CHAPTER 3
THE FORM OF THE LESSON

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GROUND-FORMS*

Introduction

One should not lose sight of the fact that instructing children has educating (i.e., upbringing) as its primary aim. There is a common misconception that educating has to do with norms, values and matters of a philosophy of life, which it aims at the child's moral forming and, thus, is directed to his/her heart. In contrast, teaching only has to do with subject content or knowledge, and is directed to the child's reasoning. However, we view the relationship between educating and teaching differently. Our primary aim is to guide the child normatively to a full-fledged, refined adulthood, and this aim includes all areas of adult life. We want to equip the child with knowledge for exercising his/her religious, vocational, and work life, as well as all other facets of adult life he/she is going to enter.

Adults, be they parents, teachers or whoever else takes on the role of the child's educator--always and necessarily educate him/her in terms of content. It is evident that one cannot educate about nothing. We talk with children about things, let them play or work with us or we present something to them to look at or to become directly acquainted with. The immediate problem the adult must struggle with regarding the content with which the child will be educated, is that they are not always on hand or immediately available. For example, the child wants to know something about the Bushmen, and the adult is willing to help, but how? They are not in the Kalahari (desert where the Bushmen live). Or suppose the teacher eagerly wants to have the children in his/her history class hear something about a brave hero and his/her exploits. Now, the teacher must consider how to allow the Bushmen to appear--certainly not literally--or the heroic deeds to be enacted. A variety

* In the didactic-pedagogic literature, ground forms also are referred to as fundamental or basic didactic forms. (G.D.Y.)

of possibilities arise: he/she can tell the class something about them or, perhaps, read something to them about the topic. It is not impossible that he/she will assign the children to play different roles and, thus, revive a scene before the class. The fact is, he/she must think about the ways the children will become acquainted with things which are not available to them before they are introduced or presented.

As soon as one thinks about presenting content in an educative situation, the activity of teaching comes to the fore. We can say that, as soon as the content is introduced in a class, there is teaching. The important fact that educating is only actualized through teaching has already been noted. Similarly, teaching will be meaningless in the child's life if it does not contribute to his/her being educated via content.

Thus, teaching is presenting content to children, but presenting them in such a way that they will entice and captivate the children, i.e., so that they, who are naturally eager to learn, are motivated to lively participate in the lesson by becoming involved in it as learners. Now, the question is in what ways is it possible for a person to let content appear in the classroom and make the children eager to learn it.

The most obvious way, naturally, is by means of language. A person knows things around him/her symbolically by naming them and, although it is not practical to bring the real Robin Hood with his wife and tent into the class, they can be depicted in words and a discussion about the matter can follow. Another expedient way for the teacher is to let the children play with things so they become playfully familiar with them. Quite often, the teacher gives assignments to the children to get to work, to make something, to construct or do an exercise, and his/her aim is that by being busy and working with the content, they will become familiar with it.

Very often, the teacher decides to bring to class something which he/she effectively presents as a direct example to be perceived and studied. One can appreciate a child's excitement and focused learning if a biology teacher uses a live rabbit to class when he/she deals with the topic of rodents or mammals; or, if the heart is to be dealt with, a frog can be dissected and the pulsing heart exposed. The effectiveness of this method lies in the fact that the content appears in a real and appealing way.

In summary, conversation, play, (assigned) work and example are the modes used by the teacher to bring about an involvement between content and child.

In fact, these modes or forms are everyday forms of living. A person involves him/herself in living, among other ways, by speaking, playing and working. Often, he/she also takes a slice of reality and presents it as an example when he/she thinks and talks about it. Suppose he/she wants to discuss a hero, then he/she can use an example of a hero as an illustration of his/her definition or argument. Thus, in presenting a lesson, it is everyday forms of living which the teacher implements. It also is of interest that humans, from time to time, have identified themselves so much with a form of living that they have become typified by it. He/she is **homo loquens** (speaking person), **homo sapiens** (thinking person), **homo faber** (working/creating person, especially in our technological age), and with increasing free time, **homo ludens** (playing person). In addition, it strikes us that the four forms mentioned, namely, conversation, play, assignment and example, are the teacher's ways of giving help, which are correlated with the forms in which the child's learning activities are expressed:

Teacher	Child	Didactic ground-forms
plays to/with	plays	Play
indicates/points out demonstrates	perceives imitates	Example
prompts narrates/tells	talks fantasizes	Conversation
assigns	works	Assignment
repeats	repeats	

These seven ways fall conspicuously into the four mentioned ground-forms of play, example, conversation and assignment (work). [Repeating is not a ground-form but is used within each of them]. Now, we formulate the matter of form and content in the design and course of a lesson in more formal ways:

It has become clear that in preparing, designing and executing a lesson, the teacher is involved with two things, i.e., cultural content and the ways of presenting and opening it up. Ways must be planned by which the teaching and learning event will progress to bring about meaningful understanding by the child. Optimal teaching and learning effects spring from creating a harmony between the unique nature of the content and implementing the best form(s) for bringing this about. The form opens ways for the teacher to meaningfully bring content into the child's life horizon. Briefly, the function of form is to present the learning material or content in the lesson situation in such a way that it speaks to the pupils' curiosity and motivates them to have a learning involvement with it. Thus, form is just as necessary as the content. The use of form has direct consequences for the quality of the learning effect, and is a determinant of the pupils' participation, and of the learning results.

Why is form involved whenever a teacher prepares and presents a lesson? From the above, the answer is that he/she must design the form of the lesson with the aim of allowing the lesson content to speak to the pupils so they will become motivated to participate in the lesson by learning.

At this stage, an example of a lesson serves to illustrate this. P. Gurrey gives an example of an effective lesson pattern in second language teaching in his work, **Teaching English as a Foreign Language**, which we gladly present because some of our ground-forms are so clearly in evidence.

In a second language lesson, the functional approach is of fundamental importance. This requires that the teacher set up everyday life situations in his/her lesson to create a context for the oral use of the language. The structure of such a lesson has the following main aspects: the re-creation of an everyday life situation by the teacher, the origin of a conversation within which the teacher prompts and the children say (repeat) after him/her, and, finally the selection of usable phrases for practicing and memorizing.

If it is a primary school lesson, it can begin with a dramatization of an incident such as the use of a watch by the teacher in a real experience. "Look when I wind the watch up". While he/she shows, demonstrates and prompts, the children listen attentively to the

clicking noises. Thus, a living person acts a part and uses the language in a real situation. Notice how the forms of expression of teaching and learning referred to earlier--pointing out, prompting, perceiving, talking--already are at work.

Obviously, this naive event is not going to interest the secondary school pupils, and a more meaningful scene will have to be produced for them. For example, the teacher pretends that he/she must catch a train and must leave quickly, since he/she is already late. He/she looks anxiously at his/her watch, shakes it, listens to it and looks again: "Oh gosh, I wonder if my watch is correct. Did I wind it last night?" Then he/she puts on his/her hat, grabs his/her briefcase/purse, and hurriedly disappears out the door.

While this scene takes place, the children express his/her activities in words and, in this way, acquire the opportunity to use language in a real-life situation. Also, the initial step is now taken for a more general conversation about matters related to the event. This is followed by the teacher giving an assignment to write about a related theme.

This lesson illustrates how the teacher has planned to make available the language which the children must learn. The fact that it is a second language lesson obliges him/her to create a context within which the language can be used functionally, since talking is the primary purpose. Have the forms conversation, play and assignment become evident to you during this lesson? The teacher has designed the lesson such that the lesson progresses by means of conversation, but the level of the children and the fact that he/she must dramatize, also allows the activation of the lesson to take on the form of play. By means of conversation and play, the teacher has infused the lesson situation with language as the content the children become involved with. Conversation and play bring to light the content and allow it to be lived such that the children become involved in the event by learning.

What is remarkable in this lesson is that language is not the carrier of meaning only during the conversation, but the learning material primarily is, because the specific aim is language acquisition. The pupils' learning is observable in activities such as viewing, imitating in play, repeating after, and doing while the teacher's assistance has assumed the forms of leading in play, prompting, narrating, dramatizing, indicating and giving an assignment. The didactic

forms of actualization, which are prominent in the lesson, are conversation, play and assignment.

