

CHAPTER V

LEARNING AND PERSONAL ACTUALIZATION

1. INTRODUCTION

In the four previous chapters it is shown how psychopedagogics proceeds from its point of departure in **educative reality** to establish a scientific **structure** in terms of which a child's becoming adult or his/her **personal actualization** in an educative situation can be understood. It is noted that personal actualization occurs because a child is **accompanied** in this by adults **and** because of his/her unique participation through **self-actualization** by **giving meaning**. With respect to this unique participation in his/her becoming adult, it also is indicated that he/she gives meaning through learning and, thus, through actualizing his/her psychic life. This actualization has been discussed fully and because of its meaningful and inseparable connection with learning, a brief exposition of learning also has been given.

Since learning plays such an important role in a child's personal actualization as well as in a school situation (see chapter VI), a more complete reflection on the learning event is required.

Essentially, learning is a search for the sense and meaning of the content of reality, and this also can be described as a child's personal exploration, conquest and mastery of reality by attributing sense and meaning to it (see Sonnekus and Ferreira, 1987, p. 99). Also, Landman (1983, p.17) describes learning as acquiring, unfolding and conquering relations with reality by means of the modes of learning such that life can be meaningful. Thus, a learning event is actualized by **different modes of learning**. However, it is stressed that actualizing these modes of learning is a totality-act in the sense that a child- or person-as-totality is involved. Thus, learning is not merely an isolated "function" of a person but rather it is much more a way of being human.

2. A PSYCHOPEDAGOGICAL PERSPECTIVE ON LEARNING

The following discussion of a learning event is largely connected to and supported by the work of Sonnekus and Ferreira (1987, chapter 3);

The modes of learning by which a total learning event is actualized are divided into two groups, namely, **accompanying** (affective) and **knowing** (cognitive) modes of learning:

- * Accompanying (affective) modes:
 - ** sensing
 - ** attending
- * Knowing (cognitive) modes:
 - ** perceiving
 - ** thinking
 - ** imagining and fantasizing
 - ** remembering

2.1 Accompanying (affective) modes of learning

2.1.1 Sensing

Sensing is the beginning or onset of learning since, of necessity, it precedes or initiates the other modes. It is primarily **emotional** in nature because it manifests itself as a child's "attunement" to the world in and through his/her (bodily) sensing of it. This attunement is strongly supported by the seeing-, listening-, touching-, tasting- and smelling-images that he/she experiences (Basson et al., 1983, p. 34). Thus, sensing is a child's **first becoming aware of and being involved with** specific content of reality and it provides the possibility for him/her to encounter this reality by taking the initiative to come to know it by learning about it (see Sonnekus, 1973, p. 76). However, he/she cannot learn to know or understand reality only through sensing it. This is because sensing essentially is **fore-knowing**; that is, via sensing, a child only has a vague, inarticulate and mostly affective "sense" (i.e., feeling) of what the content is about. On this level of learning, explicit (cognitive) knowing or understanding is not yet possible because it still is intuitive (felt), vague, diffuse and unstructured (Sonnekus, 1973, p. 109), and a child only has a global notion of the content (Basson, et al., p. 34). This implies that, through sensing, he/she cannot yet determine **what** the nature and essence of the content is but, at most, he/she can experience that there **is** content. Thus, one can speak here only of an intuitive knowing (see Sonnekus, 1973, pp. 130-131).

As fore-knowing, sensing touches a child **emotionally** and thus prepares the way for actualizing the knowing modes of learning. On an emotional level, sensing awakens in a child a lived experiencing of, e.g., **wonder, excitement, interest, and curiosity** but also possible, e.g., are **shock, fear, anxiety and tension**. From this it is apparent that sensing largely determines the quality (e.g., **stability or lability**) and level (e.g., **pathic or affective**) of his/her emotional lived experiencing at any given moment. Thus, even though, sensing in itself does not lead to knowing, it determines the emotional state that **initiates** the further course of learning and that **guides and accompanies** (i.e., supports/sustains) the knowing modes of learning until the desired knowledge is achieved.

Van Dyk (1973, p. 134) indicates that sensing has a strong emotional flavor and that essentially it can be typified as **wondering**. The quantity and quality of wondering awakened in a child can serve as a criterion for effective learning. The quality of the lived experiencing of wonder is related directly to sensing a matter as something, e.g., unexpected, unknown, or different (Van Dyk, 1973, p. 134). Thus, sensing is the basis for cognitive learning to arise because in wondering a child discovers his/her ignorance and this initiates (motivates) his/her desire to **want to know** or to search for knowledge. This **wanting to know** accompanies the cognitive modes of learning until the content is unlocked and made accessible to him/her and he/she lived experiences **satisfaction** (see Sonnekus, 1973, p. 77). If, in this way, he/she gradually acquires greater control of and insight into the content, he/she will lived experience even more stability and this will promote the further course of cognitive learning.

