROSTRUCTURE</td>
<td>BEGINNING PHASE</td>
<td>MIDDLE PHASE</td>
<td>CLOSING PHASE</td>
</tr>
<tr>
<td>MACROANALYSIS</td>
<td>BASIC FORMS</td>
<td>STRATEGIES</td>
<td>LEARNING ACTIVITIES</td>
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<tr>
<td>MICROANALYSIS</td>
<td>EXAMPLE</td>
<td>COMBUSTION</td>
<td>PERCEIVING/THINKING</td>
</tr>
<tr>
<td>MICROSTRUCTURE</td>
<td>APPARATUS, CHEMICALS, TRANSPARENCIES</td>
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6. CONCLUDING REMARKS

From what has been said, it is clear that the lesson structure can be enlivened because subject didactics takes up its components and implements their possibilities in terms of particular contents (Van Dyk, 1977 p 141). Each subject didactician and teacher should be able to achieve the harmony that ought to exist between form and content if he is able to meaningfully integrate into his lesson design and its presentation didactic theory, knowledge of the subject matter and subject didactic particularizations.
As Van der Merwe (1977 p 2) rightly says, in planning a lesson the task of subject didactics is to search for ways and means of making the particular meaningful and causal connections (subject specific learning aims) into life content for the child. The developing practice thus only acquires a true gestalt when its content and form are harmonized with each other in a particular lesson model.

Each teacher preparation program has to take note of the significance and place of contents in the teaching-learning event and needs to purposefully and systematically create learning opportunities where student teachers have the opportunity to plan and design lessons. In addition, numerous teaching and learning experiences have to contribute to the student teacher being able to think about, analyze and synthesize the learning contents within the framework of a macrostructure. This can occur by means of micro-lessons, demonstration lessons and example teaching. In my opinion, a student also needs to receive explicit preparation in particularizing where he is given the opportunity to arrive at a microstructure of his particular school subject through macro- and micro-analyses so that he can achieve a suppleness in setting aims, selecting and implementing basic forms, strategies, methodological principles, principles of ordering the learning material, learning activities of the pupils, and teaching and learning aids (i.e., by designing a lesson in accordance with the didactic-pedagogic structure of a lesson).

It is important for each teacher to continually keep his pedagogical-theoretical and subject knowledge current. Only when he is able to furnish the macro-structure with an effective microstructure can his particular teaching and learning situation lead to the optimal attainment of what is planned (learning results based on an authentic learning aim as an aim of the content).

7. REFERENCES


