

CHAPTER IX

THE LESSON STRUCTURE AND ITS COMPONENTS: GENERAL GUIDELINES*

D. J. P. Koekemoer
(In collaboration with the research committee)

Gold City (Johannesburg) Teachers College

1. INTRODUCTION

1.1 In the didactic-pedagogical and subject-didactic literature, there are many references to planning and designing the course of a lesson, but there is little discussion of the ground structure/lesson structure which gives a lesson its flavor (Van der Merwe, 1971, p 1). For example, in Hopman et al. (1973, pp 130-133) we find:

- (a) setting the lesson aim,
- (b) following didactic principles,
- (c) preparing a lesson,
- (d) carrying out a lesson,
- (e) evaluating the results.

The lesson scheme of Van Gelder et al. (1971, p 53) is:

- (a) preparing,
- (b) presenting,
- (c) deepening,
- (d) summarizing,
- (e) applying.

Quoting from Van Gelder et al. (1971, p 53), Morrison mentions: "exploration, presentation, assimilation, organization, recitation."

1.2 Nowhere to be found is a **detailed** lesson plan in terms of which a practicing teacher can design lessons.

* Most of the components are dealt with in the previous chapters.

1.3 This committee accepts the view of Van der Stoep et al. (1973, pp 139-140) of a chronological succession of aims to be striven for: actualizing foreknowledge, stating a problem, exposing new contents, controlling new contents, functionalizing, and evaluating what has been learned.

1.4 Along with Van der Merwe (1977, p 2), who keeps in mind this sequential course of aims, the phases of the course of a lesson are viewed in broad strokes as follows:

(a) **The beginning phase with component aims:**

The lesson greeting
Actualizing foreknowledge
Stating the problem

(b) **Exposing*** the new contents by:

exposing it by a teacher
controlling [correcting where necessary] by a teacher during exposing
actualizing [practicing] after the exposing is concluded

(c) **Functionalizing** the learning contents by:

practicing the new contents
applying in similar and new situations and
evaluating (all the aims)

1.5 In addition to these aims, the didactic essentials of the lesson structure are considered: the ground-forms and lesson relationships, methodological principles, principles of ordering the learning material, methods of unlocking (exposing), didactic principles, modes of learning, and teaching and learning aids.

* The word "exposing" in contrast to "presenting" sounds foreign to us in this context but it reflects an underlying philosophy that gives a child more responsibility and control over learning the content than we usually do, but without negating the necessity for adult guidance and responsibility. As I understand it, the key idea in this context is that "exposing" implies revealing something for someone to give it meaning in a personal way (but under the corrective guidance of an educator) whereas "presenting" implies giving someone a finished product to more or less passively accept such as a gift. [GDY]

1.6 Further, it is accepted that no lesson can be successful without a teaching aim and reducing the learning content in terms of that aim.

1.7 In designing a lesson structure (lesson plan), the committee also considers "the structural components of a lesson" as compiled by L. P. Calitz and D. A. Gresse at Rand Afrikaans University.

1.8 This final product was accomplished by cooperation among the Head of Gold City Teachers College (Prof. P. J. van der Merwe), the University of Pretoria (Prof. F. van der Stoep), and the Rand Afrikaans University (Messrs R. A. Kruger and L. P. Calitz). The Committee heartily thanks everyone who has contributed.

1.9 Although no claim to completeness is made, (for example, it should be kept in mind that we are especially involved with the **primary school**), we are confident that definitive guidelines are offered to a teacher, student teacher, and teacher educator which are foundational to practice.

1.10 Attention is given to the lesson plan originating from the lesson structure, and which has the latter as its starting point.

1.11 These broad guidelines were elaborated on during a symposium on 1 August 1978 at the Gold City Teachers College. The previous chapters are the papers presented there.

2. COMPONENTS OF THE LESSON STRUCTURE

2.1 The teaching aim

An important aim for a teacher is to teach successfully (which includes educating) so a pupil can learn fruitfully. Thus, in school, **all teaching is purposeful**. "The time when a teacher presented a lesson haphazardly is past forever", according to Van der Stoep et al. (1973, p 26). In Afrikaans, the concept "teach" (onderrig) includes the root word "direct" (rig), which means **to indicate, to show**, while the component "onder", of onderrig, means **together**. Thus, "teaching" literally means "to indicate together". Hence, both teacher and pupil have an active role in the lesson and, thus, we heartily preserve Van der Stoep's **lesson aim** and **learning aim**. Gresse and Calitz indicate, in a Study Guide for Rand Afrikaans University, that, with this view and distinction, Van der Stoep

stresses their **functionality**. To the above thoughts, we add "direct or teaching aims", "indirect or educative aims", "implicit versus explicit" aims, etc. (See Rand Afrikaans Study Guide, pp 6 and 7).

2.1.1 The lesson aim

This has to do with the total role played by a teacher regarding exposing subject content. This is viewed as the **lesson theme**, for example, unlocking the concept of "direction" in geography. The lesson aim also can announce types of **lessons**, such as an appreciation lesson, an experimentation lesson, an explicatory lesson, a demonstration lesson and drill or exercise lessons (Van der Stoep, 1973, p 100). A teacher must ensure that there will be a "functional relationship among the methods used, the contents, and the aims" (Rand Afrikaans University Study Guide, p 12).

2.1.2 The learning aim

This embraces the new content (essentials) regarding the theme the pupils must master. At the end of a geography lesson, e.g., they must be able to answer the question, "What is direction and how can one describe it?" This learning aim should not be stated vaguely. On the contrary, the **operationalization of the learning aim** must be given attention, i.e., at the end of the lesson, it must be concrete and measurable (evaluation).