From the above, sensing, although not a cognitive mode, is very important during the course of learning since it **initiates** it. Sensing is an accompanying mode of learning since, on the one hand, it provides the **emotional basis** for all learning and, on the other hand, it **guides** and accompanies the knowing modes of learning, as a wanting to know, until the desired knowledge is obtained.

For a teacher, whose primary aim is the effective learning of his/her pupils, an understanding of sensing as the initiating mode of all learning is of great importance. For this reason, brief attention is directed to some **modalities** or essential characteristics

of sensing. These modalities describe sensing in its **essence** and indicate the **ways** it is actualized.

The following modalities [functions] of sensing are distinguished (see Sonnekus and Ferreira, 1987, pp. 110-112):

****Sensing initiates all learning***

Sensing is the beginning or onset of all learning. A child becomes involved with what he/she ultimately is going to learn because he/she becomes aware of it by sensing it. This first awareness of the learning content can occur in two ways. First, it can begin by an **intention to learn** (see Sonnekus and Ferreira, 1987, p. 86) by which a child becomes motivated **purposefully** to **search** for specific content. Second, it can occur in a more **incidental** way by means of the **valence-values** (e.g., attraction or repulsion) of the learning materials (see Sonnekus and Ferreira, 1987, p. 89) or as a result of one or another **physical stimulus** (see Nel et al., 1965), p. 182) (e.g., light, sound, smell) awakening his/her sensing.

****Sensing accompanies all cognitive learning***

Sensing accompanies learning on a knowing level. Effective attending, perceiving, thinking, imagining and fantasizing as well as remembering presuppose sensing has contributed to establishing and sustaining a stable emotional base (lived experiencing).

****Sensing is affective, pre-cognitive or subjective***

As mentioned, sensing does not result in real or objective knowledge but it lies much more on an emotional level and thus is preponderantly **fore-knowing** in nature. A child's first sensing or becoming aware of the content gives rise to emotional lived experiencing such as **stability**, rest, certainty, and security or also **lability**, anxiety, tension and uncertainty that form the basis for and give rise to the further course of learning. Sensing, which awakens a feeling of **stability**, can promote the further course of learning, and elevate its quality. When **lability** is awakened, this leads to anxiety and tension that can block and impede the course of learning.

Ferreira (see Sonnekus and Ferreira, 1987, p. 122) indicates that the modalities of sensing and of all modes of learning only can

be distinguished from each other but that they cannot be separated and that they always are actualized as a unity.

2.1.2 Attending

Although sensing initiates all learning, this does not mean that a child comes to know completely everything that he/she senses. The emotional lived experiencing awakened by sensing influences a child's willing by accompanying it and determining its strength. This strength of willing then determines whether a child will attend further in any way to the content. If he/she will attend further, the **becoming aware and concerned involvement** of sensing proceeds to an **active remaining aware and involved** with it (see Sonnekus, 1973, p. 80). Since attending is preceded by a definite decision, it is an activity of deliberately remaining-by the content (see Van Niekerk, 1971, p. 21). From this, a stable emotional lived experiencing (i.e., affective stability in contrast to pathic lability), brought about by sensing, is a precondition for attending. That is, a stable sensing promotes a willing readiness in a child to know and this motivates him/her to actualize his/her attending. Through the dictates of willing, there is a **learning intention** or **learning directedness** with respect to specific content. The original learning intention, on the level of sensing, now is **sharpened** because of a child's willing readiness to master the learning content. For this reason, attending does not occur automatically but always is preceded by a willful decision. Through attending, he/she not only directs him/herself to the content but, in doing so, he/she unlocks or opens him/herself to that content and makes it his/her own and incorporates it into his/her possessed experience.

Attending cannot be actualized apart from the other modes of learning because the moment a child begins to attend to what he/she is sensing, the cognitive modes of learning become **directed** to the content of concern. This means that in attending, something specific becomes his/her **point of focus** and surrounding data temporarily recede into the background (see Sonnekus and Ferreira, 1987, p. 114). Thus, in essence, attending is a **selective** activity because a child chooses to "focus" on something in his/her total situation and, consequently, all other particulars are left "out of focus". Since all modes of learning are directed to what is in focus, a child can learn it.

As with sensing, attending is actualized by several modalities:

****Attending is a sharpened intention to learn***

Attending is a continuation of the original learning intention as this is awakened by sensing. However, a child **will** not necessarily attend to everything he/she has sensed. Attending is preceded by a choice or **willful** decision and, thus, is not merely a **reaction** or **response** to an external **stimulus**. Since willing is a way human **intentionality** shows itself, attending (as a mode of willing) is characterized by a **directedness that is** not present in the original sensing. That is, attending is a **sharpened and willfully initiated intention**. Now a child shows the will and desire to attain more knowledge, and, therefore, by attending, he/she directs his/her learning potentialities to the content that he/she has sensed. Because of its sharpened learning directedness, attending forms a bridge between the initially vague and unstructured **emotional lived experiencing** of the content, and a purposeful and ordered **knowing** involvement with that content. Such involvement eventually leads to substantial **knowledge** of that content. Thus, attending is an elevation in the learning intention since it is supported by a decision to remain involved with the content (Sonnekus and Ferreira, 1987, p. 113).

