CHAPTER 11 THE CURRICULUM

1. INTRODUCTION

This introduction to didactic pedagogics shows a progression from, a theoretical description of the various aspects constituting the didactic activity, to an explication of didactic practice. In this description, the emphasis continually shifts among the teacher, the child and learning contents to describe the teaching activity in its essences, and to elucidate the interactions among the constituents of the didactic situation as it is realized in school practice. As far as the learning contents are concerned, it is repeatedly indicated that, in the school they are elevated to formative means which represent the totality of reality surrounding the child.

In Chapter 5, it is stated that the elementals and the fundamentals of the learning contents give the child the opportunity, by means of the essences of the contents (elementals), to transcend them (fundamentals) to show the quality of his/her learning. It is in this respect that it is important to indicate that the elementals which are presented in the school must be representations of the religiousmoral, linguistic-literary, historical- and social-political, as well as mathematical-physical terrains.

The first question which arises is about the selection, from the totality of reality, of the terrains to be represented in the school situation. In the explication of the didactic perspective on learning, it is pointed out that there must be harmony between the learning activity and the form of the presentation by the teacher to direct the learning so the child can master the contents most effectively. The outcome of this harmonious interaction between learning and the form of teaching is the mastery of the contents by the child. In this respect, there is mention of criteria which will allow the learning of the contents in the learning situation to be realized and thrive in the most effective ways. An additional question of relevance here is: What is the nature of the relation between the learning contents and the child's learning activity such that by

learning he/she can attribute sense and meaning to the contents? In the explication of the pedagogical meaning of the school (Chapter 9) it also is indicated that, even though the school situation, in its essence, must be a pedagogic one for the child, the contents which are elevated to learning contents in the school must be true to life reality, and pedagogically accountable. This statement also implies criteria regarding the unlocked (presented) contents. For example, what constitutes the trueness to life and educative relevance of the teaching contents?

The question asked here refers directly to the fact that the contents must meet certain requirements before they can qualify as learning contents in a didactic situation. The question about selecting and ordering the learning contents, and what criteria have relevance for this, now compels an answer. This implies the question about the curriculum, and everything concerned with it. The aim of this chapter is not to describe the foundations and scope of curriculum, but to orient the reader to the most important aspects of considerations about it to understand the origin of the themes which are broached in the lesson situation, and the function of the contents in the didactic situation.

In studying the literature which deals with the curriculum, it is conspicuous that most authors attribute approximately the same meaning to the concept. In the first place, the concept indicates that it is compiled purposefully and scientifically, and that it is instrumental in realizing the didactic-pedagogic in the school situation. In accordance with previously stated aims, the contents, which are taken up and accompanied by the curriculum, contain the necessary indications of the essences of the learning contents regarding methods, means and techniques which are broached in the school. The selection of the contents is evaluated in the light of the previously stated aims.

In most cases, the curriculum appears in the form of a document which is compiled by authoritative institutions in the community. The curriculum also refers to a time of presentation for a group of pupils; in other words, it provides guidelines concerning organizational issues such as type of school, course, direction, subject and grade level. In this respect, it is a summary for both teacher and child of what must be taught and what must be learned. In this light, it is an ordered and systematized summary of contents.

The curriculum, and its degree of detail taken up in it, must allow for the teacher's preparation, as a teacher, on the one hand, and his/her professional freedom, on the other. Therefore, it must provide sufficient detail, while not restraining the teacher's creativity. Even though the curriculum contents (subjects and subject contents) must be selected, they represent a way along which the pupil, as educand, ought to move to adulthood. Consequently, the pedagogic must necessarily be taken into consideration.

A summary of what is meant by the concept "curriculum" can help the reader follow the remainder of this discussion.¹ The curriculum is a scientifically compiled document containing selected, ordered and evaluated contents, as well as those didactic considerations which are instrumental in realizing the aims of the curriculum in the didactic-pedagogic school situation. In this light, this means that the curricular contents have been selected, ordered and evaluated in terms of specific aims, and which are to be unlocked in the school as a didactic-pedagogic situation. Establishing curriculum contents is known as curriculum design or planning, and is described as selecting (and, thus, ordering) and evaluating these contents in terms of aims. In this meaningful framework, curriculum is the accountable result of curriculum design or planning.

The question which can now be asked is what must be consider in planning or designing a curriculum?

2. GENERAL PEDAGOGICAL CONSIDERATIONS FOR DESIGNING AND DEVELOPING A CURRICULUM

A human being is continually involved in a surrounding reality. This reality can be either nature or an "established" culture. In a specific society, as it can be differentiated from other societies in

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¹ This definition is taken from the work of J. S. Hill: *Kriteria vir die seleksie en ordening van kurrikuluminhoud* (unpublished D.Ed. dissertation, Faculty of Education, University of Pretoria, 1974), pp. 20-21.

time and space, culture represents a society's interpretation of reality and, especially what is meaningful to it.

Owing to the imperative nature of the normative (a person in his/her acting and conduct must be obedient to norms), it is expected that he/she will make his/her own what is approvable in his/her culture and adopt the good and useful from other cultures to contribute, through his/her own efforts, to a meaningful expansion of his/her own culture, and to accept responsibility to make them available by unlocking them. Because the scope and depth of culture (especially Western-European culture) continues to increase and, in the light of the above accountability, in the distant past, society proceeded to establish schools. In schools, qualified adults must make the culture accessible to the children. The curriculum contents, which are viewed as appropriate for forming youth, are selected, evaluated and ordered in terms of educative aims, and are eventually analyzed into learning contents in the classroom situation.

For this discussion, culture is viewed as the totality of human activities and all their results and outcomes. For this reason, it includes ideas, ideals, beliefs, skills, utensils, customs, habits of thought, language and literature, attitudes, and institutions.