Conversation

We have stated that content usually is not present in the classroom at the beginning of a lesson and that it, thus, is the teacher's task to design ways to make it present. The most obvious way to allow content to appear in a lesson is to talk about it, to use language as a carrier of meaning to inform the child about things. Can one really think of a lesson within which talking about things is not a way of presenting them?

The white rhinoceros is an interesting animal but is only found in the Hluhluwe and Kruger game reserves. Even so, one still can familiarize children with a great deal about this armored, primitive animal because words are able to convey meaning. The teacher can talk about its characteristically broad brow, sharp horn and stocky body, while the children also ask questions about its legs, skin-color and much more. No, teaching without conversation is unthinkable.

Characteristic of conversation, as a form of actualizing teaching and learning, is that it uses language to present content to the children during a lesson. Christ, the exemplary teacher, clearly was an exponent of conversation. His teaching is given by means of the spoken word. A striking example of how he applied this form of teaching is the Sermon on the Mount. Conversation also is prominent in Socrates' dialogic teaching in which he and his pupils arrive at the essentials of a matter through questioning, answering and re-questioning.

The teacher will recognize conversation as the oldest of his/her tools. Lesson after lesson, he/she uses this form whenever he/she is with the children and talks to them about things. It is possible to discuss with the children anything a person knows (and, thus, has named) by means of language. Conversation brings about the context for allowing a battle to be re-lived, a natural scene to be described or anything else the syllabus of a subject prescribes be subjected to communicating, narrating, expressing, describing and discussing.

This is not to say that conversation consistently will be the most effective way of presenting the content; still, unquestionably, it is

the most frequent, overarching ground-form. Keep in mind that conversation really is a prominent everyday form by which persons live. When they are with each other, to chat, to argue, debate or engage in discussions, say in the United Nations, at a house party, at work, in a conference room or wherever else, conversation usually is the most frequent form of communication with each other about matters and things and, as a rule, it takes place spontaneously and informally. However, when a teacher presents a lesson, this everyday form acquires a more formal and explicit character because, here, it is used to bring about learning.

The basic test for effective instruction is the meaningfulness of the learning it brings about. Meaningful learning arises from the desire to solve a problem. Consequently, teaching should be more question-problem oriented, rather than merely telling [lecturing] if we expect to have good learning results from our lesson. Hence, the teacher ought to use conversation in such a way that the pupils are stimulated to talk about the content, rather than having them listen passively while he/she presents it.

Now we can understand why the question-and-answer method is such an effective variant of conversation: it clearly is a method for actualizing conversation and for promoting a questioning attitude in the children. Active participation in learning usually is characteristic of a lesson in which conversation and question-and-answer are the form and method, respectively, of presenting the content. An observer of a lesson quickly notices how the pupils' participation changes between moments when the teacher presents knowledge, and when he/she is busy clarifying and questioning. In the former, attention fluctuates, while in the latter intensive learning activities are evident.

Asking questions directs an appeal to the pupils to enter conversation by means of their answers. An example of a lesson in religion can illustrate how conversation or discussion is effectively activated by means of the question-and-answer method. In a lesson about the offering on Moriah, the teacher wants to bring to light the deeper meaning of the story by asking the class penetrating questions which are directed to its essentials. In terms of questions, he/she will discuss all readings with the children and, by clarifying their answers, penetrate to the deeper truth of the Bible's story, namely, what Christ's sacrifice on the Cross refers to. By asking penetrating questions such as: "Why is the ram an image of Christ?,"

they are led to the concept "substitution" and to the realization that the event reflects God's love for Christ, since what He had kept Abraham from sacrificing his son, he had paid for himself.

Conversation, put into action by question-and-answer, thus, is the primary form of this lesson. The popular method of narration also includes the possibility of implementing conversation as a ground-form. Characteristic of this method is that facts are communicated by talking about things with the children while they listen. If the teacher applies the method of narration such that problems arise during his/her narrating, and are evident to the children, this will create a questioning attitude in them and stimulate them to participate by means of questions or comments. In these moments, conversation is put into action.

When ought the teacher use conversation as a ground-form? We have already stated that, in fact, it is used in every lesson. Although, in the choice of the ground-form(s) for a lesson, the teacher ought never be restrained by rigid prescriptions and, ultimately, it is a matter of a personal and somewhat intuitive choice; still, it appears that certain guidelines can be laid down regarding the choice of conversation as a lesson form. One can accept that the unique nature of the learning material of a subject has relevance for the choice of the forms and, specifically, regarding the use of conversation. Should it not be more desirable for a biology teacher, in a lesson about mammals, to show the class a real live example, e.g., a rabbit, rather than presenting the content (mammal) by describing it to the children? In such a lesson, example, as form, is primary and, thus, conversation is secondary. In a lesson about religion, in contrast, priority is given to conversation because of the unique nature of the content. Biblical learning material is the carrier of a deeper meaning which the teacher of religion must reveal in each lesson. The testimony of Christ in the Scriptures is the central notion which generally gives meaning to its content. At the heart of the Bible's content lies the fundamental motifs, i.e., creation, the Fall and redemption by Jesus Christ.

The correct understanding of the content by the child is necessary if he/she is to reach his/her salvation [as a believer]. This demands that, in the lesson, the teacher vigorously guides him/her, and the deeper nature of the content must be expounded and interpreted. The nature of the learning material in a lesson on religion, thus, is a

determinant of the ground-form which will primarily be a guided conversation. Generally, one can state that the teacher should choose conversation as a form during those moments in his/her lesson when, in his/her opinion, the content can be effectively discussed through the medium of language.

Play

Contemporary human being often is typified as homo ludens (playing man). Persons, so it is claimed, can better assert themselves as persons if they can carry out more unrestrained activities and play. One wonders about the extent to which this view is related to the fact that today, often, persons function as little cogs in large organizations, and no longer can see the direct results of their work. The meaning of their work has been almost entirely lost. Work no longer is life fulfilling but is merely a way in which money can be earned which they are urged to spend on free time, which also is increasing.

Persons play more than ever before. The sale of sporting goods and exercise equipment is a flourishing business. However, the fact is that play, so one-sidedly overemphasized in our time, is a human form of living. The first persons on earth were not true persons if they did not skip flat stones on the water, or if they did not roll a round object to someone else. Also, from the earliest of times, parents have let their children play with objects and then taken the opportunity to teach them to count and sort in this straightforward and playful way. To be playing in the world, indeed, belongs to a person's contact with the world.

Play is our response to the enticing invitations of the world which we come playfully forward to meet. Thus, there certainly are few things more irresistible to use playfully than a ball. Does not a tree or a ladder entice a child to climb it? Hence, we recognize play as a way in which a person and a child deals with the things in our world. If adults are not with the children to direct their activities, usually, they are involved in exercising one or another form of play. Their play also differs from that of adults, in that play for children is a serious and life fulfilling matter. Just notice how children surrender to play as if their lives depend on it. Unless children compete in play, usually their play is not directed to an aim, but is an end itself. Only we, as parents or teachers, are aware that they

unwittingly also are busily and playfully becoming familiar with the things of the world in which they live.

The teacher who plans a lesson with the aim of making content available ought to be aware of the special possibilities contained in this primordial form of child living which allows him/her to become involved with the content. The teacher will require the children to learn to know things during the lesson, and during his/her preparation, he/she should ask him/herself whether he/she can bring about a cognitive encounter between the child and the learning material through play. He/she should consider the possibility that children gladly play, and they can learn by playing. Think about the excitement a quiz contest or dramatization of a scene gives to the class. These are but two variations which play can assume in a lesson. Tinkering and experimenting with apparatuses in a laboratory also are variations of playing in a lesson.

The possibilities offered by play as a ground-form of teaching are extensive. The teacher knows all too well how youngsters get involved in playing with clay, but by giving them assignments to form models, he/she knows that his/her children's dexterity, creative possibilities, spatial orientations, calculating abilities, etc. are given the opportunity to develop.