****Attending is a selective activity***

As mentioned, attending is a mode that **directs** a child's knowing or **cognitive learning potentialities** to the object of attention (Sonnekus and Ferreira, 1987, p. 114). However, one cannot come to know in this way alone. In essence, attending, first, is merely a manifestation of a child's intentionality as this is embodied in his/her willing(ness)-to-know and, second, this directedness is **selective** in nature. In this connection, Behr (1980, p. 65) says, "The act of attention requires the selection or singling out of certain stimuli in the environment, to the exclusion of the others. As a result of such selection, the situation...becomes clearer in definition or contour". Attending means that from the total data in a situation, only specific content is **selected, delimited** and placed in the **focal point** of involvement in a situation. That which is selected in this way now becomes the central point of a child's undivided interest (Sonnekus and Ferreira, 1987, p. 114) and, thus, is placed at his/her disposal for further exploration by means of the cognitive modes of learning. "Attentive performance means a convergence instead of a scattering of mental energies" (Behr, 1980,

p. 406). In this way it now is possible for him/her to learn to know the learning content since moments such as **identifying, delimiting, analyzing, comparing, ordering, and integrating** are put into play (Sommekus and Ferreira, 1987, p. 114). Although attending alone cannot be viewed as learning, it is a **means** by which he/she can knowingly participate in the content and ultimately learn to know it.

****Attending accompanies the cognitive modes of learning***

Besides being a selective activity, from the above it is very clear that it also has an **accompanying function** with respect to the cognitive modes. This means that the cognitive modes of learning, namely, **perceiving, thinking, imagining and fantasizing, and remembering** are actualized and sustained by attending (as well as by sensing).

Since attending requires a child to **remain aware** of the content, this enables him/her to remain knowingly or cognitively involved with it. With diminished attending, there is a reduction in the quality of perceiving, thinking, imagining and fantasizing as well as remembering (Sonnekus and Ferreira, 1987, p. 113). Finally, a child cannot perceive a specific object or think about it if he/she is not aware of it. It is in this being-aware of content that attending's accompaniment of the cognitive modes of learning is constituted.

2.1.3 Actualization of the accompanying modes of learning in a classroom

As accompanying modes of learning, sensing and attending are the **basis** for an adequate course of cognitive learning. As a first becoming aware of the content, sensing is the source of and initiates as well as directs (through attending) further learning. In this way, the **emotional basis** is formed by which the cognitive modes of learning continually are supported and accompanied. The foundation for success or failure is laid by these first moments of a learning event.

For the **effective** actualization of learning in a classroom, it is **necessary** that a teacher take care that the accompanying modes of learning are adequately actualized. The question, however, is *how* he/she can achieve this aim.

To achieve this aim, a teacher must have a solid knowledge of the **modalities** [or functions] of sensing and attending as explained above. Sensing is **learning initiating** and, based on its **emotional** nature, it **accompanies** cognitive learning. **Wondering** is an essential (Van Dyk, 1973, p. 134) characteristic of sensing and, thus, a teacher must try to indicate to a pupil what, e.g., is strange, odd, different, surprising about the content. A child becomes **stimulated** by this and by wondering, a stabilized emotional stratum for adequate cognitive learning is created (see Van Dyk, 1973, p. 135).

In this way, a teacher awakens a child's **willingness** to learn and he/she also accompanies him/her to an intensification of his/her intention to learn or learning directedness. By **pointing out** the mentioned facets (e.g., the strange, the odd), a teacher has already **selected** certain learning content for a child. In this way, he/she accompanies and facilitates a child's selection of content and he/she insures, to a high degree, that a child's attending is directed to the **relevant** content. In other words, for the adequate actualization of cognitive learning, a teacher, in designing a lesson, must take account of the **modalities** of the modes of learning to be actualized.

2.2 Knowing (cognitive) modes of learning

The cognitive modes of learning are viewed as the **crowning** of a child's learning activities. Although the specific nature of each of the cognitive modes are considered next, it must be remembered that the course of learning is a unity, and the individual modes always are meaningfully interconnected.

2.2.1 Perceiving

As noted, **sensing** is viewed as the beginning or initiation of all learning. Because of its strong **emotional** character, "knowing" on this level is still vague, intuitive and unstructured. However, the emotional effect that sensing has on a child is extremely important since it accompanies his/her **willingness to attend**, and, thus, he/she attains a concerned involvement with the learning content on a **cognitive** level. In this way, there is a progression from a subjective and preponderantly emotional sensing of the content to a more **objective** and **distanced perceiving** of it. For effective learning, perceiving must be accompanied by a stable sensing and actualized by attending (see Sonnekus and Ferreira, 1987, p. 115). That is, sensing and attending are preconditions for adequate or effective

perceiving. After the more **casual** first becoming aware of content via sensing, which often is a consequence of **external factors**, perceiving is an activity by which a child **purposefully** directs him/herself to the content that speaks to him/her from reality.