A society is recognized by its culture because it is a unique compilation which embraces specific emphases; thus, it involves a particular structural connection of the matters included in it. In this sense, curriculum contents are a selection of cultural contents and, therefore, an attempt to classify cultural aspects is meaningful. Various classifications are known, of which the division into technology, social organization and ideology is the best known. A valuable division for curriculum planning is a classification according to activities, ideologies, achievements and social institutions. In curriculum planning, the division is not so important because it can be viewed from various perspectives and, consequently, each division can be valuable for curriculum development.

Above it is mentioned that a particular structure of aspects is a characteristic of a particular culture. In such a structure, there is a

certain coherence (configuration) of moments which are recognized. In this context, the identity of the culture is determined by the coherent ordering and degree of integration of these configurations. The curriculum must make the characteristics of the culture discernible as they are taken up in its structure (coherent configurations).

In any curriculum design, there must be a distinction between the real selectable culture and the ideal culture. As far as the real culture is concerned, it is the way of life, way of working, way of thinking and technology of one's own time, while the ideal culture is directed to what is proper (what is highly respected or highly valued by society).

This imposes a task on the teacher: He/she must introduce the child to the contemporary real culture, but in his/her accompaniment of the child, he/she must continually point to the worthy ideal striven for. This means that, from what is faithful to reality, as what is imminent to educating and teaching, the teacher shows the ideal as the eventual image of proper adulthood. In teaching, there must be a continual search for a harmony between the real and the ideal.

However, with the rapid development of science and technology, which has led to drastic changes in people's lives, the gap between the real and the ideal has increased. This gap implies great dangers for a society and, therefore, teaching, and also the curriculum on which it is based, must always try to provide an opportunity to realize the harmony between the ideal and the real. Hence, in the curriculum, provision must be made for this real and ideal cultures. As far as the ideal culture is concerned, the possibility is implied that it can influence the course of the real culture. The curriculum must also make provision for this.

In a person's giving value and meaning to the reality which surrounds him/her, values show a particular order and system. It is especially societal institutions (university, school, church and family) which interpret the culture and carry out the ordering and systematizing of values which have a role and carry responsibility. A reasonably firm system of values, in which a priority is knowable,

is designated as the philosophy of or view of life of a person or society.

For this discussion, a philosophy of life can be viewed as an indication of the sense, aim and value attributed to life. This is the basis for formulating the teaching aims as they are expressed in the curriculum. Therefore, the curriculum expert must him/herself live up to the philosophy of life of the society in which he/she works and for whom the curriculum is intended.

In this context, the reader must understand that a philosophy of life gives rise to specific teaching aims. It also is important to indicate that these aims play an important role, as criteria, in selecting, ordering and evaluating curricular contents. This means that the aims which are included in the curriculum can be seen as a further interpretation of the philosophies of life or interpreted basic essences of the ideal image of adulthood. One can also say that the aims taken up in the curriculum systematically lead to realizing, in time and in terms of specific contents, a particular image of adulthood.

However, it is obvious that all cultural contents are not suitable for the curriculum because many of the things one can achieve can be physically, but also spiritually, harmful for a child. For this reason, in selecting and evaluating cultural contents, it is necessary that the aims anchored in the ideal of a philosophy of life involve judgment. The various symbol systems, such as language and numbers, make the culture available to a person. In a person's involvement with reality, he/she objectifies it and shapes it, in terms of symbol systems, into forms which are manageable for him/her. In this way, one exceeds or transcends reality by symbolically interpreting it for him/herself and by appropriating it. This symbolically possessed reality is known as knowledge.

The danger is that the reader will equate knowledge with scientific knowledge--however, knowledge includes everything to which a person has attributed meaning and sense. This means that knowledge includes the terrain of the ethical, esthetic, intellect and activities. For example, if one knows what a spade is, how it is used and how to use it, one says he/she possesses knowledge of a spade.

It is in this light that the curriculum exists through knowledge—selected, ordered and evaluated according to teaching aims.

A person's and, thus, a child's original relationship with reality amounts to the fact that he/she is a knowing presence in the world, where "knowing" is a potentiality which can be realized in various ways. In this respect, five forms of knowing, as various ways of realizing it, are distinguished—an intuiting, indicating, questioning, structuring and understanding knowing.

The preconditions for realizing these modes of actualizing knowing, among others, are the following modes of being, as modes of learning: sensing, perceiving, remembering and thinking (In this connection, see the discussion of the modes of learning in Chapter 7). In designing a curriculum, these forms of knowing must be considdered, so that there can be a movement to the highest form of knowing the appropriate contents. This means that the curriculum is nor only compiled in terms of teaching aims, but that its design must take into consideration the various forms of actualizing knowledge. It must also be indicated that the quality of knowing is not dependent only on the actualization of the modes of being such as perceiving and thinking, but it is closely related to the depth of the correlated gnostic-cognitive (intellectual) and pathic-affective (emotional) lived experiencing, as well as to the nature of experiencing, as a turning to and being involved with reality.

The movement from a gnostic to a cognitive lived experiencing, as accompanied by the pathic-affective, is highly dependent on the quality and scope of language acquisition, as the adequate mastery of sound- and written-symbols. Therefore, the curriculum must make provision for practice in formulating (orally and in writing) in as many areas of knowledge as feasible. It is in this connection that it is previously stated that all lessons are really language lessons.

It must further be indicated that the school is that societal institution within which selected, ordered and evaluated cultural goods are made available, in formal ways, to a child as knowledge. This knowledge is selected, ordered and evaluated in terms of the aims which arise from a philosophy of life and then are compiled as curriculum contents so that they can be presented in the school's

didactic-pedagogic situation. Knowledge, as curriculum contents, must be general, and this primarily means that there is knowledge which must be acquired by all pupils. This implies a minimum amount of time for teaching it, which usually is determined by the state authorities. Apart from the fact that all pupils must be confronted with the so-called general knowledge, general knowledge also means that the contents must be of such a nature that it is transferable, in the sense of "limits-exceeding" and, further, that it must include essential concepts. This means that, as far as the curriculum contents are concerned, it includes the scientific disciplines which are made accessible to the child. This emphasis means that an inductive-deductive approach must be stressed in the curriculum to show the way for the child's experiencing and lived experiencing to arrive at knowledge.