The learning aim can also be viewed as **formulating a problem** (for a child) which arises via two of the six lesson phases, actualizing foreknowledge and stating the problem.

2.2 Reducing the learning content

(Note: the word **learning content** is chosen over learning material. This usage is important because **learning is** really acquiring **content**).

Stemming directly from the learning aim, subject contents are reduced to elementals by a teacher making a **micro-analysis** of the lesson theme. A teacher, as knower of the **subject** and of a **child**, must highlight the elementals (essentials) for a child. This must provide a child with insight and, therefore, the reduction should never exceed aspects of life. Subject contents become **life contents** when, in a moment of insight, the elementals become a child's. The

essential is fundamental for him/her, and the concrete, tangible is exceeded. Therefore, the aim of the lesson must be known in detail to reduce the content; a learning aim should include a **content** and an **activity** aspect. Thus, aspects of reality are selected for a child (who a teacher understands) such that he/she can guide him/her to make the elemental his/her own fundamental. (In this respect, see Chapter V by Kruger).

During the lesson phase of exposing the new content, these essentials (elementals) can appear gradually as **chalkboard schemes** and which can serve as a gradual solution to the problem (**problem solution**).

2.3 Further planning from the components of the lesson structure

Depending on the nature of the learning content, and with the learning aim indicating the course, a teacher now chooses from different components of the lesson structure. The entire course of the lesson (which is not haphazard) has a beginning, which considers a child's **level of becoming**. Definitive planning is not possible without considering this entry level.

2.3.1 Choice of lesson relationships and ground-forms

Teaching is a matter of relationships since a person is an initiator of relationships. "The didactician is only interested in those ground-forms which, in his/her view, are identifiable in actualizing basic teaching relationships" (Swart, 1977, p 132). In this connection, Swart mentions the following:

- (i) The language-dialogue relationship, with **conversation** as the ground-form;
- (ii) a searching relationship, with **play** as the ground-form;
- (iii) a demonstrative (indicative, showing) relationship, with **example** as the ground-form (Swart, 1977, p 134).

Van der Merwe (1977, p 18) further classifies the three mentioned ground-forms with their relationships, and refers to implementing them in terms of the role of a teacher, a pupil, and the learning content as follows:

GROUND-FORM

1. Conversation

- (a) Relationship: language-dialogue
- (b) Teacher: narrates, converses, tells, asks
- (c) Pupil: listens, talks, says, answers
- (d) Content: narration, discussion, acquire everyday subject-scientific meaning.

2. Example

- (a) Relationship: demonstrative
- (b) Teacher: show and narrate, show and say, show and ask
- (c) Pupil: look-see, hear and listen, propose
- (d) Content: particularly, examples and/or generalizations

3. Play

- (a) Relationship: searching
- (b) Teacher: organize, initiate, role assignments
- (c) Pupil: search, handle, exemplify, imitate, recognize
- (d) Content: investigate, recall, recognize

(Note: **assignment** can be added as a ground-form.)

2.3.2 Methodological principles

With this choice, which, in a primary school, especially includes inductive, **deductive** and **transductive principles** (examples are handled for their **own sake** to present the necessary foreknowledge (Van der Merwe, 1977, p 102)), the pupils' potentialities and readiness must be considered. What is the best method for attaining the learning aim? As far as strategy is concerned, it can be both inductive and deductive, and it can alternate between the two: one indicates (demonstrates), or one lets the pupils discover. It must be kept in mind that in the same lesson, inductive and deductive demonstrations can be used. For example, if a teacher deals with an isosceles triangle, he/she can **indicate** that the two sides are equal, and let the pupils measure the angles so they can **discover** this characteristic themselves. It also is possible that, during the level of discovery, a teacher again demonstrates. Thus, generally, a teacher's guidance remains important. For example, in teaching, all discovery is guided discovery. In this way,

the ground-form and lesson relationship, as well as other didactic principles, are linked together.

2.3.3 Principles for ordering the learning content

With the reduction of the learning content to elementals, the principles of ordering arise and depend on the pupils' level of readiness, and the nature and structure of the learning content of the subject. These principles must first be linked to the subject content. They must mesh functionally with the way the learning content is to be presented. For example, some principles are more relevant to teaching history than Afrikaans.

Regarding principles of ordering, the Rand Afrikaans University study guide mentions the following:

- (a) Core learning contents and supplementary programs.
 - (b) Principles having a child's lifeworld as the point of departure.
 - 1. The **symbiotic** principle of ordering.
 - 2. The principle of "**local lore/knowledge**".
 - 3. The principle of **integration**.
 - (c) The **concentric** principle of ordering.
 - (d) The **linear** principle of ordering.
 - (e) The **punctual** principle of ordering.
 - (f) The **chronological** principle of ordering.
- (Basson, 1973, pp 2-54).

In particularizing the content to a unique teaching situation, as far as the principles of ordering are concerned, in working with concrete examples, there must be a harmony with the subject, e.g., a harmony which is understood through the chronological principle. It is obvious that the principles of ordering the learning content are not isolated from the didactic ground-forms.

2.3.4 Methods of exposing (unlocking) contents

One or more **methods** are chosen by a teacher to implement his/her lesson design: narration, question-and-answer, demonstration, experimentation. These methods are linked up with the previous, as well as the following components.