We have indicated that a conspicuous characteristic of teaching via play is that often the child participates so spontaneously and with such abandon in what the teacher aims at in the teaching event, that he/she is not aware that the child also is learning. It is so inborn for the child to play, and usually it is so pleasing and natural to him/her that it has the decided advantage that teaching is relieved of its routine character in a play lesson. The formal atmosphere of a conversation lesson is missing, and room has been made for less formal and more spontaneous learning participation from the children. This fact makes it an extremely effective form of contact with the child's reality. This holds especially regarding the young child for whom play is a customary matter. It is of value in preschool teaching, where play often assumes the form of adult life. When a preschool bot rides on a little box he is really a horseman, helmsman or engineer, and the box respectively is a horse, a ship of a locomotive. Through such play, he is introduced to the content of adult life to which we will ultimately lead him.

A conspicuous characteristic of play in the teaching situation has now become evident, i.e.,, the child plays **with** things. In contrast, in a conversation lesson, we talk **about** things with the children. Thus, for the child, in play, the content is a means and not an end. The things with which we want to familiarize him/her direct us to arrange an opportunity for him/her to play with them. Consequently, he/she is playfully immersed in or is in direct contact with the content. If, instead of narrating the Christmas story or reading a scene from **Hamlet,** the teacher chooses to assign roles to the children to dramatize it, in all probability, this will be an effective way to present to the class the story of Christ's birth or the tragic life of the Prince of Denmark because of the direct participation of the children in the event--as players and spectators. In these lessons, they will not only learn the facts, but also will have lived experienced the atmosphere. The lived experiencing promoted by play will lend a quality of durability to the learning.

Vriesland and Kamphoff give an excellent example of a play lesson in their work, **Praktische Wenken voor Creatief Spel** (Practical Points for Creative Play). It was Spring in Amsterdam, and the fields were covered with flowers. Through playing, a conversation arose between the teacher and the children about the growth and blossoming of flowers. With the question of what flowers grow from bulbs, the lesson got going and the teacher requested that one of the children impersonate a flower. The preschooler squatted down on the floor to represent a flower. Then, a text was read aloud, and the movements controlled. First, the flower slept, and after that became thirsty. Obviously, nothing has happened yet; but with the coming of the rain, there is a noisy little gulp followed by the "little flower" gradually standing up and unfolding to its fullest extent, its unfolding leaves waving in the south wind. After this, the rest of the class joined in representing themselves as a field of flowers.

Viewed didactically, the children clearly learned something about the germination and growth of a flower via play. In this lesson, the content strikes us as more than just the application of a means. The children embodied the content themselves and, in this way, became familiar with it. How much excitement and effectiveness there is when an arithmetic teacher draws a clock on the chalkboard, putting a figure in the middle and then having the children practice their times-tables by requiring them to give the products as he/she quickly and arbitrarily points to the numbers on the clock? With a little ingenuity, any drill, even the so-called "pattern drill" in

learning a second or third language can be rid of its tediousness and boredom by using play and, thus, transforming it into a pleasant and agreeable lesson. One wonders if teachers appreciate the value of this ground-form, realize its possibilities, and makes use of them. With the exercise of good supervision, such a lesson need never become disorderly; indeed, play can be an extremely effective way of teaching.

In summary, in play, the content is a means, and is directly on hand and more available for the children because they handle, use or, in one way or another, are directly involved with it. Thus, play seems to distinguish itself from the other forms in that the intensity of the child's involvement with things appears to be greater. Thus, in planning and designing a lesson, the teacher's task is to consider the desirability of casting his/her lesson in the form of play, with due consideration of the nature of the learning material, the potentialities of the children, availability of apparatuses and other factors.

The assignment

To thoroughly design and plan a lesson truly is not an easy task. There are a multitude of aspects involved, each of which requires careful consideration and planning. Surely, we cannot have a lesson be merely haphazard; on the contrary, we aspire to make it an optimally meaningful moment in the child's life. The teacher stands under the imperative to intervene in the child's life in meaningful ways and, indeed, in terms of content. The question is whether, in our planning, we must always consider the child's role in the lesson. Are we not sometimes so involved in planning how we will act in a lesson that we do not form an idea about what we expect of the child at during in the lesson? Have we also planned for the child's modes of learning? If the children do not participate by learning, our best attempts will be frustrated. Their learning activities will be evident in the fact that they sense the content, experience it, and appropriate it for themselves. In doing this, they acquire new knowledge and insights, and integrate them into their existing knowledge.

So far in our discussion of the forms, we have seen that children can become involved with the content by learning it during a conversation about or during playing with the content. However, didacticians also are aware that the child can learn by means of a

functional experiencing of or involvement with the learning material, i.e., by working with it.

John Dewey (1859-1952), the prominent American philosopher-pedagogue, certainly is the most prominent exponent of learning by doing. In the propagation of this approach to learning, Dewey opposes the passive learning situation within which the teacher talks and the child listens. Child experiencing, for him, is at the center of school activities. His approach points to a change from a content-centered to an experience-centered school. For Dewey, this primarily involves learning through and in relation to life. According to him, the pupil is in interaction with reality by which he/she is not allowed to be untouched. His concept of "experience" is constituted by an active doing and a passive undergoing from which learning arises. The child's active, working (doing) involvement in the learning situation, thus, is a basic Deweyan didactic principle. In the Deweyan school, emphasis is placed on the teacher and pupils working-in-cooperation.

As are conversation and play, so is work an original human form of living. A person's relationship to reality generally is shaped through working activities. All of us are busy carrying out our daily tasks via this form of living, i.e., working. Some write, others design, construct, manufacture, assemble--briefly, a human being is a working person. Even if we dig in the garden or mow our lawn, we can be busy working with the world. The question which arises here is, how one distinguishes between play and work. Doesn't a person sometimes also play when he/dhe steers his/her gasoline-driven lawn mower? What about a mechanic who tinkers with an engine? We must decide precisely what the dividing line is when he/she works and when he/she plays with things. This probably has something to do with his/her focus at a moment. If he/she is seriously and purposefully busy repairing something, he/she is working; but, if something peaks his/her curiosity, and he/she does a little experiment or tinkers with it, he/she is playing.

To work means to discover, master, and apply with profit, a structure in the lifeworld. In our time, human work has acquired a conspicuously technical character, in the sense that, by preference, persons make and use instruments for the manipulation and control of reality.

Because work characterizes adult life, of necessity, the child cannot be led to participate in the culture-creating activity of the adult world in any other way than to him/herself work. He/she usually does this by carrying out assignments given by the adults and, specifically, by the teacher in the lesson situation. That the child can arrive at a cognitive encounter with reality through working also is a cardinal principle which had been recognized by educationists before Dewey.

In Wie Gertrud ihre Kinder lehrt (How Gertrude teaches her children) (1801), Pestalozzi indicates how this principle is implemented by Gertrude, the mother. At the basis of teaching her children to count and compute, her method is, while they are spinning and weaving, to let them count their yarn and stitches back and forth, and let them skip, add and subtract with odd numbers. Thus, she teaches her children to calculate by means of their work.

The German educationist, Georg Kerschensteiner, the Director of Instruction in Munich from 1895 to 1919, is an equally famous exponent of the principle of teaching through the child's working involvement with the milieu and reality. In teaching, he implements the Aristotelian principle that character is formed through activity. In practice, this principle is embodied in the Kerschensteiner Activity School, in which purposeful workshop teaching is the basic axiom.

These educationists recognize the important fact that children can learn through being active, doing and working.

Thus, in designing a lesson, the teacher should allow for the fact that he/she also can let the children learn by giving them work assignments. He/she should ask him/herself if he/she can bring about effective learning in a specific lesson through this spontaneous life attitude, i.e., work. He/she should ask him/herself, at what stage in concluding a lesson, is it desirable to let the children learn by assigning them a task, by requiring them to study by themselves, by letting them construct something, to use an instrument themselves, by letting them do an exercise in the textbook, by letting them tackle a project, set up an apparatus, or do a dissection--in other words, to harness work as a person's form of living, as a didactic form of actualization.