An additional aspect of importance here is that the formative value of the subject is enhanced in this way. Where the scientific disciplines in the school are represented by means of the curriculum, the overwhelming multitude of knowledge and, especially the continually rapid increased in it and technology, becomes an important problem. This gives rise to a deluge in learning material in an attempt at unachievable completeness in the syllabus, which also is discernible in classroom practice.

This is a thoroughly researched problem, and a possible solution is seen in the principle of the exemplary, which means that the contents are selected to represent a greater whole. (In this connection, see Chapter 12, where a complete explication of the exemplary is given). The use of the exemplary offers the opportunity for experientially meaningful knowing, in contrast to superficial and frustrating memorization and reproduction. Thus, the exemplary takes up a specific representation of reality for the child, and the insight into the structure of this reality is unlocked for the child through a chosen example, model, historical case, etc.

The contemporary human situation undoubtedly indicates the value and necessity of specialized knowledge, especially for the vocational world. The efficiency which specialization brings about in society cannot be contested as an economic factor. In this context, the question posed to the curriculum compiler is how must the demands of "general" and specialized knowledge be harmonized with each other in an educative program?

By the nature of the criteria for compiling the curriculum, both general and specialized knowledge make high demands on the curriculum. These demands cannot be removed or avoided. The answer to this quest possibly is in the fact that the demands arising from the general and specialized knowledge can be harmonized within the general (representative and essential), where provision is made for the greatest possible range of contemporary, but also anticipated, directions of specialization. This means that, from the general (which each child must master) there is a working through to specialized knowledge.

It will also become evident whether the most suitable forming in this regard is dependent on a didactically-pedagogically accountable mastering of the contents of the main disciplines. In this context, the curriculum contents must lead to the acquisition of knowledge, which is made available in the various disciplines, each according to its own nature. As indicated above, this knowledge includes not only the facts, but also the knowledge of how the facts are systematically obtained, in other words, knowledge of the sciences' methods. This pronouncement is a reflection of the fact that a thorough preparation in the disciplines, which does not exclude its pedagogic significance, can lead to a general formedness which can be fruitfully pursued in any direction with specialized contents.

The practice of teaching shows that the oldest known manner for ordering knowledge for teaching is a division according to subjects. This division corresponds to the areas of intellectual interest. Since the pedagogical in school is increasingly recognized, many objections have been raised against this ordering, and a more pedagogical ordering is proposed. The most important objection against ordering knowledge for teaching aims is that it is isolated into closed compartments. Because of this objection, there have been attempts to correlate, integrate and also eventually unite contents into a firm whole. Irrespective of these attempts, practice still shows that subject matter teaching remains the most general form of teaching and ordering knowledge.

The problem with subject matter teaching can largely be attributed to the fact that it is no longer discipline teaching, but rather is a collection of facts. This misjudgment is discernible in equating the reproduction of facts with the mastery of the subject. In addition, all sorts of problems (such as, e.g., the deluge of learning material) have appeared which more strongly cast suspicion on subject matter teaching.

It is the task of curriculum design to be able to teach a subject as a discipline (the facts as well as the methods for disclosing them) in such a way that positive learning effects are guaranteed. This means that the curriculum must present the contents for school teaching in such a way that they offer the possibility for the child to experientially know and master reality.

In the discussion so far, the reader is shown that certain demands are placed on the curriculum in terms of the nature of a person's relationship to reality and to his/her culture, the importance of the contents of the culture, deriving cultural contents for teaching, the effect of cultural change on the curriculum, how the culture establishes societal values and takes them up in the curriculum, how the values which are in the cultural contents are taken up as aims in the curriculum, establishing the connection between knowledge and the curriculum, how general and specialized knowledge must be taken up in the curriculum, how school subjects, as representations of the scientific disciplines must be taken up in the curriculum and, finally, what light these matters throw on the selection of contents.

It is important for the reader to note that this description points especially to socio-pedagogic and a few psycho-pedagogic demands, which must be placed on curriculum development which must be attended to. The question which can now be directly asked is: How can the previous pronouncements about a socio- and psychopedagogic perspective on curriculum design provide the criteria for this design?

If these pronouncements are examined, there are some conclusions which can be drawn to possibly answer the question. The first important conclusion is that the curriculum contents must be a pedagogically accountable selection from the cultural contents of

the society. The reason for this is that a society is identified by its culture and, thus, it is necessary that the contents of the curriculum reflect that identity. Although cultural contents can be classified in a variety of ways, the division of the elementals into "universal knowledge" is especially important because it can be related to the question of general and specialized knowledge.

Further, provision must be made in the curriculum for youths' insertion into the contemporary real culture of society. However, here, the emphasis must fall more on the ideal culture, i.e., the culture which ought to be. There must also be an allowance in the curriculum for culture of the future; it must not only anticipate possible changes, but also direct the changes where this seems to be pedagogically necessary. The philosophy of life of the community is decisively important in formulating the teaching aims. In this respect, the teaching aims, as an interpretation of a philosophy of life, are the primary criterion for selecting, ordering and evaluating curriculum contents. Culture for a person is possible, accessible and manageable through the possibilities of symbolizing reality in the form of knowledge. Here knowledge is dealt with as knowing and acting. In the curriculum, it is handled by the selected, ordered and evaluated knowledge which must be taught and learned. Knowledge is not limited to intellectual mastery. The permanence of knowledge is assured by its acquisition which is paired with experiencing and lived experiencing it. Therefore, the curriculum must make provision for an experiencing and lived experiencing knowing, and this means that there must be time allowed for this.

Language acquisition lays the foundation for the intellectual abilities of a child as a power to break through by which reality is transformed into culture. This means that all teaching must be seen in the light of language acquisition. Therefore, the curriculum must emphasize this matter in all subjects.