2.4 Things a teacher should consider in the phases of the course of the lesson

2.4.1 Didactic principles or principles of actualization

Here is mentioned the **activity principle** (acting on one's own willful choices, exploring, doing, doing for oneself, devising); the **principle of individualization** (each person is "different" and can **change**, own individuality, uniqueness, originality, etc.); the **principle of socializing** (being-with-each-other, in relationship with, being in communication, etc.) and the **principle of tempo differentiation** (the lesson structure shows movement in the beginning, the course, and the end of a lesson, and in each there are tempos which must be maintained). These principles must be attended to in the different phases of a lesson. The activity must be planned.

2.4.2 Modes of learning

Sonnekus (1975, pp 41 et seq.) mentions **sensing** and **attending** as accompanying, or concomitant, **affectively laden** (i.e., always present) modes of learning. In addition, he mentions the following **cognitive** modes of learning: **perceiving, thinking, remembering, imagining, fantasizing, actualizing intelligence, and observing**. He describes these as modes of actualization, which refer to an activity (learning event). Although in planning a lesson, a child should not be forced into a rigid "pattern of learning", the careful planning of a mode or modes of learning is necessary. (These modes of learning have been linked up with the ground-forms, as the role of the pupil [but not in the same terminology] --see section 2.3.1).

2.4.3 Teaching and learning aids

Teaching or instructional aids serve to guide a teacher, more than a child, a means to unlock reality (learning content) for him/her, while learning aids serve a child "as means for self-actualizing his/her learning" (Sonnekus, 1975, p 52). However, both types of aids serve a teacher in guiding a child and must be planned for in designing his/her lesson. Sometimes learning and teaching aids can be interchanged, e.g., a textbook or a chalkboard. There are many teaching and learning aids at a vigilant teacher's disposal which are not gone into here. It is extremely important that, along with the other mentioned didactic-pedagogical considerations for designing a lesson, he/she plans his/her teaching and learning aids "such that

they will direct the most meaningful appeal to the self-actualization of the modes of learning by a child" (Sonnekus, 1975, p 52). Also, these aids must be linked to a child's level of becoming, give direction to his/her willingness, and allow him/her to perceive and attend. In this way, any of the other cognitive modes of learning can be awakened (actualized) and result in stable learning.

3. PHASES OF THE COURSE OF THE LESSON

With the above components of a lesson structure in mind, the course of the lesson can be planned.

As mentioned in the introduction, the phases of a lesson of Van der Merwe (1977, pp 87 et seq.) along with Van der Stoep and others, are recommended as a point of departure by the Committee. Van der Merwe's pronouncements (somewhat modified) are considered briefly:

3.1 Beginning phase (introduction, beginning of the lesson, beginning situation)

Here three clearly distinguishable **aspects*** are indicated, i.e., the lesson greeting, actualizing foreknowledge, and stating the problem. The differentiation, especially between the latter two, is largely for the sake of easier explication because, "in the practical course of a lesson, the two matters go hand-in-hand, and there is continual interaction, as well as mutual cross-fertilization" (Van der Merwe, 1977, p 87).

3.1.1 The lesson greeting

This is an expression of a **form of human courtesy**, with the primary aim of establishing a **pathic-affective relationship**. In addition, this creates an **atmosphere** (climate) in the lesson situation. At its foundation, it is a **language-dialogue relationship** which refers to mutually agreeing and assenting to establish a relationship. In addition, this also contributes to a previous attribution of meaning in the beginning phase, since it is a manifestation of a human **readiness for contact** and **community** between teacher and pupil. Thus, the pupils' **openness** for what follows is already actualized here.

* These are not viewed as separate components

Lesson greetings are simple forms of conversation, such as the **greeting**: Good mornings; Good day; as in "Good morning class/boys/girls". A general form of greeting is a **request**: sit, stand, quiet, etc. or a **wish** as: "I want you to sit and take your book out". Van der Merwe mentions further the **warning**, the **question**, and the **admonition** as forms of **greeting**.

The lesson greeting, thus, occurs in a speaking relationship, sometimes with linguistically incomplete sentences, and it is not always an authentic dialogue, but rather a monologue. However, it refers to the fact that we are aware of each other's presence (Landman), and that a relationship, thus, is established. A very important aspect of this phase is creating a **lesson climate**.

3.1.2 Actualizing foreknowledge

Control of [gauging] the content of **an earlier lesson(s)** plays an important role here. Concepts, terms, propositions, etc. can be queried to actualize the pupils' **level of entry** into the new lesson. A teacher's means of control are important because, for example, if ready knowledge is overemphasized, this can cut off the willing readiness for contact, and the community created by the lesson greeting.

Control can occur within a **language-dialogue relationship**, e.g., a teacher narrates, the pupils narrate to each other, pupils question each other, etc., and a **searching relationship** can be established. From this/her class discussion, it might appear that a teacher must replan his/her lesson, revise it in general, etc. Thus, **concepts** which serve as foundational knowledge for the new content which are going to follow, must be **explicated**.

Foreknowledge must be meaningfully actualized so that it can function as a **precondition** for motivating the pupils. Then they will **throw** themselves **open** to the new content, an important aim here.

Previously unlocked reality is recalled and, thus, relationships with the **known** are found (for the pupils). The intention to learn is stimulated, while there also is a search for relationships between the new and the known content, such that the new theme is lived experienced as meaningful.

3.1.3 Stating the problem

While an increasing line of tension is maintained with the lesson and learning aim in view, **new facts should be lived experienced** by a pupil **as a problem**. His/her lived experiencing, however, must include a **wondering**, and a **wanting to know** the learning content so that he/she will **linger** (attend) to break through the **resistance** with an **I-can-know**. It is here where fundamental pedagogical relationships, such as trust and understanding explicitly arise, because a child knows his/her teacher will guide him/her so he/she can solve the problem, provided his/her sensing the problem is not labile, and blocks him/her from doing so (lost attending).