Through perceiving, real knowledge can be attained since now **sense and meaning** can be given to the content of reality on a **cognitive** or knowing level. Behr (1980, p. 61) says that perceiving enables a person to give **meaning** and to **interpret**. According to Ferreira (see Sonnekus and Ferreira, 1987, p. 115), and in agreement with Strau (1963), perceiving establishes a more distanced and objective relation to reality. It is directed to reality as it is and that has validity for everyone. It thus involves the **universal**, the **generally valid** and the **objective** as this is found in the matter, the learning material, the object, etc. in itself. The vagueness, unclarity and unstructuredness still existing in the content are eliminated during perceiving and the **essentials** are brought to the fore (see Sonnekus and Ferreira, 1987, p. 115).

The act of perceiving moves on a **cognitive** level where there is objective globalizing, analyzing, structuring, ordering, systematizing, synthesizing, etc. (Sonnekus, 1974, p. 45). According to Landman (1983, p. 18), perceiving is an inchoate ordering through an arranging of possessed knowledge. It is a search for what is or for the essentials of the content and it is an entry into the problematic in the content. As a mode of learning, perceiving is actualized on a cognitive level, and this leads to knowledge since it brings to light the essentials of a matter in its totality.

As is the case with sensing and attending, perceiving is actualized by several modalities. It is important to keep in mind that the different modalities of perceiving are actualized as a **unity** and that they necessarily presuppose each other. True knowing through perceiving only is possible when the initial global-identification of the object of perceiving is filled in by analyzing, synthesizing and ordering. In this way, a child can **give** a cognitive **meaning** to what he/she perceives and thus really and fully learn to know it.

****Perceiving is global-identification***

When a child perceives, he/she is directed to reality as it is. Through attending, his/her perceiving is directed to something

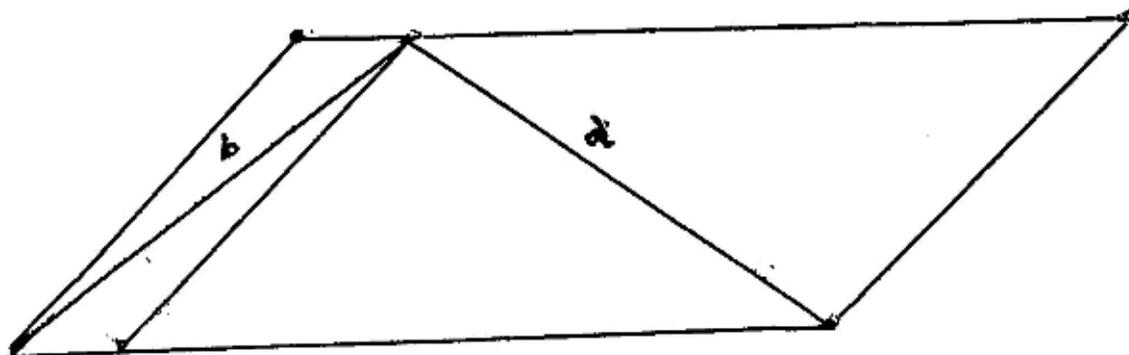
specific, and he/she determines its **identity**. Thus, in a geography class, when a map is shown to him/her this immediately is identified in its **totality** as a map of the world. Only later will he/she proceed to distinguish the continents, islands, etc. Thus, at first perceiving is directed to the **whole** with the sole function of determining its **identity**.

To perceptually identify an object, matter or learning content, it must be placed in the **foreground** while all other data in the situation temporarily fade. According to Behr (1980, p. 61) ,the tendency to distinguish between figure and ground is one of the most important aspects of perceiving. Already, with this first global identification, a child is involved with eliminating the vagueness and unstructuredness of his/her situation and he/she begins to order and structure it to attain full knowledge of it.

**Perceiving is analyzing*

To achieve full knowledge of a particular matter, mere global-identification or recognition will not suffice. **Analyzing** is an additional and logically necessary modality of perceiving. According to Ferreira (Sonnekus and Ferreira, 1987, p. 116-117), the learning content or object of learning is stripped of its global quality during analyzing. This analyzing activity enables a child to perceive the detail or finer particularities and thus strengthens his/her grasp of the larger whole. Although analysis is directed to **detail**, at the same time the structure of the whole becomes graspable to a greater degree (see Sonnekus and Ferreira, 1987, p. 117). Through analysis the **essential** characteristics of the learning material is disclosed and, therefore, a better insight into and understanding of the whole can be attained. However, once again it must be indicated that these first two modalities of perceiving do not function separately from each other. During analyzing, **identification** always occurs again. For example, when a child perceives a table, first he/she **globally-identifies** it as a table and then by **analysis** he **identifies** a base or foot and a surface as essential characteristics of a table.