The knowledge presented in the school, and described as curriculum contents, can be general or specialized in nature. The demand of time forces the curriculum to make provision for specialized knowledge within the general knowledge taken up in the curriculum. This means the general also includes the preparation for a wide variety of specialized directions. It will further emerge if

there is a reasonable agreement about whether subjects are taught as disciplines (their specific contents as well as methods of research) and, if this is the proper form of knowledge classification for effective teaching. This means that provision must be made in the curriculum for an inductive-deductive approach.

The socio-pedagogic and psycho-pedagogic perspectives on the problem of curriculum design offer a broader orientation to the ultimate problem of criteria for the compilation of a curriculum. The curriculum contents, however, must be interpreted in the class situation by the teacher and unlocked for the child. It is for this reason that it is now important to examine more closely the didactic-pedagogic implications of curriculum design.

3. THE PEDAGOGIC-DIDACTIC PERSPECTIVE ON CURRICULUM DESIGN

In the following discussion of a didactic-pedagogic perspective on curriculum design it necessarily is so that aspects thoroughly described in previous chapters will once again be mentioned. This is not an indication of a repetition of the different aspects of the descriptions of the didactic-pedagogic, but of an attempt to relate aspects described to the problem of the curriculum. Thus, the reader must keep in mind the problem of curriculum design and, especially the criteria which must be fulfilled in terms of his/her knowledge of the various aspects already described.

In the discussion of the didactic perspective on curriculum design, the reader must always keep in mind that teaching and learning are not limited to a pedagogic situation. The learning activity, as such, indeed is essential to realizing the pedagogic. However, the fact is that teaching usually is related to the school, because it is the most familiar of circumstances among which it is executed. For teaching, in any sense, to be able to have pedagogic significance, the pedagogic structures and essences must be actualized in the didactic activities which ultimately result in the acquisition of appropriate adulthood by means of of contents.

The connection between the pedagogic and the didactic can be summarized as follows: It is in the actualization of the didactic ground-forms, by which contents are unlocked, *and* where the pedagogic essences are actualized. Educative teaching which arises here, thus, refers to the adult intervening (by teaching) with a child to promote and ensure the child's becoming a proper adult.

The didactic event is viewed as a double unlocking of reality where the teacher unlocks the contents for the child and where the child learns by unlocking him/herself to the contents. This latter aspect is a theme for psycho-pedagogics and, when its findings are judged and interpreted didactically, a child throws him/herself open to reality through lived experiencing, experiencing and knowing, and makes it his/her own possession by actualizing the different modes of learning. Since the level of lived experience, experience and knowing reality gradually are elevated through mastering contents, in the selection of contents, attention must be given to the readiness of the child for whom the curriculum is intended. It is because of this elevation that his/her becoming a proper adult is reached. In this sense, proper adulthood also means the proper participation in society and, therefore, in selecting contents, attention must be paid to its vocational, societal meaning, and the meaning of the contents for participating in society.

In the discussion between the teacher and the child in the didactic-pedagogic situation, contents are essential. It is in terms of the contents that an adult supports a child to his/her own proper adulthood. These contents are specific, in the sense that they are selected and are placed with authority on the child's path. When a child is surrendered to the totality of cultural contents, this confuses and frustrates him/her and exposes him/her to its negative aspects. For this reason, such an unreflect exposure of the child to the total reality is pedagogically unacceptable. It is expected that, in the didactic-pedagogic situation, the adult gives proper meaning to the contents, and it is also expected that the pupil takes up the meaning attributed by the adult, assimilates it and accepts responsibility for the understanding he/she now has of it.

The quality of the meaning given and received is inseparably intertwined with linguistic and expressive potentialities. In this respect, the acquisition and mastery of language should receive special attention over the entire spectrum of the curriculum. Apart

from the sense and meaning which the teacher interprets for the child regarding the contents, it also is the case that the teacher gives meaning to the relationship to reality, such that he/she demonstrates it, and that he/she, therefore, presents an exemplification (a preliminary image) of being-adult. This means that the teacher him/herself *is* content in the way he/she *interprets* and presents contents in the light of his/her philosophy of life and, based on his/her subject matter expertise and educative knowledge.

Because, for an extremely long time, the school textbook has had such a prominent place in the didactic situation, what is said above is now of significance for the textbook. Because the teacher presents and represents meaning and, because language acquisition and mastery, as the symbolized mastery of reality, are so important in teaching, it is necessary that the teacher subject him/herself to rigorous criteria in the compilation of the textbook, as the linguistic system and concepts which make reality meaningful. Also, since the school textbook plays such a decisive role in teaching practice, especially as the "interpreter" of the curriculum, the curriculum must contain adequate guidelines which give unambiguous guidance to prospective textbook authors. This means that the authors must not only compile in the textbook a precise accumulation of facts into a coherent whole, based on his/her subject matter knowledge, but that the pedagogic significance of these contents must also be given their rightful place in the textbook.

A child must learn the contents made available in the teaching situation by curriculum design. For this reason, it is important for the curriculum expert to have insight into the psychic life of the child-in-education. In this respect, he/she must be well-acquainted with the findings of psycho-pedagogics regarding the structures "becoming" and "learning" so that, at least, the contents presented by the curriculum can connect with the level of readiness of the child for whom the curriculum is meant. This implies that he/she must know how pupils learn, what role the psychic moments of lived experiencing, experiencing and knowing play in this context, and how language acquisition and mastery lay the foundation for the gnostic-cognitive modes of learning. The fact is that meaningful decisions regarding contents can only be made if the teacher understands the psychic life of the involved pupils.

In everyday school practice, contents can be offered in many ways (ground-forms, methods, etc.). One of these ways might provide the teacher with the opportunities to realize his/her creativity in the lesson situation. But, in this respect, it can be expected that a trained teacher can responsibly decide on any form. It is possible that, with the aim of achieving or realizing specific aims, one of the forms of teaching is not only appropriate but necessary. In these cases, adequate guidelines must be offered the teacher in the subject curriculum (syllabus). It also must be kept in mind that the form in which the teacher is going to cast his/her lessons is primarily a matter of training. A practical consideration which arises here is that only such contents are presented by the curriculum which are teachable in the light of the requisite training of teachers for special pupils.