A sound **questioning relationship** stemming from the gradually dawning lesson problem is the apex of the increasing line of tension: a child becomes aware of his/her incomplete knowledge, and a **fruitful moment** (i.e., a readiness to learn to solve the problem) is created. The activity of unlocking (exposing) the content paves the path between the questioning relationship and the fruitful moment (this unlocking is where a teacher and child search together for the elementals--the essentials). The fruitful moment arises when a pupil sees into and appropriates the elementals (the matters of concern). The **tension** which arises here is between what a teacher presents as an achievable aim, and what a child doesn't know, but must know (to achieve that aim). This is not a tension between a teacher and a child. Rather, by this tension, a child is **stimulated to open** him/herself to the new content which is going to be unlocked (introduced) in the following lesson phase. Thus, he/she strives to get rid of the tension (burden) of not knowing by a **willingness to learn**. Here, the **security** which a child lived experiences in the **teaching** situation is important.

In summary, the beginning phase can determine the success or failure of the lesson because it is a necessary precondition for a good lesson. Van Dyk (1977, p 186) says that the weakest lessons are weak precisely because of a weak beginning phase.

3.2 Middle phase/exposing the new content

Here, a teacher especially directs the pupils to those **learning content essentials** (learning aim) he/she has arrived at in **reducing the learning content**. "Through supportive guidance and clarification, a teacher must gradually make these learning content

essentials perceptible to the pupils” (Rand Afrikaans University Study Guide, p 21).

Here, Van der Merwe (1977, p 93) refers to three aims:

- (i) a subject-specific or content aim;
- (ii) striving for a change in relationship, not only with reference to the subject but also to personality change;
- (iii) to actualize forming as an elevation in level regarding a child's involvement (competence, knowledge, skills, and techniques) with reality.

Three distinguishable aspects also are noticeable here:

3.2.1 Exposition by a teacher

A teacher must know how his/her exposition of the new learning content is progressing. How are the essentials going to be made perceptible, and placed in logical relationships? How are the **learning essentials** (as they appear as chalkboard schemes or on transparencies) gradually going to make a solution to the problem more evident? (A planning strategy with the help of a **chalkboard scheme** is required in preparing a lesson for a primary school, and it is felt that such a scheme should appear in a student teacher's journal). Because of the nature of the matter, to make the exposition more meaningful, the foreknowledge must be recalled continually. (Therefore, the phases should not be viewed as watertight, delimited compartments!).

Exposing the new content primarily involves concept formation. In planning, the concepts aimed at by the lesson aim must be written down.

Although, as appropriate, the components of the lesson structure must be considered in planning **all** phases, it is especially in this phase that a teacher's initiative and professional knowledge must show. In this respect, the following are mentioned:

- (1) Plan strategies (heuristic-ostensive continuum) (Rand Afrikaans University Study Guide, pp 21-22).
- (2) Select learning content.
- (3) Choose didactic ground-forms.
- (4) Select principles of ordering.

- (5) Reduce learning content to essentials.
 - (6) Unlock learning content by lecturing, explaining, etc.
 - (7) Choose teaching and learning aid(s).
- (Thus, a teacher plans as thoroughly as possible the successful exposition of the new learning content).

3.2.2 Control by a teacher during the exposition

The pupils should continually **actively participate** in the lesson. (Here there is a continual evaluation by a teacher, see section 3.3.3). During this phase, the pupils remain actively engaged in the lesson through, among others, the question-and-answer method, class discussion, etc. "The teacher continually directs the pupils' perceiving to the essentials of the learning material" (Van der Stoep, 1973, p 174). The pupils' active involvement is necessary during this phase--this active involvement gives this phase a particularly dynamic character (Van der Stoep, 1973, p 174 and Rand Afrikaans University Study Guide, p 21).

The lesson tempo will be slower than during the other phases because, **together with** a teacher, a pupil must reduce the learning content to its essentials and understand the connections among the essentials.

Modes of learning which are controlled (gauged) by a teacher, among others, are **perceiving** and **thinking**.

3.2.3 Actualizing during and after the exposition

Here, a teacher **controls** [gauges] the pupils' **insight** into the essentials. Ordinarily, during the exposition, use is made of **varying questions**, now opportunities are given to the pupils to themselves **handle** the new insights. Example exercises (e.g., in science) are shown by a teacher in terms of which there can be a break-through to insight. According to Van der Stoep (1973, p 176), this phase especially is aimed at stimulating and directing productive thinking. Also, here there is not merely mention of the differentiation of content, because the aim is still that **all** pupils understand the same essentials. The main idea here is exercising (practicing) **to insights**.

3.3 The ending phase/functionalizing the learning content

Insights which the pupils acquired during exposing the new content are, in this phase, thoroughly **pinned down** and made **functional**. The **main aspects** which are distinguished are:

- (1) Exercising the new content;
- (2) applying it to similar and new situations and, finally, these are followed by
- (3) evaluating.

3.3.1 Exercising (practicing) the new content

In contrast to **practicing to insights** during the exposition phase, what follows here is a **practicing of insights** or new content. This is **functionalizing guidance** (Rand Afrikaans University Study Guide, p 22), i.e., the pupils must use (bring into function) the new content and are led/guided until they can. The new knowledge must be integrated into their foreknowledge before they can use the new insights.

With respect to functionalizing, Landman (1974, p 178) says, "Acquiring insights serves exercising insights. A person cannot exercise insights that have not yet been acquired! Insights must be acquired before they can be used".