During the lesson, the assignment is used by the teacher at that moment when he/she deems it desirable that the pupils acquire a grasp of, or firm up the content by working with it. Thus, he/she will allow the conversation to change into self-activity via assignment, as soon as he thinks the pupils are able to do, by themselves, what they were doing together. During a lesson, an obvious moment for the effective implementation of an assignment is directly after the exposition phase and the breaking through of insight, when practice will serve to exercise and consolidate the insight. The relationship between assignment, as a didactic ground-form, and the textbook method is clear here. The teacher uses the textbook when he/she wants to let them do an activity which exercises their insight, or if he/she wants, by means of a comprehension test, to exercise their ability to read with comprehension.

Thus, the textbook method has its primary foundation in the assignment, as a ground-form; so also do the task and the project. The task assumes the form of independently studying a text and working out a problem, often with a library or reference book. The assignment usually, but not necessarily, follows the end of a lesson or series of lessons, and hass an important role in a program which follows the principle of differentiation, and provides supplementary content for the more discerning pupils.

A modern tendency is to replace the somewhat rigid textbook method with a project, as a comprehensive task to be undertaken by the pupils individually or in groups. The Dalton Plan is an extreme form of this. Its primary characteristic is the pupils working independently in terms of a monthly program of work. The Dalton Plan, which has individualization as an aim, eliminates the system of classes. The role of the teacher is to give assignments, and additional advise, as well as to continuously evaluate the pupils' progress. In a demonstration lesson, the pupils' active doing also is clearly in the foreground. In this type of lesson, at first the teacher demonstrated, but necessarily following this is the assignment to work together or by oneself. For example, the construction on the chalkboard of a perpendicular line, AB, on line CD will be followed by the teacher assigning the pupils to individually construct a perpendicular line, PQ, on line RS. A drill and practice lesson each occur equally often via assignment.

Above, it is stated that planning and designing a lesson are not easy. The ideal of having the children learn effectively during a lesson is not easily achieved. Still, in the assignment, we must realize that it is a very valuable possibility at our disposal for attaining our aim.

The example

Sharp-rising curves are characteristic of today's graphs depicting the activities of people. This also holds for their intellectual, culture creating activities, of which life content is the product. Teachers and compilers of syllabi can attest to how they feel about the pressures of the cultural revolution of our time. Our greatest fear is whether we can get through all the prescribed content with a class in the time allotted.

Until a few decades ago, an encyclopedic approach to learning material was current. Syllabus planners still deemed it possible to have completeness as an aim in compiling school syllabi. The school's task of unlocking or presenting culture also was not complicated because cultural content had increased slowly.

In the twentieth century, the tempo increased so drastically that the school experienced the increasing burden of a deluge of learning material. It is estimated that the first doubling of human knowledge occurred from the birth of Christ to 1750, the second in 1900, the third in 1950, and the fourth in 1960--data which clearly reflect the increasing growth in knowledge. A radical reorganization of the given mass of knowledge can, so it is contended, be expected several times more over the remaining decades of the century.

The cultural revolution has forced the school to a reorientation regarding its function of unlocking culture and ways must be investigated to face up to the problem. Subject content has become so voluminous and differentiated that it no longer is accessible in its entirety, even in a few subject areas. Necessarily, memorizing must be abandoned, and the discovery of knowledge striven for. Memorizing must make room for understanding, comprehension, and insight. The unimportant must be eliminated, and an encyclopedic approach must make room for a striving for an insightful command of fundamental key concepts, as points of access to knowledge. Because subject content no longer can be approached horizontally, roots, or growth points of content must be penetrated.

Various other solutions to the problem of being deluged with learning material also have been suggested. From some quarters, the appeal resounded that children should be equipped with the possibility of a life-long investigation of knowledge. Still others believed specialization was the only solution. Opponents of specialization, however, alleged that, with this, the child's general forming and broader understanding would suffer.

Against the background of the mentioned striving to return to the essentials of the learning materials, it does not surprise us that exemplaric, or example teaching has recently become so successful. In this connection, 1951 is an important date. At a congress of secondary school and college/university teachers in Tubingen (Germany), a solution was sought to the threat of suffocation of the child's spirit contained in the comprehensiveness of learning material. An appeal to penetrate to the essentials resounded, and the example was propagated as the antipode of the deluge of learning material.

Martin Wagenschein stated that exemplary teaching is the antithesis of specialization. It does not specialize, but rather it seeks the general in the particular. The nature of this ground-form is clear in this statement.

Now we can elucidate why the example is so successful. From a comprehensive field, the teacher can select an example which is representative of the essentials of that field. This example serves as a reflection, as it were, of the comprehensive. It reflects the characteristics in terms of which the child can unlock the totality of the area of knowledge. The principles of the matter can be clear in the example and, thus, offer the child the key for unlocking the larger totality of related knowledge.

Here, we also lay down the criterion for choosing an example, i.e., that it must reflect the characteristics of the general type, genre or broader knowledge which it represents. Thus, the prodigal son, James Watt and "Groot Constantia" are examples which can ideally serve to bring home concepts such as a short story, an inventor and Cape-Dutch architecture.

Perhaps, the wrong impression is given that the example is a formula conjured up because of teaching problems, and that it was

suddenly discovered in our time. The example is essentially inherent to teaching. How else did early humans admonish their children against eating poisonous fruits except by showing them examples of that type of fruit? And, what of the scientist? He/she takes a slice or sample from the reality he/she investigates, analyzes it, determine its characteristics, and then attributes it again to the whole from which he/she selected it. Every time one uses "for example" in a conversation, he/she calls on this form.

That globe which appears in the geography classroom also is a model or example of our earth and presents the world in miniature to the children. Christ also was an exponent of this form. In terms of an example, in the form of a parable, he manifested God to His audience, unlocked the eternal truths for humans and preached His message of salvation. In Luke 15, in terms of two simple anecdotes, He conveyed the message of God's calling for mercy and His singular preference for sinners. In the parable of the Prodigal Son, the message of eternal happiness echoes for a lost one who returns (to the fold).

Notice how, even in an explanation such as this very one, examples are sought to clarify something. By examples, we have tried to illustrate what an example is. It is a natural way of understanding, when a person is confronted with a large field of knowledge which he/she must unlock for another person to understand in accordance with an example which embodies the essentials or characteristics of a particular field of knowledge. The example also is an effective key for gaining entry to a field of knowledge.

A striking lesson is that of Heimpel, exponent of the paradigm, or general example. He presents the pupils with a comprehensive image of the Middle Ages through discussing several prominent figures of that era, such as Charles the Great, Henry III and Joan of Arc, each of which provides a high-point in the course of this history. His aim is to use the figures, which are representative of facets of the history of the Middle Ages, as keys to a notion of this historical period. Although, in this case, the teacher runs the risk of not coming to an integration of the knowledge, there is no doubt that this history, which spans a relatively long period, is nicely opened for the children.

Perhaps, so far, the role of the example in combating the problem of the deluge of learning materials has been over-emphasized.

Undoubtedly, it is an effective antipode to the deluge of knowledge; even so, its real merit, already referred to, lies in the ways in which the example allows the content to appear in the lesson. Consider that, by using a good example, we make reality directly available and immediately perceptible. If we talk about something in a conversation lesson, it becomes available indirectly via language, as a carrier of meaning, but if we present an example to the class, it is immediately actual because it represents reality--it reflects it directly, as it were.

Didacticians are unanimous that the great value of the example lies precisely in the fact that it makes a direct appeal to the child's curiosity. The content is not veiled through language, is radiantly present. It invites the children to focus their attention on it. Imagine the intense eagerness to learn shown by children, when the teacher of a lesson dealing with primitive weapons of aborigines, exhibits a boomerang. Will not the children find this more exciting than when the teacher tries to describe it in words? And what of the Bushman's poisoned arrow or the blow pipe of the inhabitants of the jungle? The experience which the children have from an example is that of the nearness of reality. Learning without the use of an example is truly difficult to accomplish.