In fathoming the essences of teaching and curriculum design, and their connection with learning, it is definate that they are related. Curricular essences are not realized separately because they only acquire meaning when they are functionally connected with the essences of teaching and learning. In this context, curriculum design, just as are teaching and learning, is a didactic and a didactic-pedagogic matter. Consequently, the essences of curriculum design can only have sense and meaning in or with respect to a didactic or didactic-pedagogic event, i.e., in relation to teaching and learning.

The initially naïve and spontaneous teaching of the parent in the original educative situation have developed into the huge teaching institutions of today. The initially simple curriculum of the parents has also developed into curriculum design as a theoretical practice which has increasingly become an essentially formal activity of managing instances of teaching worldwide. The reason is that persons concerned with teaching gradually accepted the idea that teaching contents must be placed under a magnifying glass. As far as organized and formal teaching is concerned, contents are the most important aspect. It is noted further that the formative value of the contents certainly is one of the most important matters for formal teaching.

As far as the formative value of contents is concerned, there are divergent views. In this connection, see the discussion of the formative value of contents in Chapter 5.) The divergent views of the matter of contents have even had the effect that, in school there are divergent systems of teaching (See Chapter 10 for a discussion of how ordering the contents, paired with the forms of teaching, result in different systems of teaching.) Regarding forming, as such, two main structures can be distinguished, namely, first, forming which emanates from the total lifeworld, and second, self-forming.

Forming which emanates from the total lifeworld can be intentional or non-intentional—it can emanate from nature or the culture, or even persons.

In contrast, intentional forming is the purposive and goal-directed influencing which emanates from one person to another, and which so clearly typifies the didactic situation. The form of this influencing can change, e.g., from intervening and agreeing to teaching. Where the intentional influencing emanates from an adult to a child to support the child to adulthood, i.e., where it has a positive purpose, then there is mention of formative influencing as educating.

Educating, in so far as the adult is involved in it, thus, is a way of formatively influencing with the aim of betterment. However, intentional influencing with forming as an aim occurs in terms of contents which must promote and realize the formative aim, i.e., which have value for forming. The contents which promote educating as an intentional positively directed influencing, in this context, thus, is educative contents which can direct and carry the educating, as such.

The second aspect of forming mentioned above is self-forming. This means that a person has potentialities at his/her disposal to change his/her personal being by appropriating contents. In this respect, educative contents (contents with educative value) are those contents whose appropriation can results in a change in the direction of proper adulthood. The educative value, as a type of formative value of the contents, thus, is latent and must, by a double unlocking, be able to push through from elemental-contents

to the fundamental-contents. This means that the educative value of the contents can only be realized by a double unlocking of them. However, there is optimal realization of their educative value only if they qualify as elementals; this includes the possibility that, in acquiring them, there is a push through to the fundamentals. (See Chapter 5 for a discussion of the elementals and the fundamentals).

To state the matter more completely, contents will have educative value if they are taught as what is essential, representative and simple, of a matter (the elemental), and if they are made familiar, acquired and integrated as basic concepts or insights of wideranging effects (fundamentals). In this sense, it is particularly important to indicate that the educative values of contents must be viewed in the light of the latent values they hold for educating in terms of educative aims. In this sense, the aims always determine the direction of the forming. As far as the school is concerned, meaningful curriculum design must result in establishing contents with possible value for educating in terms of educative aims, which are ultimately derived from the accepted views of life and world.

An analysis of didactic practice shows that there are three distinguishable fundamental activities in its course and, thus, also in the didactic-pedagogic: curriculum design (bringing about contents), teaching (the unlocking of contents) and learning (making the contents one's own). These three activities are closely related, and it can be shown that these relationships, and especially the harmony among them, can guarantee positive learning results. Stated differently, curriculum design, unlocking and learning are a unity without which a positive learning effect cannot be attained.

From this discussion of the various aspects which must be considered in designing a curriculum, it is now important to guide the reader to a synthesis and, indeed, to a synthesis in the form of criteria which must hold in compiling and designing a curriculum. Irrespective of the fact that the curriculum makes available contents for a type of school, the fact is that the syllabus (subject knowledge) which appears in the curriculum must be organized by the teacher into a work scheme for daily use in the classroom. Therefore, when the teacher selects contents from a theme which appears in the work scheme (here one thinks of examples which are chosen for

unlocking a concept), there is mention of selecting, ordering and evaluating contents. The criteria for this qualitative analysis are essentially the same as the criteria for curriculum design. For these reasons, the teacher must know what the criteria are for effectively and meaningfully incorporating the contents into the curriculum.

4. CRITERIA FOR CURRICULUM DESIGN

The criteria for curriculum design can possibly be used as yardsticks for selecting teaching contents from cultural contents, and ordering them in accordance with the appropriate level of presentation.

These criteria are aimed at ensuring that the contents brought up in the didactic situation are faithful to life and, connected with this, that they have educative value. The criteria also can be used to evaluate existing curricula. Aside from this, it is also important to indicate that the criteria can be used regarding the stated teaching aim to be reached via contents. Therefore, this amounts to the following criteria being used as criteria in realizing the curriculum in its four fundamental moments of stating the aim,, selecting, ordering and evaluating the contents, by which it seems that fundamental moments have criterial status themselves.

4.1 Categorical illumination

The contents which are taken up in the curriculum must include the possibility of categorical illumination. This means that the contents must be able to contribute to making visible the categorical structure (essences) as a coherent comprehensible slice of reality.

This criterion refers primarily to the categorical structure of the surrounding reality. Reality makes itself known to a person by means of its own categories and based on these categories, a person can recognize, e.g., the reality of nature, of language, of mathematics, of history, of biology, etc. Each of these realities has its own categorical structure. Therefore, this criterion indicates that the categorical structure of the separate aspects of reality must be taken up in the curriculum. This also means that learning contents taken up in the curriculum are selected in such a way that the essences of this slice of reality are clearly presented to the child.