The following serves as an example to show the different as well as the distinct function of globalizing and analyzing as modalities of perceiving:



(Behr, 1980, p. 64)

With the first glance (global-identification), it appears that line **a** is longer than line **b**, but with a more discerning look (analysis) it seems that they are of equal length.

***Perceiving is synthesizing**

This means that from the parts, a comprehensive whole is formed. In perceiving, synthesizing is closely related to the initial global-identifying and analyzing. Synthesizing puts the crown on what a child globally-identifies and analyzes in perceiving. Through synthesizing, the different parts of a greater whole, disclosed by analysis, again are united into a whole but now this whole is more than the mere sum of its parts (see Sonnekus and Ferreira, 1987, p. 117). Through synthesizing there is a better understanding that is **not** present in the initial globalizing because now the relationships of the separate parts to each other and to the whole are understood. Thus, synthesizing is not merely the uniting of the separate parts. Since the separate parts are related to each other, qualities arise that are not present in each part and, therefore, the whole, as what it is through synthesis, is **more** than the sum of the parts.

***Perceiving is ordering**

Through perceiving, a learner also is busy ordering. By **naming** (descriptive language) what is perceived, it is no longer limited to the data surrounding it but its true identity is disclosed. Thus, perceiving is a way of ordering in and through descriptive language (Sonnekus).

By naming an object or matter, a child also orders reality for him/herself. In this way, giving meaning (cognitive ordering) to reality

occurs as well as this object or matter, as abstracted by language, being ordered within possessed experience.

2.2.2 Thinking

According to Behr (1980, p. 78), a primary characteristic of persons is their ability to **think**, and this ability is necessary for successful learning and living. The complexity of the act of thinking is well known and, therefore, it is very difficult to analyze and really understand. In the past, a great deal of research has been done on thinking and, especially, the German psychology of thought and gestalt psychology are well known for their research on thinking.

For example, the Cologne school distinguishes three layers or levels of thinking (see Nel et al., 1965, pp. 249-250):

- *The level of individual images
- *The level of schematic ideas
- *The level of abstract concepts

Regarding the content of the different levels, the level of **individual images** exists as individually experienced images as a direct result of sensory perception. This is the level of concrete experience. There is no notion of the abstract and interrelations do not exist. [I have an image of my friend's face]. On the **schematic** level, original perceptual images have been elaborated into more general or schematic images. On this level, connections between things are noticed. Here there is classifying, schematizing, systematizing and ordering of the original individual images into more meaningful relationships that are preparatory to abstract forms of thinking. [I think of my friend as an example of the concept "friend"]. On the **abstract** or imageless level of thought, thinking functions mainly by means of concepts and categories for ordering and this involves relations such as cause-effect, similarity-difference, and means-end. On this level, the perceptual completely disappears and there only is imageless knowledge. [I am thinking of "friendship" as an example of one kind of human relationship]. (see Nel et al., 1965, pp. 249-250).

Otto Selz (see Nel et al., 1965, p. 252) of the Wurzburg school of thinking elaborated on the imageless character of thinking and specifically stressed its **directed** and **ordered** character. Since it is not the aim here to present an historical overview of the research on thinking, these few introductory remarks suffice.

However, to understand thinking as a way of being-human, it must be viewed as a phenomenon within the relationship of a person to his/her world. Although the German psychology of thought and others have made valuable contributions to the study of thinking, especially as a cognitive **function** of a person, it seldom has been studied within the **comprehensive relationship** of person and world.

As an introduction, thinking is an activity in which a **total** person is involved and it is actualized in accordance with a **relationship** he/she establishes with his/her world. In this light, Sonnekus (in Nel et al., 1965, p. 360) states that thinking is a **goal-directed** activity of a person and this should be viewed as his/her **answer** to an appeal that arises from **reality as a problem**. Thus, thinking is an activity by which a total person enters a dialogue or encounter with **reality** and in this relationship, it addresses itself to a person **as a problem** and this appears to him/herself as an obstacle, a resistance or a challenge. He/she responds to this situation by thinking (see Nel et al., 1965, p. 260). As mentioned, the different modes of learning are not brought into play separately but rather as a unity. In this light, thinking, to a large degree, is an extension of perceiving. Actually, it is through perceiving that the problematic aspects of the content of reality are **discovered** and this gives rise to thinking.