Yet another benefit of the example is now evident. Obviously, the teacher will not let the cat out of the bag and merely elucidate and elaborate everything about a boomerang. He/she will plan to lead the children by questions, to discover for themselves the essentials of the weapon. From the boomerang's particular shape, he/she will let the pupils themselves infer why it returns if it doesn't hit its target. In this way, learning effects will be more lasting because the pupils have discovered the essentials themselves.

Also note the contribution the example makes to the authenticity of the matter. Reality is presented so genuinely that there is little room for doubt. Thus, by means of an example, the validity of a general proposition can be shown by carrying out an experiment about a general law of nature. Perhaps the impression, so far, is that the example is appropriate only for inductive methods, but we previously indicated how it also functions deductively. The teacher does not necessarily need to begin with an example; he/she can first present a general proposition, rule or truth, and then illustrate it in terms of an example.

At this stage, it is necessary to point out that there are many variations of the example. The teacher must make sure this is a part of the theoretical substructure of his/her lesson planning. Here, there is only an incidental or passing reference to the distinctions didacticians make among the example, as exemplar, as exempel, as paradigm, as model, as type, as pattern and as other variations of it.

The exemplar is an example of a type of thing (a species) such as the cheetah being an exemplar of a beast of prey. In contrast, an exempel is concerned with norms: it is applied as an example of what ought to be or how a matter ought to be viewed to serve as an example. The exemplar functions in a radiating way for a type-idea, e.g., a specific novel, which is used as an example of a historical novel. However, the exempel has itself acquired value, which elevates it to something generally valid. It has a quality which elevates it above co-exemplars. **Treasure Island** (R. L. Stevenson) and **Tom Sawyer** (Mark Twain) certainly qualify as exempels of classical child literature, while Alexander the Great is an excellent exampel of a conqueror.

Finally, here is yet another typification of this ground-form. The example is clearly differentiated from the ground-forms of play, conversation and assignment because of its characteristic form. The example has to do with the relationship between the particular and the general, and by the fact that it reflects the characteristics of a particular field of knowledge which makes its general structure penetrable. The characteristic form of a lesson within which example serves as the ground-form is that it fans out from the particular to the general. When the teacher has led the children to the door of a new facet of knowledge, he/she ought to weigh the possibility of unlocking it with the example as a key, given its merits.

INDUCTIVE AND DEDUCTIVE APPROACHES

Should children remember or understand? This question pits two approaches to teaching against each other. If "memorization" is stated as the primary aim, we find ourselves somewhat in the tradition of that approach which has in view the conveyance of knowledge by the teacher, and its memorization or reproduction by the pupils. In contrast to this, "understanding" refers to insightful knowledge or comprehension. To attain this, the children must

learn to know the content in terms of its essentials. On his/her part, the teacher must reduce the learning content to its essentials.

Above, we referr to the deluge of knowledge in our century which has enveloped the school, and has forced teachers to abandon the encyclopedic approach, and direct themselves to the essentials. The answer to the question of remembering or understanding, thus, appears to be that knowledge based on understanding is preferable because it is lasting. Experience shows that such knowledge, unlike the memorized, is more functional because the child can use and implement it. Instead of the teacher only covering the broad lines of the subject content, it is preferable that he/she explore rather broad lines and, then penetrate to the enduring core or, begin with the core and, from there, unlock what is more comprehensive.

An identifiable lesson pattern is evident in the above discussion. The teacher can explore the general with the pupils with the aim of discovering and formulating an essential, a fundamental truth, a law or rule. This exploration usually is related to the use of example as ground-form because the law or rule can come to light from an investigation of different examples. This then also shows the following pattern, i.e., example, example, example → inference (as proposition, definition, and law).

During a lesson, this procedure is known as the inductive method, which refers to a progression from given examples to a general conclusion. Thus, the inductive method is a fundamental pattern in a lesson in which the teacher first investigates, studies and analyzes with the children, things which are available such as a poem, a sentence, a construction, a number of facts, a flower, a sample of soil or any other content, with the aim of drawing inferences from them with respect to their characteristics and essentials.

If, after one perceives a couple of hundred crows, and concludes that all crows are black, one typically has worked inductively. However, it also is possible for the teacher to cast his/her lesson in a deductive pattern, which means that he/she first presents and clarifies a general principle, proposition, rule, law or conclusion and, then applies it. Thus, the deductive approach is the opposite of the inductive, and usually appears as: conclusion or proposition (definition or law) → example, example, example. One will immediately recognize this in any lesson where the teacher first explains or makes hypotheses and then proceeds to illustrate them

in terms of examples or applies them in an exercise. To make the statement that all men are mortal, and then reason further that Socrates is a man and, thus, Socrates is mortal, is typical deductive reasoning.

What consequences do the inductive and deductive approaches have for the design and the course of a lesson? They are organizational schemes or procedures of importance for pupils gaining insight in a lesson.

A lesson with a deductive pattern involves leading the child to apply general principles to a set of data and draw appropriate conclusions. The lesson pattern is shown in the presentation of particulars, e.g., the characteristics and requirements of a short story, followed by their application to a specific short story. The aim of the application is to illustrate or verify the characteristics by means of an example or this one example of a short story by evaluating it in terms of the requirements.

In contrast, a lesson with an inductive pattern will begin with some experiential facts and lead to discovering and forming a general concept. The lesson probably will begin with stimulating the child's experiential knowledge or with a perception; from this, a problem will arise or a hypothesis is formed. The following phase of the lesson will be to gather data related to the concept, or additional perceiving or experimenting to verify the hypothesis. This is followed by comparing the data to identify generally valid and common elements and, finally, to formulate a general proposition, concept, rule or definition. Basically, this amounts to drawing conclusions after the children explore a particular field with the help and guidance of the teacher. The moment in which such newly formulated propositions are applied to new situations and problems, the lesson switches over to the deductive method.

What, thus far, has been formally stated, now can be quickly illustrated by two examples. Suppose a teacher of literature must deal with the following two themes: "The symbolism of Totius" and "How Wordsworth's love for nature led him to a love for persons". Necessarily, he/she is going to have to work inductively or deductively and must decide which one will be the best for his/her lesson, considering such factors as the child's background of knowledge in the subject, and level of literary-critical appreciation.

In the case of Totius, he/she can work deductively by telling the class that it was characteristic of Totius to project his inner lived experiences--e.g., his personal grief or compassion for his people--into natural phenomena such as a weeping willow or a thorn tree (acacia). After this, he/she can discuss with the class, as illustrations, some of Totius' poems such as "Forgive and forget", "The old willow" and "God's choice".

One rightly wonders whether the pupils would enjoy their lesson more if he/she were to work inductively and discuss the striking poem "Forgive and forget", which represents the Afrikaner's power to lift him/herself out of humiliation, and gradually lead the pupils to self-discovery of the symbolic meaning of the thorn tree, and the characteristic qualities of Totius' poetry.

In the case of Wordsworth's poetry, the same possibilities exist. We can begin our lesson by telling the children how, in his youth in the landscape of the magnificent English moors, Wordsworth had developed an intense love for nature. The shepherds and plainsmen of the moors were viewed by him as part of the landscape, and he associated their lives with the grandeur of nature. Thus, his love for nature led him to love for persons.

Now, the theme "Wordsworth, poet of people in nature" can be studied further in terms of poems such as "Lucy Gray", "Michael" and "The Solitary Reaper" and "To a Highland Girl". Naturally, it also would be possible to work inductively and identify this characteristic of his poetry from a poem or poems.

In a didactic context, different factors such as the nature of the learning material and the level of readiness of the pupils have an influence on the choice between an inductive and a deductive procedure. One can accept that a pupil who is not yet able to think abstractly will feel more secure if he/she can make conclusions and deductions in terms of an example or examples.