Here, one thinks of language teaching; at a minimum the curriculum must include the structure of the language (grammar), its development (history of the language) and its achievements (literature).

The discussion of categorical forming in Chapter 5 indicates that the teacher's role in the teaching situation is to reduce the contents in such a way that only their categories (essences) are exposed to the child. In the discussion of a didactic perspective on the learning activity in Chapter 6, it is indicated that a child can only attribute meaning to reality if its categories are made accessible to him/her, because these categories illuminate the meaning of the contents (reality), as such. It is for this reason that curriculum contents must be evaluated and selected in terms of this criterion of categorical illumination.

4.2 Themes of communication

The contents taken up in the curriculum must be able to form a theme of conversation or communication between teacher and child. In this respect, the contents must have meaning for both the teacher, as adult, and the pupil, as child.

This means that the curriculum contents must appear in the child's lifeworld, and that the teacher must view them in their value for the child's future. This also means that the contents borrowed from the child's lifeworld must incorporate two aspects of giving meaning: first, in the stage of his/her current situatedness, they must be meaningful, and they also must be meaningful for his/her existence as an adult.

Thus, in this regard, it is much more meaningful for a [South African] child to make an intensive study of the regional winter rainfall of the Southwest Cape Province than, e.g., that of Chile. Even though the child has direct references to the Cape region, in the sense that it is much more prominent in his/her lifeworld, it is also the case that, as a future adult, he/she must understand the results of the configuration of factors which impinge on the region, as such. It is true that a child must be aware that there also is regional winter rainfall in other parts of the world. But because

rainfall in the Cape is not unknown to a child (perhaps he/she has even visited the Cape), his/her experience of this region is an important basis for an intensive study of it. At the same time, it also is meaningful for the teacher to discuss this region with the child because he/she must be able to make clear the relationship between regional winter rainfall in the Cape and other regional climates. In this respect, as far as the teacher is concerned, use is made of the child's direct experience, which elevate his/her insight into climate regions. This also is meaningful for the teacher, as an adult, because he/she knows that eventually the child must understand the climate of the Republic of South Africa and that insight into the regional winter rainfall of the Cape promotes this understanding.

4.3 The teacher's command of the learning contents

In agreement with the previously described training, as supplemented from time to time by in-service training as this seems to be necessary, the teacher must be able to adequately master the contents. The implication of this criterion is that the contents taken up in the curriculum are not beyond the teacher's abilities. Where there is a development in the curriculum, in the sense that more complex contents are taken up, it is obvious that teachers who must unlock these contents for the child must be trained to be able to master these contents.

The teacher must not only be able to master the learning contents taken up in the curriculum, but he/she must also possess, because of his/her training or in-service training, a broader horizon of knowledge which makes it possible for him/her to meaningfully interpret for the child these contents. Finally, the teacher must be able to help the child place the newly acquired knowledge into the whole of his/her horizon of knowledge in accordance with its priority. This criterion especially is of significance considering that knowledge in the various sciences and related technologies are increasing so quickly and must continually be reflected in the curriculum.

Apart from the possibilities that in-service training offers a teacher, it is also his/her responsibility to continually orient and r-orient

him/herself with respect to the developments which occur in his/her subject matter. However, it is appropriate that the authorities responsible for adding contents to the curriculum do not include contents which exceed in scope and depth the abovedescribed training of the teacher.

4.4 The teacher's command of the didactic

In accordance with the training mentioned above, the teacher must be able to deal with the contents taken up in the curriculum in an adequate didactic and subject didactic way. This means that in the lesson situation, he/she must be able to interpret insightfully and creatively the various didactic methods, teaching aids, methods of evaluation, principles of ordering the learning materials, etc.

The demand that this criterion places on the teacher and, therefore, on curriculum construction, as such, is that his/her subject matter and his/her pedagogical training (pedagogical-didactical training) must be in harmony with each other. The fact of the matter is that mastery of subject matter knowledge is not necessarily sufficient to guarantee unlocking the contents of the subject. The question about teacher training ultimately amounts to whether, in his/her training, he/she becomes capable of interpreting the subject matter contents didactically and pedagogically, and to unlock them for the child in the most effective ways.

4.5 Positive tendency

Given that the significance of the school is pedagogical, the contents which are unlocked in the school must promote accepted values and the normative. This means that contents having a negative or deleterious or detrimental tendency must be avoided or resisted in the school.

In unlocking the contents, when a child is confronted with the new contents for the first time, his/her amazement must eventually culminate in wonder; this means that the child must give sense and meaning to the reality which is unlocked for him/her so that he/she then wonders about these contents. Wondering leads to the didactic criterion of transcending. In transcending, the life and world views

of the teacher ought to establish a bridge for the child to the world above and beyond persons, to the realm of the transcendent, to God who has created heaven and earth. In this light, it can be asked if the contents taken up in the curriculum have a positive tendency, i.e., lend themselves to promoting accepted values.

4.6 Relevance

Irrespective of the normative nature of the contents which must be taken up in the curriculum, they must also be able to maintain, within the framework of a subject, a meaningful relationship to it's origin, as a discipline. However, the scope of these subject contents (learning material) must be limited, as a didactic-pedagogic matter, so that there is room for differentiated encounter with them.

The question which can be asked regarding this criterion is: On the one hand, do the contents maintain an adequately meaningful relationship with their disciplinary (scientific) origins and, on the other hand, are they didactically-pedagogically limited in such a way that room is allowed for a differentiated encounter (lived experience, experience) with them?

This comes down to the fact that the contents taken up in the curriculum must, at least, represent the coherent structure of the subject but that, at the same time, must be presented in such a way that the learning child can become involved with them as a total person. This also means that contents, which can only be managed in logical ways, cannot be didactically-pedagogically appropriate for the lower grades.