Thinking primarily is a mode of learning directed to **ordering, understanding** and achieving **solutions**. The activity of thinking is initiated by a problem and this confrontation compels a child to search for solutions by means of activities such as planning, analyzing, comparing and ordering (see Sonnekus and Ferreira, 1987, p. 119). Behr (1980, p. 78) also mentions that "thinking involves reasoning, judging, conceiving and problem solving". Thus, it has a character of **breaking-through** (see Sonnekus, 1974, p. 71) whereby reality as a problem is **transformed** to **understand** and **control** it (see Sonnekus, 1985, p. 85). In this activity of breaking-through, by which a child eventually knows and understands, thinking does not stand alone as a mode of learning. The other modes of learning, as it were, are at the service of thinking; for example, in thinking, "use" can be made of perceiving, remembering or imagining and fantasizing in his/her search for a solution.

It is well to mention that there is a special and indissoluble connection between **thought** and **language**. For example, Nel refers

to the "developmental parallelism" that exists between language and thought (see Nel et al., 1965, p. 72). According to Sonnekus (1974, p. 254), "language development" is not identical with "thought development" but they are closely related and especially in the way language "develops" from more **perceptual** forms of language to more **abstract** symbols and concepts. In addition, language is the **medium** within and by which a person thinks (Straus, 1963, p. 28). As such, language supports thinking and it is the footing or bedding on which thinking stands (Nel). In this regard, it seems that the essential of language lies not in its system of sounds but rather in its system of symbols or thought. Language also is an abstract symbol system by which thinking enables a person to **abstract** from and to **order** reality (see Nel et al., 1965, p. 254). There also is a relation between language and intelligence, as well as between language and concept formation. Language, thought, intelligence and concept formation are a unity without which a child's learning could not occur.

The following are some of the most important modalities of thinking (see Sonnekus and Ferreira, 2987, p. 120-122):

****Thinking is abstracting***

A person continually is in contact with concrete reality. To command this reality, he/she must learn to know it and this is made possible by the abstracting function of thinking. That which is made available during perceiving becomes abstracted to symbols by thinking (especially by means of its close connection to language). During thinking, the concrete is exceeded and dealt with in terms of symbols, concepts or thoughts. Thinking transforms a world of perceivable objects into a world of concepts and this involves an abstracting from reality that also means a distancing from it. The act of thinking, thus, is a reconstructing, transforming and symbolizing of the real world or reality into a symbol-image of reality (see Nel et al., 1965, pp. 260-261).

Abstracting also essentially is distancing. That is, in his/her thinking, a child loosens him/herself from the concrete and that it continues to exist only in terms of symbols or thoughts (see Sonnekus and Ferreira, 1987, 120-121). Through abstracting and distancing, real objectivity is achieved.

****Thinking is conceptualizing***

Through abstracting, distancing and objectifying, there is a progression to a **conceptual** level. According to Van Parreren (see Nel et al., 1965, p. 255), concept forming always presupposes a degree of abstraction. By means of language, the concrete is abstracted and there is a distancing to the symbol or concept. Now, a concept becomes a substitute for a concrete object. Thinking transforms the concrete-perceptual world into a world of concepts that involves an abstracting and ordering of reality. Thus, in thinking, a child deals with reality on a conceptual level (see Sonnekus and Ferreira, 1987, p. 121).

The strong relationships among the different modalities of thinking are evident in the above.

****Thinking is ordering***

Ordering also is one of the modalities of perceiving. According to Ferreira (Sonnekus and Ferreira, 1987, p. 121), it also must be viewed as an inherent function of thinking in that perceiving already is the beginning of thinking, and the activity of thinking itself involves ordering. From this, the close connection among the different modes of learning is seen once again.

Thinking is an activity directed to **ordering** reality. In this planned, ordered involvement with reality, a child makes use of **language** as a **means of ordering**. Thought achievements such as analyzing, schematizing, synthesizing, comparing and generalizing are possibilities for ordering that lie in language itself (Sonnekus and Ferreira, 1987, p. 121). Because of this **ordering character** of thinking, a child continually explores and discovers reality and orders it from a **multiplicity** to a **unity**. This involves a relation between a child and **reality as a problem** that must be analyzed, ordered, summarized and transformed from a multiplicity to a unity or synthesis. Ordering reality from a multiplicity to a unity means that, by thinking, one arrives at an understanding of it (see Nel et al., 1965, pp. 260-261).

Thus, thinking is directed to an order that is inherent to reality itself. However, a child wants to disclose and order this **him/herself** to get a better understanding of it. Without such ordering, he/she will stagnate on a visual and concrete level, and the abstract or symbolic will remain inaccessible to him/her (Sonnekus and Ferreira, 1987, p. 122).

**Thinking is solution-directed*

As mentioned, thinking arises when reality or a part of it is perceived as a problem. Thus, during thinking, a child is directed to searching for a solution to a problem. In this active search for a solution, there are activities such as planning, comparing and especially ordering that play an important role in overcoming resistance and stumble blocks (see Sonnekus, 1977, p. 71).