Also, the inductive method preferably ought to be used with any introduction of a new rule or way, e.g., in grammar. Instead of presenting a grammatical principle, and then illustrate it or applying it by means of an exercise, it would be more effective to guide the pupils to a self-determination of the principle by, e.g., analyzing several sentences in which the principle is embodied. In this case, the inductive approach has the decided advantage (in

contrast to the deductive method, where the pupils will be inclined to memorize the proposition) which will lead the pupils to a clear formulation and formation of the concept. Such exploration which leads to self-discovery of the rule, law or proposition undoubtedly will make the learning more exciting, and the insight more lasting.

In **The Teaching of High School English**, J. N. Hook discusses two good examples which show the different effects of the inductive and deductive approaches in a grammar lesson. A teacher can begin his/her lesson by making a statement, e.g., "Each gerundive or infinitive phrase should be placed in a sentence so that the relation that it has with the word that it modifies is immediately discernible". After this, the teacher can give the pupils an assignment to investigate certain sentences to test whether they meet the requirement. However, he/she also can begin by writing a sentence on the board, e.g., "While kicking and screaming, the mother carries the little child to the bathroom," and then the pupils are asked why the sentence sounds odd. After this, he/she presents additional examples for further clarification. Then, the teacher helps the class formulate the general rule in such a way that it is understandable to them, e.g., we must be careful where we put our phrases with "ing" words or infinitives so that we might possibly say something we did not mean.

Hook's second example refers to the choice of the verb in a composition. Possibly the textbook prescribes a complex rule. The resourceful teacher will begin, e.g., with writing the sentence, "George and Mary ___ here." on the board and asking how many persons are involved in the activity. The pupils are aware that it is two and, consequently, understand the choice of the verb "were". Then, he/she writes "Either George or Mary ___ here" and asks again how many persons are involved. The obvious answer is one, and this explains the choice of "was". Step by step, he/she guides them to acquiring insight into the correct verb in "Either the man or the boys ___ here" and "Either the boys or the man ___ here".

The advantage contained in the inductive approach for language instruction is that, in contrast to the deductive, within which rules and definitions are prominent, it agrees with the sound aim of exploration which leads to self-discovery--the child thinkingly pushes him/herself through to the core of the rule and is involved in its formulation. The result is more exciting and more lasting

learning, and the use of grammatical rules will rest on understanding.

These advantages of the inductive approach also hold in literature with respect to the presentation, e.g., of the characteristics of different genre and forms of poetry. The characteristics of the Italian sonnet are, among others, its structure at most consists of fourteen iambic pentameter lines of poetry. The rhyme in the quatrain is embracing. As far as its intrinsic structure is concerned, ordinarily we receive an image of nature, a phenomenon from everyday life or an expression which rises to a climax and concludes in the eighth line. In the sestet, we find an application of the image to life. In the light of the above, the inductive approach in handling the Italian sonnet will not be possible without the vigorous guidance of the teacher.

This is a good example of a situation where the teacher must consider such factors as the pupils' foreknowledge and balance the two approaches with each other. He/she can present the lesson deductively by first handling the characteristics and then work illustratively by discussing, e.g., "Sleep" by D. F. Malherbe and/or "Early Autumn" by N. P. van Wyk Louw. If, however, he/she is confident in the pupils' abilities, literary foundation and foreknowledge regarding scansion and rhyme, with good results, he/she can guide them with the poem itself, to infer and formulate the characteristics. In a subsequent lesson, another Italian sonnet can be handled deductively in terms of the characteristics ascertained.

It suffices for us to present another example of a lesson. Suppose a music teacher states as a lesson aim "the unique nature of folk-music". In our opinion, the inductive approach has the advantage that the characteristics of folk-music (e.g., its simplicity of melody and verse, the fact that it is born of people's sentiments, and is expressed in their language, and is not harmonious) can be revealed in more enjoyable ways. Should the teacher then play "Dixie", "Loch Lomond" and "Londonderry Aire" for the children, he/she can guide them to identify and classify the essentials of folk-music.

Thus, it seems that, in literature and music lessons, the inductive method has advantages over the deductive, with respect to unlocking or presenting new content. However, we must not underestimate the deductive method. There is no doubt that the

deductive method will be equally or more effective when a solid foundation of already formulated knowledge exists.

How the unique nature of the learning material is a determinant of the choice of the inductive or deductive method is evident in the case of teaching geometry, where the use of the inductive method is not expedient. All geometric rules are formed by deductions from fundamental axioms. Propositions and definitions are the building blocks of the subject. For example, it is possible, though undesirable, to let the pupils measure the angles of many triangles and ascertain that the sum of the angles equals 180 degrees. However, such a conclusion will be imprecise and unreliable. It is characteristic of inductive results that they never can claim absoluteness. However, if the mathematics teacher begins with Euclid's axiom regarding rectangles to show that the angles of every triangle form two right angles and, thus, conclude that the three angles of this triangle form two right angles, his/her method was deductive and his/her results are irrefutable.

During the 19th century, the inductive method became the method of the natural sciences. The laws of the natural sciences are self-evident inferences from the perceptions and investigations of many instances and, thus, are formed inductively. However, once they are formed, one can draw additional conclusions deductively.

Thus, the unique nature of the subject content is relevant to the choice of the inductive or deductive method. In the natural sciences, a distinction can be made between inductive subjects, i.e., open systems in which rules are formed inductively, e.g., physics, biology, chemistry, etc., and deductive subjects which are closed systems within which the rules are arbitrary laws or definitions formulated or deduced from other rules, e.g., mathematics and logic. Because of the multiple nature of the human sciences, the didactic implementation of the two methods is not rigid and, in choosing an approach, the teacher must consider such factors as the level of readiness of the children, their intellectual potentiality, and the demands which the unique nature of the subject pose with respect to the approach and methods of instruction. In accordance with these factors and the advantages and disadvantages of each approach, in his/her planning a lesson, the teacher must choose between the inductive and deductive, with the final criterion being the question of which of the two will lead to the best learning effect in this lesson with these children and learning material.

Possible advantages of the inductive approach are that, because of its slower tempo, it ensures understanding which endures. Also, it activates a wider spectrum of modes of learning such as observing, perceiving and thinking. With the younger, more concrete-bound child, it guarantees greater security while learning because the thinking expected of him/her remains anchored in the concrete or immediately perceivable and graspable.

The slower tempo which it uses, perhaps, hides a shortcoming of this method, and it seems to be general practice to use the inductive method economically, and as an introduction in the higher classes, where time and a comprehensive teaching plan require a faster teaching tempo.

In contrast, the deductive method is a faster way of dealing with the content because it makes use of the children's already acquired insights and, therefore, is particularly useful with older children. However, it presents the teacher with the requirement that he/she creates security in the classroom by exercising close control over [monitoring of] the break-through of insight, and deducing conclusions by each of the pupils in his/her class. The effective use of one or the other, or both, in one lesson will depend on the teacher's intuition, experience, knowledge of his/her subject, and the level and ability of the pupils who are going to be involved in the lesson situation. Consequently, his/her choice also will be related to his/her choice of ground-form and he/she necessarily will begin inductively if the ground-form of the lesson is the example.

ORDERING THE LEARNING MATERIAL

During the discussion of the ground-forms, reference is often made to content or learning material from the perspective of the role which they have in making the content present and accessible to the children during a lesson. However, from experience, a teacher knows that content is the matter with which he/she must first deal in preparing and designing a lesson. If he/she sits down to plan his/her lesson, he/she opens his/her work scheme by explaining schematically the learning material for his/her

subject for a specific grade level for the year. Then, he/she indicates the content he/she is going to unlock for the children. This becomes the task of the lesson, and the goal which he/she ought to set for him/herself is, as effectively as possible, to make this content accessible to the children he/she is going to give the lesson to. The teacher must mobilize his/her knowledge about the theme, teaching theories and experience, as well as his/her knowledge of the children to try to make the lesson a meaningful matter for them.

His/her first task should be to take a careful look at the content. This usually results in discovering their main points--key concepts and viewpoints which show clearly where the possible points of entry into the content lie. Here, a teacher often has an exciting experience like what a diamond cutter has when he/she works on a diamond. He/she discovers a new facet of the content each time he/she changes his/her perspective.