This criterion also is closely connected with the criterion of the teacher's command of the learning material and also the teacher's command of the didactic because, it is in the light of his/her subject matter and didactic knowledge that the teacher can interpret the relevance of the contents with respect to the subject, on the one hand, and with respect to the child and, especially his/her knowledge of the differentiated ways in which the child can be involved with reality, on the other hand.

4.7 General readiness of the child

The contents must be selected and ordered to link up with the readiness or level of becoming of the pupil. That is, the curriculum contents must link up with a child's state of knowledge and skillfulness, his/her level of cognitive and affective lived experiencing, his/her state of emancipation and being distanced, and his/her radius of differentiated action regarding the actualization (realization) of the modes of learning.

From this criterion, the curriculum must show a construction from easy to difficult. This also implies that, when a teacher selects contents (chooses an example, etc.), this always must be done in terms of a child's potentialities. Related questions are: Do the contents link up with the pupil's level of readiness? Do the contents link up with the child's state of knowledge and skillfulness? Do the contents link up with the child's level of cognitive (intellectual) and affective (emotional) lived experiencing? Do the contents link up with the child's level of self-responsibility and objectivity, as well as with the range of differentiated activities regarding the realization of the modes of learning?

4.8 Language readiness of the child

Even though the curriculum contents must link up with the child's general readiness, they also must link up with the level of the pupil's verbalization of reality (Language mastery). The unlocking of contents, especially in a formal didactic-pedagogic situation, is carried by language. This amounts to the fact that the teaching continually offers the child new language, and the effect of teaching, as a learning effect, is that the child can use his/her language on increasingly higher levels.

However, if the curriculum contents fall outside of the child's linguistic ability, as the ability to verbalize reality, then the teacher's presentation is meaningless to him/her. This criterion is closely related to the general didactic principle of clarity. The question which must be asked here of the curriculum contents is: Do the contents link up with the level of the child's verbalization of reality (language mastery)?

4.9 Harmony of the terrains of reality

The curriculum contents must offer the possibility of a balanced teaching of them across the various terrains of reality or principles of meaning (pragmatic, theoretical, esthetic, ethical and religious).

Because a child stands as a totality in the terrains of the surrounding reality, and because, one day, as an adult, he/she will assume responsibility regarding that reality, the various terrains of reality, and their principles of meaning must be taken up in the curriculum contents of the school. Therefore, they must present these principles of meaning in balanced ways in the school situation. Apart from the possibilities of specialization which can be derived from the general contents, the balance or harmony of the curriculum contents must be maintained for each type of school, along with a balance or harmony of the principles of meaning.

In this respect, the question which can be asked of the curriculum contents is: Do the contents, in teaching them, offer the possibility of a balance across the various terrains of reality or principles of meaning?

4.10 Pedagogic-didactic accountability

The curriculum contents must not only be limited to a syllabus, as pertinently ordered learning material (subject matter materials or contents), which form their necessary core. They must also include the necessary didactic considerations (methods, principles, approaches, teaching aids, evaluative guidelines, considerations of form, etc.). The curriculum contents must also include the pedagogical essences necessary for actualizing the aims (the normative).

Where the curriculum contents only emphasize the subject material, the essential unity of the didactic and the pedagogic in the school, formal didactic situation is disturbed. This amounts to the school losing its pedagogical significance. Further, if the necessary didactic considerations are not organized into the curriculum contents, the realization of the contents outside of the school situation cannot be guaranteed. Here, subject-didactic considerations are of importance

because the subject-didactician must interpret the unique nature of the contents didactically for the teacher to most effectively unlock the contents, and to guarantee their most effective access for the child.

When the normative is not involved in the curriculum contents, there also is no guarantee that the contents can serve as a means for realizing normative and responsible adulthood. The important question in this context is: Irrespective of the syllabus (as concisely ordered learning material), does unlocking the contents also include the necessary didactic considerations, as well as the related realizable pedagogic essences necessary for attaining the educative aim?

4.11 Balance and representative nature of the total possessed knowledge

In its knowledge aspect, the curriculum contents (subject matter contents) must be a balanced slice from the totality of possessed knowledge.

To satisfy this criterion, the curriculum contents must be balanced with respect to the time devoted to them. This means that one subject cannot be given more teaching time at the expense of other subjects. The curriculum contents must also represent what is proper from the totality of possessed knowledge; in other word, it must represent the norms of the time but, at the same time, embrace the norms which are anticipated for the future.

Also, the curriculum contents must be representative of the totality of possessed knowledge. Thus, they must be representative of the scientific discipline they represent, as well as the variety of subject contents which can be taken up from a discipline.

From the nature of the matter, this criterion is closely related to the previous criteria and, especially to the criterion of pedagogic-didactic accountability.

The question which must be answered positively with respect to this criterion is: Are the contents, in their knowledge aspect, a balanced,

proper and representative slice of the totality of possessed knowledge.

4.12 General and specialized possibilities (subject contents)

The curriculum contents must be as general as possible but, at the same time, they must include the possibility of later specialization. This means that the contents broached in secondary school teaching must include the entire terrain of the subject they represent. For example, the curriculum (or syllabus) for geography for the senior secondary school, must include geomorphology, climatology, economic and political geography. These general contents must provide the basis for further specialization, especially on the tertiary level of teaching.

The question of relevance here is: Are the contents adequately general, and do they include optimal possibility for later specialization?

4.13 Disciplinary coherence

In their knowledge aspect, all curriculum contents must be selected and ordered only in a disciplinary context. The reason is that they must represent a meaningful and continuous coherent knowledge.

Also, they must include the methods which bring the knowledge to light. This means that the curriculum contents, as they are divided in the different grade levels, systematically build up an image of the subject, as such. In this respect, it is important to indicate that there are not certain basic concepts or insights which determine the coherent facts of the subject which might be left out of the curriculum. The curriculum must also include the subject methods which bring the contents to light. Thus, there must be provision made for the pupils in school to apply the contents themselves. This criterion also underlies the possibility that various subjects can be integrated with each other; for example, the mathematical insights into the essences of a circle can be used in calculating gradations of length, breadth and time in geography.