A child's psychic life and his/her learning potentialities are functioning while he/she thinks. During his/her search for a solution, on the one hand, he/she addresses him/herself to his/her possessed experience (memory), i.e., all relevant knowledge, means and skills at his disposal and, on the other hand, to his/her immediate perceiving, imagining and fantasizing and everything that enables him/her to clarify the problem. Thus, thinking is not only abstracting, conceptualizing, ordering and solution-directed but it necessarily is supported and supplemented by the other modes of learning (Sonnekus and Ferreira, 1987, p. 122). Of course, in a sense, this can be said of every mode of learning because, since they always function as a totality, there is no precise boundary separating one mode from another. And yet, as noted, even if they are not separable, they are distinguishable.

Without any claim to completeness, in light of the above, it is seen that thinking is a purposeful activity by which methods of solution and means of ordering are applied to the solution of problematic situations in a person's involvement with reality (see Nel et al., 1965, p. 263).

2.2.3 **Imagining and fantasizing**

When imagining and fantasizing are considered as modes of learning, it must be noted that there only is a difference in degree between them. For the sake of greater clarity, these two modes of learning are treated separately, but the relation between them remains clear. The following elaboration relies greatly on the writings of Sonnekus and Ferreira (1987, pp. 122-126) on this topic.

To understand **imagining** as a cognitive mode of learning, the difference and connection between imagining and perceiving is indicated.

Perceiving is a way in which a person is directed to the **real** world. The perceived object is itself present and directs an appeal to a perceiving person. Regarding imagining, its object is not present but by an act of imagining it is **represented**. Perceiving assumes an involvement with the real world while imagining constitutes an **irreal** world (see Swan-Liat, 1966, p. 200). In an imaginary world, a person experiences an object in another mode or way of being. The imagined is an unreal, fictive image; it is less clear, not sharply defined, less stable, not clearly localizable and has no unique size. Further, a person is free to transform or change the image by a spontaneous act of imagining. Thus, the acts of perceiving and imagining signify two different relations to reality (see Nel et al., 1965, p. 200).

On the other hand, no matter how "unreal" imagining might be, it is necessarily connected to previous perceptions since someone imagines something him/herself and this imagining has its origin in what is found in reality. This implies that the content of what is imagined, in one way or another, leads back to reality. This does not mean that imagining always must be "reproductive" but it also can contain creative moments. In this respect, imaging can **exceed** the data of perception because something new or additional is added that had not existed in the original perception. However, the possibility exists that such imagining can be true to or foreign to reality since this is strongly connected with a person's fantasy life.

Also, imagining, as a mode of learning, is inseparably connected with a child's **possessed experience** and that, to a great degree, it furnishes content about which he/she can imagine for him/herself. Imagining not only includes the possibility of distancing from and exceeding reality, but it also provides room for creative involvement with it.

With **Fantasizing** as a mode of learning, in comparison with imagining, it is an even more distanced relationship with reality. Fantasy exceeds all limits of reality and is viewed as a creative activity by which a person enters a fantasy world. (Compare, e.g., a child's fantasy play). On this basis, fantasizing is an activity by which a child can "escape" reality and "lose" him/herself in a world where feelings, wishes and desires are rampant. On the other hand, it also embodies the possibility of proceeding to a cognitive level to think and live creatively, etc.

Although imagining and fantasizing, as modes of learning, have a strong emotional side, in learning, both primarily are directed to knowing, planning, creating, etc.

Thus, the following modalities of imagining and fantasizing are distinguished (see Sonnekus and Ferreira, 1987, pp. 125-126):

****Imagining and fantasizing exceed reality***

When it is stated that imagining and fantasizing make exceeding reality possible, this does not deny that their content is borrowed to a large extent from reality. However, it is possible that the form that the image or fantasy takes can be unreal, can become reality or even never will or can become reality. Such imaginings and fantasies usually have a strong emotional flavor and are recognizable in human strivings, desires, wishes, and expectations. Thanks to the strong personal nature of these two modes of learning, they often give rise to original or new ideas, projects, and creations.

Especially, as far as learning is concerned, imagining and fantasizing are modes by which a child distances him/herself from reality and even exceeds it. In this way, he/she exceeds the immediately perceivable world and finds him/herself in a world of the abstract with its primarily cognitive flavor.

****Imagining is representative***

It is stated that imagining is an activity by which a child can represent reality. This implies that the object or content is stripped of concrete, visible elements while, via a child's possessed experience, it is represented on an abstract, non-perceptual level. This act of imagining rests largely on previous perceptions while the possibility of representation is based on the active support and actualization of thinking and remembering as modes of learning. Whether this imagining of an object, content or event more or less is faithful to reality depends on a child's previous perceptions and on the sense and meaning he/she has attributed to them, among other things. Thus, the quality of a child's possessed experience is a decisive factor in whether imagining is faithful to reality.

****Imagining and fantasizing are creative***

It is unique to imagining and fantasizing that they both have a **creative** aspect. Thus, a child can transfigure or transform reality into a

"new" reality. In this respect, he/she exceeds the data of his/her previous perceptions since he/she adds something new to them. Such imagining, then, is a combination of existing and new data.