To make the content ready for teaching, his/her first step is to cast, in the form of a question or problem, the elements (elementals) which show themselves as essentials from a certain perspective. At this stage, his/her preliminary spadework is over. The content has been penetrated and laid open by him/her. But now, he/she must think of the children to whom he/she is going to give the lesson and realize that he/she must explain and order the content in some way, and according to the ways in which, in his/her opinion, the children will be able to follow him/her as he/she guides them through it.

Poorly ordered or unordered content will only land the children in a maze, while a well outlined path with good indicators of direction, and few sidetracks, will give greater stability and assurance to the children in their explorations. It is apparent that two factors determine

his/her ordering of the content. Of primary importance is the children's level of readiness. In addition to this, another determinant is the unique nature and structure of the subject from which the content is drawn. Each subject has an inherent ordering which must be considered. Remember, the teacher's primary aim is to get the children to understand the meaning of the content. Are they able to think abstractly? Will they be able to follow me as I lead them up a steep spiral staircase? Are they only able to walk along side me on a similar path? These and other questions will occur to him/her. Only after he/she has given decisive answers to them, and has systematized the lesson content, can he/she turn to the problem of the ground-form he/she is going to use as a means of conveying the content.

What forms of ordering content are there? We know that content of a historical nature, which we come across in, e.g., history, religious instruction and in the history of language, can be ordered **chronologically**. This holds for anything occurring in time, which we want to present or relate to the children, e.g., a heroic deed, a life story, a hunting story. Such cases naturally can be ordered chronologically. Hence, this way of ordering correlates with the narrative method.

However, chronological ordering does not always hold in history, Today, **symbiotic*** ordering is current in history, in the sense that a contemporary situation is taken as the

* For some reason, the author did not discuss the **symbiotic** principle of ordering. Therefore, I (G.D.Y.) will summarize the essential idea of this principle [taken mostly from F. Van der Stoep and O. A. Van der Stoep (1973), **Didactic orientation**, Johannesburg: McGraw-Hill Book Company]: The concept "symbiotic" is derived from the Greek word "sym", which means **together** and "bioein" which means **live**. A symbiotic ordering of content, then, leads to teaching where the child is **not** brought into contact with reality **through** content, say, a description of the City Hall, but rather, as far as possible, **directly** with the reality itself. Reality as it appears to and is experienced by the child is at the core of this principle. The ordering is based on what is actual to the child, i.e., what is actual within his lived reality.

point of departure for acquiring an understanding of a similar case in history. Certainly, children will better understand the reasons the 1820 settlers had for coming to South Africa, if they are aware of how mechanization in our own industries leads to a reduction in employment opportunities, e.g., for non-white workers who then are forced to find refuge elsewhere. In such cases, the teacher begins with a contemporary situation and then looks for a correlated one in the past.

Another possibility is that the teacher analyzes the factors giving rise to a historical event, in which case, he/she will first analyze the content. Here, we cut into another form of ordering content, i.e., the **linear**, which means an analytic-synthetic building up of an idea. Thus, in this ordering, the teacher analyzes the content in detail to be able to reconstitute it into a comprehensible whole. Linear ordering is correlated with example, as a basic form. Ordinarily, a teacher uses the example in his/her lesson to represent the features, characteristics, and requirements to be disclosed, after which they are united again into a whole image.

Also, the above holds regarding the ground-form of play and, in particular, the method of experimenting, which is rooted in play. During experimenting, teacher and pupil work analytically. Also, in using the ground-forms of assignment and conversation, content can be broken down naturally, and then integrated into a whole image.

Nowadays, analytic-synthetic (linear) ordering is favored in poetry lessons. Modern literary criticism holds the view that the poem itself is the main issue, and the circumstances surrounding its writing are not of as much importance. As a first step, the teacher and pupils ought to make a fine analysis of a poem regarding its sense, structure, and style. However, a good poem is a unity

within which there is harmony among all the elements. Words, figures of speech and verse forms are only important with regard to their contribution to the whole. The entire poem requires our attention and, therefore, it ultimately must be arrived at by means of synthesizing the elements. Thus, analytic (linear) ordering of the content will not rip the poem apart, but rather will determine the contribution of each element to its whole effect. Hence, the linear form of ordering often will be used in poetry lessons with older pupils.

To this point, the chronological and linear ordering of content have been discussed. In addition, we also distinguish the **divergent** principle of ordering. This means that the teacher gives a systematic explanation of the theme from a chosen center which then spreads out to related aspects and areas. This form of ordering is especially important in task or project teaching, where content usually is centered in an established theme. Suppose the theme is "Technology comes to our town". From this central point the children can move out in different directions; e.g., after studying the social consequences of technology, they can study air and environmental pollution, or the advantages of technology. A wheel with spokes is a good symbolic representation of this type of ordering.

Finally, the **spiral** way of ordering has its turn. This especially is applicable when one is going to work concentrically. The teacher aims, via ordering the content, to guide the children from the elementary to the difficult and more complex. Thus, he/she begins with the simplest aspect of the theme and extends it to the more difficult and guides the children from a command of simple to more involved and complex structures.

In teaching mathematics, this way of ordering the learning material is peculiar to the subject. As an example, the theme "equations" is mentioned. The most elementary equations, i.e., those in the first grade are taken as base. The theme then is further extended until the pupils are ready to meaningfully master equations in the second grade. The knowledge of equations from the first grade serve as a foundation for the new concepts, and all necessary insights are used and applied, but new concepts are added. This same principle also is implemented when there is progress to equations in the third grade. Were we to designate first grade equations as "a", the

second-grade equations can be viewed as (a + b) and those of the third grade as (a + b + c), etc.

TYPES OF LESSONS

From common characterstics, the zoologist classifies animals, e.g., beasts of prey, rodents and antelope. So also does the ornithologist when he/she distinguishes among birds of prey, seed eaters and insect eaters. The question is if the didactician also can make a classification of different types of lessons from a variety of them. Teachers agree that lesson aims are differentiated--we do not aim for the same sort of learning result with our lessons each time we teach. In some lessons, we strive only for appreciation without thorough understanding; in others, understanding and insight are the primary aims. However, without practice, understanding is superficial and without demonstration, practice is impossible, and conversely. Aims do vary, and they can have consequences for the modes of learning, teaching and learning aids and for evaluating a lesson. With the lesson aim as our point of departure, we will try to identify different types of lessons.

I read a beautiful essay for which a pupil received 90 percent on a final examination. He described daybreak in the field with beautiful figures of speech: "And as the sand grouse poured its song over the sparkling field, I listened to the strong rhythm of my earlier footsteps" and further: "Then I knew how much one misses: the quiet sleep of a donkey on the road, the quick blush of lapwing legs by the next ant hill and a few 'chirps'!" This is beautifully described, not so? The entire essay sparkles and one really shudders at analyzing the experienced beauty of it. One always has this feeling when one reads a good poem or novel, sees a painting, ballet performance or nature scene or listens to good music. It is their beautiful harmony which speaks to a person. The same also is true of the exalted beauty of the Bible: I mean the love which brings everything into harmony and which is the essence of the Bible's beauty.

Very often, a teacher's aim in a lesson is to allow the children to experience something novel, beautiful or exciting without arriving at a thorough analysis of the content and experience. They only must enjoy and appreciate a poem, work of art, short story without analyzing it or giving reasons why it is novel, beautiful, meaningful,

or exciting. The teacher aims for not much more than the total effect the content has on the children with a first acquaintance of it.

Thus, a teacher of literature can effectively lead an eighth-grade class to a first acquaintance with the concept of personification, in terms of Eugene Marais' poem "The Dance of the Rain". During the reading of the poem, by questioning, he/she can acquaint them with the concept personification, without arriving at a strict formulation of it.

In a music lesson about folk songs, on occasion we have seen how a teacher lets the children listen to recordings of folk songs to familiarize them with this type of song, but he/she had the children stay only on the level of appreciating and experiencing; perhaps in a later lesson, the characteristics become clearer when they are allowed to be identified and labeled.