3.3.2 Applying the new content in similar and new situations

"Functionalizing really implies applying" (Van der Stoep, 1973, p 178). However, here we refer to the difference between general application (e.g., where a pupil puts to use what he/she has learned in school in the lifeworld outside the classroom) and application in this lesson phase. In the latter, the knowledge/new content/insights acquired in a specific lesson (i.e., **learning effects**) are applied to similar or related problems. Before a pupil can ever apply externally what he/she has learned from his/her teacher, he/she must learn how and where it can be applied. This occurs in this lesson phase.

Consequently, a teacher must create an opportunity for exercising such applications in his/her preparation, and in the problems which might arise during the lesson. Should the pupils succeed in making such applications, this gives a teacher an indication of their insightful mastery of the learning content, and of the **success** of his/her **activities of unlocking** (exposing) the content. For example,

he/she might find that he/she must return to practicing the new contents or even go back further in the lesson. This means **intervening**, and a child is **guided again** to the learning aim.

In this lesson phase, the principle of **self-activity** particularly is in force because each pupil **must actively demonstrate** his/her **insights**. Thus, he/she gives evidence of participating in reaching the (learning) aim.

For example, by asking questions, a teacher can determine whether a pupil has attained the expected level. The pupil must distance him/herself from a specific example so he/she can acquire a more general and objective grasp of the matter. Common essentials which have come to the fore from an example during the exposition phase, can be used as a rule or principle.

A variety of possibilities can be used by a teacher to help the pupils' make their insights functional, e.g.:

- (a) Repeating the insights in the pupils' own words;
 - (b) Questioning which will lead to a clarification of subject-matter terminology;
 - (c) Solving problems similar to those exposed (unlocked);
 - (d) Comparing two aspects/phenomena;
 - (e) Completing outlines by adding missing aspects, etc.
- (Rand Afrikaans University, Study Guide, p 23).

As in the following lesson phase, there also must be differentiation. During functionalizing and evaluating there must be differentiation for the weaker, the average and the more intelligent pupils. Therefore, a teacher also must **know** his/her target group.

3.3.3. Evaluating

Evaluating has three functions for a teacher: to evaluate the teaching, the learning, and the curriculum.

This particularly important aspect during a lesson follows the completion of a lesson **or** series of lessons. Pupils' insights into the essentials of the learning content are tested especially with the aim of ascertaining if they understand and grasp the content which has been unlocked in the previous lesson phases. Also, their own thoughts, creations or activities regarding the matter are evaluated.

Is the learning aim attained? Has the learning aim been realized? To ascertain this, testing and evaluating are always necessary, and in his/her lesson preparation, a teacher must make provision for them. This is an **orienting activity** for teacher and pupil: the pupil's **readiness** to progress further in the subject is determined and, at the same time, a teacher apprises him/herself of the **quality** of his/her **unlocking of the learning content**. In addition, it can be determined if a pupil needs **remedial** help and, indeed, where the bottleneck is. Thus, testing and evaluating are orienting for a pupil, in the sense that a teacher determines for him/her that his/her knowledge/understanding is adequate or not, the problematic area is pointed out, etc.

In concluding **evaluating and assessing**, De Lange and Gresse (Study Guide on Didactic Design, pp 30 and 31) refer to **continuous evaluating and assessing**. "During the course of the lesson, there arise questions that are asked, work that is done by the pupils, class and pupil discussions, thus, many opportunities to evaluate and to acknowledge learning successes or movements in that direction by affirming, encouraging, etc." This continuous evaluating is a **moment of individualization** (where a teacher teaches in a group situation) which creates the possibility of evaluating and assessing each pupil's learning success within the context of his/her personal involvement, his/her potentialities, and the quality of their actualization. Two criteria hold here, i.e., the "objective" minimum achievement required and demonstrated for learning success, and the "subjective" criterion of the degree to which a child actualizes his/her potentialities in the learning activity. This latter criterion holds particularly in the junior primary phase, but also within the context of evaluating dispositions (e.g., Christian-National principles in South Africa), the educative aim, etc. There is continuous evaluating by which a teacher gradually knows the extent to which the relationships of understanding, trust and authority have been actualized, and also whether a child's Christian philosophy of life has been formed (aspects which are not empirically measurable).

Here, the following concepts are distinguished:

(a) **Evaluating**: a broad and comprehensive term which includes determining the teaching-pupil gains with respect to the expected learning gains, as well as value-judgments regarding the nature and desirability of changes in the pupils. For example, this answers the question, "What methods are best?"

(b) **Testing:** this is a precondition for evaluating which determines if a change has occurred and, indeed, "How much and in what direction?" This is a more general term, which includes "measuring". The latter includes a scale, according to which a person can be classified with respect to his/her level of knowledge or intellectual capability. (Rand Afrikaans University, Study Guide, p 25).

4. CONCLUDING REMARKS

"As such, the lesson structure remains ... really a lifeless construction unless or until subject-didactics takes up the pronouncements about the lesson structure and actualizes their possibilities in terms of specific learning content" (Van Dyk, 1977, p 141).

Regarding the lesson structure, subject-didactics starts with general pedagogical theory. Guidelines are established by which a specific lesson in a subject can be prepared or designed. In preparing this specific lesson, it is the task of subject-didactics to look for ways and means by which the specific relationships of the meaning and the matter (subject specific learning aims) can be made into life content for a child (Van der Merwe, 1977, pp 2 and 3).

Thus, a **lesson** must be **designed** in terms of a proposed **lesson plan** (see appendix) with the **lesson structure** as the point of departure. Lesson structure essentials or components must be "brought to life" in practice by a **lesson design**. There must be reflection on the teaching and learning relationships in terms of specific contents (e.g., history, geography) with their unique structure and nature and for a specific group/class within a specific cultural milieu.