In this respect, this criterion is closely linked to the criterion of general and specialized possibilities. The question which must be affirmatively answered regarding this criterion is: Is the disciplinary coherence of the factual material maintained in the contents?

4.14 Realization of quality and identity by the learner

Curriculum contents must have the possibility of bestowing on the acquirer (child in the school situation) of the contents, a quality and identity in the light of the highly valued things in the culture of a community. Thus, the contents must embrace what the community deems to be valuable. This means that the curriculum contents must be able to guarantee that mastering them will result in a quality of being formed, and which the person who can master the contents thereby can acquire am identity as a cultural member.

The question of importance here is: Do the contents include the possibility of bestowing the acquirer of them a quality and identity regarding highly valued things in the culture of a community?

4.15 Identity and the ideal culture of the community

The curriculum contents must not only reflect the identity of the community, as contained in its cultural contents (customs, morals, views, etc.), but must also portray the ideal culture.

In this respect, the curriculum must be progressive and creative regarding the culture. In other words, it must take its point of departure from the culture, as it is, and indicate an ideal culture. Therefore, in this sense, the curriculum serves to broaden and expand the culture and not merely preserve it. From the nature of the matter, this criterion is closely related to the previous criteria. The question which can be asked of the curriculum here is: Do the contents portray the ideal culture as the community sees it, as well as the community's identity?

4.16 Aim structures in harmony with a philosophy of life and view of being human

In the first instance, curriculum contents must be selected and ordered in the light of general aim structures (as point of departure), as "life" is given to them by contents which are in harmony with the community's philosophy of life and view of being human (as points of reference). This comes down to the fact that the contents taken up by the curriculum can be interpreted in accordance with the community's philosophy of life and view of being human. In other words, these contents must be in harmony with the philosophy of life and view of being human held by the community. It is precisely in terms of these criteria that the differences (of philosophy of life and view of being human) are so clearly observable in the curricula of different cultures. For example, one thinks of the different approaches regarding the Second War of Independence. The philosophy of life and view of being human here in South Africa (Christian-National) differs fundamentally from the philosophy of life and view of being human of English teachers in England (Material-National). For this reason, the interpretation of the Second War of Independence in South Africa and in England is vastly different.

The question which can be asked in this context is: Do the contents include the possibility that general teaching and educative aims can be actualized in terms of these contents provided by the philosophy of life of the community?

4.17 Authority of the teacher's teaching

Curriculum contents must be selected and ordered such that the teacher, because of his/her required training (i.e., full-time as well as in-service), can teach them with the necessary authority. This criterion is closely related to the criterion of the teacher's command of the learning contents. Aside from the authority which the teacher has because he/she is a proper adult, he/she also has authority because he/she thoroughly knows the contents which he/she teaches. This means that the curriculum must not include contents which fall outside of the teacher's required training. However, when it is necessary to include contents in the curriculum not taken up in his/her training, provision must be made for his/her in-service training so that he/she can talk about the new contents with authority.

The question to be asked here is: Are the contents of such a nature that the teacher, by virtue of his/her required training, can teach them with the necessary authority?

4.18 Formative possibility

Contents must include formative possibilities and, therefore, they must be situation surpassing. This means that the contents must be general, representative, essential and elemental in such a way that, as personal possessions, they are understandings (fundamentals) which unlock [further understandings]. This means that, if the child masters the contents and their essences, on this basis, in his/her activities, he/she will show a different relationship to reality.

The quality of the change comes down to the fact that the child carries more responsibility with respect to reality. His/her level of formed-ness is seen in this enlarged and more improved relationship to reality. In this respect, there is mention of situation surpassing possibilities because the child manifests a more deepened and intensified possession of the contents in terms of their elementals (essentials).

The important question here is: Do the contents have situation surpassing possibilities? In other word, are they general, representative, and elemental in such a way that, as personal possessions, they are understandings (fundamentals) which unlock [further understandings]?

4.19 Bringing about the elementals

Linking up with the previous criterion, the curriculum contents are selected as knowledge from disciplines because their key concepts (elementals), in their relationships and meaningfulness, can be visible in the disciplines as categorical structures. The reason is that the elementals make the categorical structure of a discipline visible.

In this respect, the question which must be asked is: As key concepts, do the contents form a meaningful coherence which

accords with the categorical structure of the acknowledged discipline in which they appear?

4.20 General and specialized (societal) possibilities

Disciplines differ relatively from each other in terms of facts, relationships and methods and, for this reason, the contents meant for a pupil must represent those different areas of knowledge (disciplines) which satisfy the demands of society for general (necessary for each person), but also specific (preparation for as many specializations as possible) knowledge. This criterion is closely related to that of general and specialized contents.

Here, the question is whether the contents taken up in the curriculum satisfy the general and specific demands a society makes with respect to knowledge which each of its members must have at his/her disposal. This means that each pupil must be able to master basic concepts and insights which are important for the society. Thus, the curriculum must contain core learning material which each child must be able to master.

4.21 Effort

The contents which are taken up in the curriculum must be able to be acquired with some degree of exertion or effort. This means that the pupils, for whom the contents are meant, can acquire them only with effort. Simple or simplistic learning materials have the effect of frustrating and boring the child, with the possibility of all kinds of disciplinary problems. Therefore, the contents must always offer a challenge to the child.

In this respect, it is asked: Are the contents of such a nature that the pupils for whom they are meant can acquire them with some degree of effort?

This chapter is not meant primarily to offer a complete discussion of the curriculum, as such. The idea is that the reader can also orient him/herself with respect to the demands placed on the curriculum before it can be used for teaching in the school. For this reason, the description is properly directed to the criteria for designing and developing a curriculum.

In this discussion, it is repeatedly indicated that the contents taken up in the curriculum must represent the reality which surrounds the child. The relationship between the contents which are broached in the lesson situation, and the ways their essences make the reality that they represent understandable to the child are fully considered in the following chapter on exemplary teaching.