Rightly, here it should be indicated that it is not possible for someone to appreciate something without grasping its meaning. Children will not be able to appreciate the beauty of a poem if they have not also analyzed its meaning. In the type of lesson to which we refer here, the primary aim remains an emotional experiencing of the total effect. Thinking does play a decisive role but appreciating is the primary aim.

This also opens the matter of the modes of learning. This type of lesson characterizes itself not only by the aim, but also necessarily by the modes of learning which we actualize to achieve the aim. We will have the children sense and lived experience that the content has an intrinsic sense, meaning and beauty; but at this stage, we will not particularize or analyze it, i.e., we will not appeal too much to the child's thinking. The aim, the nature of the lesson and the modes of learning also will have consequences for the choice of teaching and learning aids. The aids which can be implemented should give a total image and contribute to the creation of an atmosphere and lived experience. Here prints, an example or a moving or colored model is important.

From the lesson aim, in our evaluation at the end of the lesson, we must test the quality of the appreciation. Evaluation in this type of lesson is difficult because appreciation is a subjective matter. We do not expect much from the children regarding insight and, thus, we should suffice with questions such as: What effect has the poet,

writer or artist achieved with a particular medium? How do you interpret a particular line or verse? What is the core idea?
From our discussion, there is evidence that we are dealing here with a type of lesson which, because of the aim, modes of learning made prominent, and the teaching and learning aids used, as well as the unique nature of the evaluation, it appears to be a type of lesson. We will call this an **appreciation lesson.**

The aim of an appreciation lesson is valuing or appreciating. This involves the total effect of the content, to the degree which it has spoken to our feelings. Although the children necessarily are thinkingly involved, emotional experiencing is primary. However, in the great majority of the lessons we give, our aim is that the child must grasp and understand something, i.e., he/she must acquire insight into the matter. The teacher will have the children understand why Napoleon's Russian Campaign had failed, or why when two lines are parallel, a transversal to these lines makes a pair of corresponding angles equal, and the sum of the two interior angles on the same side of the transversal equal 180 degrees.

The child must be guided beyond the total experience of the matter. He/she must analyze the content for the sake of acquiring insight and understanding. More directed perceiving is needed, and, here, the child is required to think. Through perceiving, he/she will appropriate new concepts, but through thinking, the concepts will be more clearly defined. During the teacher's explication and exposition, the children are expected to draw conclusions, to analyze and again synthesize things. To attain the aim of this lesson, modes of learning such as perceiving have a secondary role, while thinking is prominent.

The aim and the modes of learning in this type of lesson are additional determinants of the choice of teaching and learning aids. Where the teacher wants the children to think reproductively, i.e., let them call up earlier knowledge, the use of slide projectors, films, prints, diagrams, tables and schemes are very appropriate; however, for productive thinking, effective use can be made of aids that give direction and focus to problem solving, e.g., microscopes, magnifying glasses, models and patterns. As far as evaluation in such a lesson is concerned, the teacher will test for insight. The questions he/she asks will be directed to establishing if the children understand his explanation.

Thus, here we have a lesson which, in its aim, modes of learning, teaching and learning aids, evaluation and methods clearly shows itself to be a type of lesson. The teacher explicates and explains, while the children direct their thinking to a problem. We can call this an **explicatory** (to make explicit, to explain) **lesson.**

In an appreciation lesson, the child mainly perceives while, in an explicatory lesson he/she thinks to understand. Often, however, the teacher will have the children learn to do something for them to learn a skill. Consequently, he/she designs his/her lesson such that possibilities for action are created for the children. Handiwork, music, physical education and science teachers know how often they must first demonstrate how one makes a model, plays an instrument, performs an exercise, assembles an apparatus or makes a construction, and subsequently gives the children the opportunity to imitate him/her. They first watch how an activity is carried out and then, with insight into the nature of the activity, they practice their skillfulness at it. Thus, this has to do with designing a series of activities, and activity based on insight is central in this type of lesson. The teaching and learning aids mentioned here mainly are apparatuses and materials needed to carry out the activity. Evaluation in this lesson involves the question of whether the children have at their disposal the necessary skillfulness and fluency of action which must precede insight into the essentials of the activity. Briefly, we test the quality of the skillfulness which was acquired.

In view of the unique nature of the aim, modes of learning, methods, teaching and learning aids and evaluative aspects of this lesson, we can say that here we have to do with a type of lesson which, because the teacher's behaviors are demonstrative, can be typified as a **demonstration lesson.**

To this point, the identification and description of different types of lessons rest on the principle that a specific type of lesson is reducible to a characteristic lesson aim and is recognizable because of its unique nature regarding the use of the modes of learning, teaching and learning aids, and evaluation. The appreciation lesson aims at valuing, the demonstration lesson at activity and an explicatory lesson at insight and understanding.

However, there also are lessons in which the teacher will have the children perceive, explore, discover and describe. Often, we hear a

science teacher say to the children: "Now look carefully while the experiment is done and write down what you have seen". The different modes of learning again enter action, but with a different accentuation than in the other types of lessons. In this lesson, the children first perceive, but then consciously search for the sense and meaning of what they perceive, after which they will order, classify and schematize the data which are established. Hence, perceiving is the primary medium of penetration and exploration.

In this type of lesson, evaluation will be directed to ascertaining whether the children have attained insight into the aspect of reality which is unlocked by means of the experiment. In the light of the lesson aim, modes of learning and evaluation, we call this type of lesson an **experimentation lesson.**

Teachers know that once in awhile they decide to stay with a piece of learning content which he/she already has unlocked for the children so that they can exercise, consolidate and pin down the insights they already have attained. Insights, knowledge and skills must be made permanent and enduring additions to the child's arsenal, before he/she leads them any further. In these lessons, the teacher sets as his/her aim pinning down concepts, exercising insights, carrying out activities in the correct sequence and practicing skills. Remembering (meaning recalling and rehearsing acquired insights and knowledge) and reproductive thinking will be prominent modes of learning for the sake of bringing into motion already acquired insights, activities and skills. Useful teaching and learning aids for this type of lesson are the chalkboard, duplicated notes, textbooks, slide projectors, etc. while evaluation will be concerned with the question of whether the child is able to use his acquired insights in new but related problem situations.

The type of lesson which makes itself discernible here has an interesting variation. The difference lies in the aim and modes of learning which give it a slightly different form. This variation arises when the teacher has automatisms in view by which habit formation or automatic control of the content is the aim. This type of lesson especially arises in teaching a second or third language, and where the teacher wants the children to practice and pin down certain language patterns (in teaching English as a second language, this is known as "patterns") so the children can use them unreflectively. Naturally, we also run across this variation in a typing lesson where, by continually practicing, the typing skill becomes automatic. In

these lessons, automatisms are the mode of learning and evaluation will involve testing the proficiency, e.g., of being able to speak Spanish without consciously thinking about rules or being able to type accurately without concentrating on the letters on the keyboard of the typewriter.

In the light of the aim, modes of learning and evaluation, we clearly have here another type of lesson, indeed, the **drill** or **exercise lesson.**

In summary, we claim that the lesson aim determines the type of lesson:

> The child must value: **appreciation lesson.**
> The child must perceive and describe: **experimentation lesson.**
> The child must understand and grasp: **explicatory lesson.**
> The child must perceive and act: **demonstration lesson.**
> The child must pin down his/her acquired insights: **drill** or **exercise lesson.**

The different types of lessons are characterized by the modes of learning that are prominent during the lesson, but they also show a uniqueness with respect to the use of teaching and learning aids and the nature of evaluation.

The final question which now must obe asked is if each type of lesson is independent. We must answer that there is no pure lesson type. In one or another way, each lesson type includes elements of the others. Usually, a lesson is a combination of lesson types where an element is more prominent in one than in the other. A child appreciates a structure but also must be guided to an understanding of it to heighten his/her appreciation. Appreciation only acquires sense and meaning to the degree that understanding becomes keener. Thus, one can investigate further the intertwining among types of lessons so that it becomes clear that, in an appreciation lesson one finds elements of an explicatory lesson and in the experimentation lesson there are elements of a demonstration lesson and, again, in an explicatory lesson, there are elements of a drill lesson.