Summary: Here we have the task of a subject-didactician giving rise to a particularized theory (i.e., when the general concepts of the particularized theory are brought to life through nuances) for a lesson design by which a teacher gives "life" to schooling (Van der Stoep and Van Dyk, 1977, p 35).

Finally, according to Van der Merwe (1977, p 111), a **general lesson plan** represents what is didactic-pedagogically founded. However, it should be kept in mind that the course of a lesson must be viewed as a **unity**. Indeed, the **components** are **distinguishable**, but in

didactic practice they are exercised as an interrelated **whole** (Van Gelder, 1971, p 38).

5. APPENDIX TO THE LESSON STRUCTURE: A PROPOSED GENERAL LESSON PLAN

1. Localizing information

Grade/Group: (Indicate child's level of becoming)
Subject: Time: Grouping: (homogeneous/
heterogeneous)

2. **Teaching aim** (a) Lesson aim (theme or type of lesson)
(b) Learning aim (problem formulation -
new contents)

3. **Reducing learning material** (Microanalysis of lesson
theme/learning aims).

4. Lesson structure

4.1 **Phases of the course of a lesson** (Each phase as a learning aim):

(a) **Beginning phase** (Introduction, beginning of the lesson,
beginning situation)

(i) **Lesson greeting**

(Forms of lived-experiencing, creates pathic/affective relationship,
attunement, language-dialogue relationship, early giving of
meaning, readiness for contact, community between teacher and
pupil, greeting, wish, question, warn).

(ii) **Actualizing foreknowledge**

(Control of previous lesson(s), entry level, language-dialogue
relationship, searching relationship, concepts clarified,
meaningfulness of foreknowledge, precondition for stimulating
pupils, linking up with the known).

(iii) **Stating the problem**

(New facts lived-experienced as problem, awaken wondering,
relationship of wanting to know, will linger (attend), break through
the resistance with I-can-know, stable sensing fruitful moment,
opening of pupils willingness to learn).

(b) **Middle phase (Exposing new content)**

(i) **Exposition of content by the teacher**

(Essentials of learning material/learning aim as determined by reduction of learning material, subject-specific aim, change relationships/personality, level elevation, chalkboard schemes, professional knowledge, and initiative of teacher, determining strategies).

(ii) Control by teacher during exposition

(Active participation by pupils, question-and-answer method, direct pupils' perceiving, pupils' active involvement gives dynamic character, together teacher and pupils reduce contents, perceiving and thinking).

(iii) Actualizing during and after the exposition

(Control pupils' insights, varying questions, handle new insights, direct pupils' productive thinking, exercise to insights).

(View moments (i), (ii) and (iii) as a **unity** during the lesson).

(c) The ending phase (functionalizing the learning content)

(i) Exercising the new contents

(New insights are pinned down and made functional, exercise new insights/new contents, functionalizing guidance, integrating new knowledge with foreknowledge, control of pupils' "understanding").

(ii) Applying in similar and new situations

(Learning effects/learning results are applied to similar or related problems, exercise application, control insights, mastery and success of teacher's unlocking activities, intervention, learning aim reached?).

(iii) Evaluating

(Testing/evaluating/measuring after the course of a lesson or series of lessons, pupils give reasons, own thoughts, creations, activities for teacher and pupils ready to go on with work, remedial help).

STRUCTURAL COMPONENTS WHICH MUST BE INTEGRATED IN THE PHASES OF THE COURSE OF A LESSON

4.2 Ground-form (ways of teaching/lesson relationship/modes of learning)

Choice from: (a) **conversation** (teacher: questions, narrates, says, discusses) with language-dialogue relationship (learner: answers, listens, says oneself, discusses oneself). (b) **play** (teacher: organizes, initiates, assigns roles) within a searching relationship (learner: searches, handles, imitates, recognizes, etc.). (c) **example** (teacher: indicates and narrates) within a demonstrative relationship (learner: looks, sees, hears, listens). (d) **assignment**.

4.3 Methodological principles: choice from or combination of **inductive** and **deductive** principle in the beginning, middle and end phases (as with all components).

4.4 Principles of ordering learning material: choice (combination) of (i) core learning material, (ii) symbiotic, (iii) "local knowledge", (iv) integrative, (v) concentric, (vi) linear, (vii) punctual, (viii) chronological, (ix) spiral. (This holds especially for reducing the learning material and the chalkboard scheme).

4.5 Methods of unlocking (exposing): Choice from 4.2 of question-and-answer, narration, demonstration, experimenting, etc.

4.6 Didactic principles or principles of actualization: (i) Tempo differentiation: Particular tempo in each phase of the course of a lesson. (ii) Activity principle: handling, exploring, doing with, doing oneself. (iii) Principle of individualization: own uniqueness, originality. (iv) Principle of socialization: being-with-each-other, communication.

4.7 Modes of learning: Which the teacher aims to actualize: sensing, attending, perceiving, thinking, imagining, and fantasizing, and remembering (Implemented with the lesson relationship).

4.8 Teaching aids: Chalkboard, prints, audio-visual media, models, diagrams, graphics, tables, schemes, etc. (Can be interchanged with 4.9). Serve more the teacher. Linked now to the modes of learning - guided actualization.

4.9 Learning aids: Textbook, library, notebook, numbers, prints, etc. (Can be interchanged with 4.8). Serve more the child with teacher as guide. Actualizing modes of learning - self-actualization.

6. REFERENCES

Basson, N. J. S. (1973). **Leerstofordening in die lessituasie.** Johannesburg: McGraw-Hill.

Calitz, L. P. and D.A. Gresse (1977). **Die strukturele komponente van 'n les.** Supplementary study material. Johannesburg: Rand Afrikaans University.

De Lange, J. P. and D. A. Gresse (no date). **Didaktiese ontwerp.** Study Guide. Course IIB. Johannesburg: Rand Afrikaans University.

- Hopman, W. M. et al (1973). **Lessen over lessen**. Leiden: Stafleu and Son.
- Landman, W. A. and S. G. Roos (1974). **Die praktykwording van die fundamentele pedagogiek**. Johannesburg: Perskor.
- Sonnekus, M. C. H. (1975). **Onderwyser, les en kind**. Stellenbosch: University Publishers and Booksellers.
- Swart, A. (1977). Die plek en funksie van onderrigswyses. **South African Journal of Pedagogy**, 11 no. 2.
- Van der Merwe, P. J. (1977). **Vakdidaktiese beplanning rondom die aanvangsituasie van 'n geskiedenisles**. Unpublished M. Ed. thesis, University of Pretoria.
- Van der Stoep, F. et al. (1973). **Die lesstruktuur**. Johannesburg: McGraw-Hill.
- Van der Stoep, F. and Van Dyk, C. J. (1977). **Inleiding tot vakdidaktieke**. Johannesburg: Perskor.
- Van Gelder, L. et al. (1971). **Didactische analyse: Werk en studieboek 1**. Groningen: Wolters-Noordhoff.
- Van Gelder, L. et al. (1972). **Didactische analyse: Reader 1** (Third edition). Groningen: Wolters-Noordhoff.
- Van Gelder, L. and I. van der Velde (1970). **Kind, school en Sameleven**. Third edition. Groningen: Wolters-Noordhoff.

GENERAL BIBLIOGRAPHY (EDITOR)

- Anderson, R. H. (1976). **Selecting and developing media for instruction**. New York: Van Nostrand
- Basson, N. J. S. (1973) **Leerstofordening in die lessituasie**. Johannesburg: McGraw-Hill.
- Bjerstedt, A. (1969). Educational technology in Sweden: systematic approaches to learning. **Educational Technology**, IX (11).
- Bloom, B. (Ed.) 1974). **Taxonomy of educational objectives**. London: Longmans.
- Brenzinka, W. (1968). **Erziehung als Lebenshilfe**. Stuttgart: Ernst Klett.
- Brown, J. W., Lewis, R. B. and F. F. Harclerod (1977). **A V instruction**. New York: McGraw-Hill.
- Brunnhuber, P. and B. Czinczoll (1974). **Leren durch Entdecken**. Donauworth: Ludwig Auer.
- Calitz, L. P. and D. A. Gresse (1977). **Die strukturele komponente van 'n les**. Supplementary Study Material. Johannesburg: Rand Afrikaans University.
- Campean, P. L. (1974). Selective review of the results of research on the use of audiovisual media to teach adults. **AVCR**, 22 (1).

- Cavert, C. E. (1974). **An approach to the design of mediated instruction**. Washington: Association for educational communications and technology.
- Chapman, A. S. and D. Unwin (1969). Educational technology at large. Different emphases, different directions, in different countries. **Educational Technology**, IX (11).
- Conradie, P. J. (1977). **Van onderrighulpmiddel tot sisteemonderrig: 'n inleiding tot onderwystegnologie**. Durban: Butterworths.
- De Cecco, J. P. (1968). **The psychology of learning and instruction: educational psychology**. Englewood Cliffs: Prentice-Hall.
- De Corte, E. (Ed.) (1974). **Beknopte didaxologie**. Groningen: Tjeenk Willink.
- De Corte, E. (1975). **Onderwysdoelstelling**. Second edition. Louvain: Studie Paedagogia.
- De Graeve, Maria (1973). **Lesvoorbereiding en evaluatie op basis van didactische analyse**. Amsterdam: Standaard Wetenschappelijke Uitgeverij.
- De Lange, J. P. and D. A. Gresse (no date). **Didaktiese ontwerp**. Study Guide for course IIB. Johannesburg: Rand Afrikaans University.
- Ely, D. P. (1972). The field of educational technology: A statement of definition. **Audiovisual Instruction**, 17 (8).
- Eriksson, B. (1969). A systems approach to educational technology (with special reference to Swedish conditions). **Educational Technology**, IX (6).
- Filep, R. T. (1975). Learning, technology and potential increase of productivity in higher education. In Harrison, S. A. and L. M. Stolurow. **Improving instructional productivity in higher education**. Englewood Cliffs: Educational Technology Publications.
- Fourie, H. P. (1975). **Communication by objectives**. Johannesburg: McGraw-Hill.
- Gerlach, V.S. and D. P. Ely (1971). **Teaching and media: A systematic approach**. Englewood Cliffs: Prentice-Hall.
- Gilbert, L. A. (1969). Educational technology in the United Kingdom. A centralist impetus. **Educational Technology**, IX (11).
- Glogauer, W. (1967). **Das strukturmodell der didaktik**. Munich: Ehrenwirth.
- Gous, S. J. (1972). **Verantwoording van die didakties-pedagogiese**. Johannesburg: Perskor.
- Grayson, L. P. (1976). Instructional technology: On diversity in education. **AVCR**, 24 (2).

- Hannah, C. (1977). **Evaluering in didaktiese perspektief**. Unpublished D. Ed. dissertation. University of Pretoria.
- Hawkins, S., H. Hitchens and J. Wallington (1974). Measuring educational technology: The first step. **Audio-visual Instruction**, XIX (6).
- Hehlman, W. (1967). **Worterbuch der paedagogik**. Stuttgart: Kroner.
- Hinst, K. (1971). Educational technology - its scope and impact: consequences for educational policies and the organization of the teaching-learning process. **Educational Technology**, XI (7).
- Hitchens, H. B. (1973). The status of educational technology. In J. W. Brown (Ed.), **Educational media yearbook**. New York: Bowker.
- Hopman, W. M. et al. (1973). **Lessen over lessen**. Leiden: Stafleu and Son.
- Janssen, W. P. (1969). **Onderwijstechnologie: Een inleiding**. Purmerend: Meulenhoff.
- Kilian, C. J. G. and J. Smit (1973). **Onderwysende opvoeding**. Pretoria: N. G. Boekhandel.
- Klafki, W. (1964). **Das paedagogische problem des elementaren und die theorie der kategorialen**. Bildung, Weinheim: Beltz.
- Kruger, R. A. (1975). Die betekenis van die begrippe elementare en fundamentele in die didaktiese teorie en praktyk. **Pedagogic Studies**, No. 86. University of Pretoria.
- Landman, W. A. (1972). **Leesboek vir die Christen-opvoeder**. Pretoria: N. G. Boekhandel.
- Landman, W. A. and S. G. Roos (1974). **Die praktykwording van die fundamentele pedagogiek**. Johannesburg: Perskor.
- Landman, W. A. (1977). **Fundamentele Pedagogiek en onderwyspraktyk**. Durban: Butterworths.
- Landman, W. A. et al. (1978). **Opvoedkunde vir onderwysstudente**. Stellenbosch: University Publishers and Booksellers.
- Maarschalk, J. et al. (1976). **Onderwyspraktyk**. Study Guide, Course D. Johannesburg: Rand Afrikaans University.
- Maree, P. J. and J. P. de Lange (1976). **Opvoedkunde IIA**. Study Guide. Johannesburg: Rand Afrikaans University.
- Meyer, J. H. F. (1974). **The application of educational technology in selected areas and disciplines in university teaching**. Unpublished Ph. D. dissertation. University of Witwatersrand.
- Oettinger, A. G. (1969). **Run, computer run. The mythology of educational innovation**. Cambridge: Harvard University Press.
- Oguri, M. (1969). Educational technology in Japan: Attention to "technology". **Educational Technology**, IX (11).

- Olson, D. R. (Ed.) (1974). Media and symbols: the forms of expression, communication and education. In **NSSE Yearbook**. Chicago: University of Chicago Press.
- Oosthuizen, W. L. (1971). **Die plek en betekenis van leerstofreduksie in die ontwerp van die wiskundeles**. Unpublished M. Ed. thesis. University of Pretoria.
- Prigge, W. C. (1974). Accreditation and certification: a frame of reference. **Audiovisual Instruction**, 19 (10).
- Romiszowski, A. J. (1974). **The selection and use of instructional media**. New York: Wiley.
- Salomon, G. (1974). What is learned and how it is taught: the interaction between media, message, task and learner. In Olson, D. R. (Ed.). **NSSE Yearbook**. Chicago: University of Chicago Press.
- Salomon, G. (1976). A cognitive approach to media. **Educational Technology**, 16,
- Sekerak, R. and B. A. McDonald (1969). Two views of educational technology. **Educational Technology**, IX (8).
- Silber, K. H. (1970). What field are we in, anyhow? **Audiovisual Instruction**, XV (5).
- Sonnekus, M. C. H. (1975). **Onderwyser, les en kind**. Stellenbosch: University Publishers and Booksellers.
- Strydom, A. H. (1976). Die onderwystegnologie. **Die Unie**, 72 (9).
- Swart, A. (1977). **Die plek van die onderrigswyses**. Lecture given before the Work Community for the Advancement of Pedagogy as a Science, University of Pretoria.
- Swart, A. (1977). Die plek en funksie van onderrigswyses. **South African Journal of Pedagogy**, 11 (2).
- Van der Merwe, P. J. (1977). **Vakdidaktiese beplanning rondom die aanvangsituasie van 'n geskiedenisles**. Unpublished M. Ed. thesis. University of Pretoria.
- Van der Stoep, F. (1972). **Didaskein**, Johannesburg: McGraw-Hill.
- Van der Stoep, F. et al. (1973). **Die lesstruktuur**. Johannesburg: McGraw-Hill.
- Van der Stoep, F. and W. Louw (1976). **Inleiding tot die didaktiese pedagogiek**. Pretoria: Academica.
- Van der Stoep, F. and Van Dyk, C. J. (1977). **Inleiding tot die vakdidaktieke**. Johannesburg: Perskor.
- Van Gelder, L. et al. (1971). **Didactische analyse**. Work and study book 1. Groningen: Wolters-Noordhoff.
- Van Gelder, L. et al. (1972). **Didactische analyse**. Reader 1. Groningen: Wolters-Noordhoff.
- Van Gelder, L. and I. van der Velde (1968). **Kind-school-sameleving**. Groningen: Wolters-Noordhoff.

Van Jaarsveld, F. A. and J. I. Rademeyer (1973). **Teorie en metodiek vir geskiedenisonderrig**. Third edition. Johannesburg: Perskor.

Van Zyl, P. (1975). **Opvoedkunde**. Part 1. Johannesburg: De Jong.

Van Zyl, P. J. (1977) **Onderwystegnologie in universitere verband**. Johannesburg: **Rand Afrikaans University Publication Series A95**.

Wheeler, D. K. (1976). **Curriculum process**. London: Hodder and Stoughton.