When fantasizing is examined, it is seen as a mode that lends itself to creativity also on a cognitive level. In fantasizing, a child is supported by his/her possessed experience but he/she also exceeds it because he/she is busy creating.

2.2.4 Remembering

Remembering also is a genuinely human phenomenon and is seen as a mode of learning that is actualized within a person's relationship to his/her world. Therefore, it must not be viewed merely as imprinting, storing and retrieving content (see Sonnekus, 1974, p. 85). Remembering is a conscious activity and demands personal effort; therefore, effective remembering requires the presence of an **intention to learn** (Nel et al., 1965, p. 294).

First, remembering is a being-conscious of the past and this implies **recalling** the past in the **present**. Things, events or persons from the past that are recalled are not present but by the act of remembering they are placed in the present as if they were present (see Sonnekus, 1974, p. 47). Thus, it is an activity by which "the effects of past learning manifest themselves in the present" (Behr, p. 70). Remembering is a mode of learning by which a child can "call up" or recall, in the present, learning content that he/she had acquired in the past. Previously learned content that has been given **sense and meaning** in the past is re-presented and placed in the present by remembering it (Behr, p. 127). Also, see Straus (1963; 1966). In this way, an appeal is made to his existing possessed experience and already acquired content is "stimulated" and he/she then can bring this into relation with new content.

However, remembering is not only an act by which he/she recalls existing possessed experience but it also is an activity by which new content is **integrated** into his/her possessed experience. In this way, his/her possessed experience continually is expanded, broadened and deepened. In this regard, remembering is the crowning of the course of learning because, in meaningful relationships with the other modes of learning, it enables a child to integrate new knowledge into his/her existing possessed experience (Sonnekus and Ferreira, 1987, pp. 127-128).

Hence, Ferreira (Sonnekus and Ferreira, 1987, pp. 128-129) distinguishes the following modalities for remembering:

***Remembering is putting in the present (recalling)**

As mentioned, remembering means to recall or put in the present relevant possessed experience. Putting such possessed experience in the present means that learning material memorized/learned in the past now, in the present, is **recalled** and is at a child's disposal. The quality of remembering (recalling) largely is determined, first, by a child's current emotional state and, second, by the way learning was actualized in the past. Current as well as past lability give rise to **forgetting** content. In a case where a child learned effectively in the past and he/she now is affectively stable, the possibility exists that he/she will remember better than if he/she is pathically labile (e.g., upset, scared).

***Remembering is integrating**

Remembering also is characterized as having an **integrating** function. This function means that new learning content, which he/she has learned to know by perceiving, by thinking and by imagining and fantasizing, and to which he/she has given personal sense and meaning, is "added", as it were, to his/her existing knowledge. However, this is not merely an adding of new knowledge to existing possessed experience but it is an act by which the new is brought into **meaningful** connection with existing knowledge. Through the integrating function of remembering, the existing possessed experience continually is expanded and, thus, there is a **quantitative increase** as well as a **qualitative deepening** of a child's possessed experience.

In the light of the above explication of the learning event as it is actualized by a child, it is a unitary event that occurs within a child-world relationship. Although learning is actualized by several modes of learning and their modalities, they are not actualized apart from each other. In learning, each of the modes has a particular function and they can be executed only within the interdependent and strong relationships that exist among them. In addition, there also is a close relationship among the modes of learning and experiencing, willing, and lived experiencing by which a child's psychic life is actualized. (This matter was discussed in chapter III, section 4.3). By actualizing learning and the psychic life

(i.e., by giving meaning to the world), a child gradually builds up a possessed experience, personal actualization occurs and he moves nearer to adulthood.

.2.5 Actualizing the cognitive modes of learning in a classroom

To adequately actualize the cognitive modes of learning in a classroom, it is necessary that they be supported by a stable sensing and a sharpened intention to learn (attending). Although the modes of learning function as a unity, still, at a particular time, some modes are more prominent than others. For this reason, it is necessary that a teacher have a thorough knowledge of the functions fulfilled by the different modes of learning and that he/she link his/her teaching with these different modalities or functions that he/she wants a learner to actualize. Thus, a teacher should first determine which modes of learning are to be actualized at which phase of a lesson and then plan his/her teaching activities accordingly (see chapter VI).

Regarding the actualization of the cognitive modes of learning, when **perceiving** is actualized, a teacher should provide for **globalizing, analyzing, synthesizing** and **ordering**. For example, a thing, model or theme might first be presented to a pupil in its **totality** and then **details** or essentials can be shown and finally be **synthesized** or unified into a whole. By means of linguistic expression and naming, **ordering** occurs. Consequently, a poem might first be read or recited to the pupils as a totality until it is formally dissected or **analyzed**. When all facets of the poem are clear to the pupils and the relationships are shown, it can again be read to them as a **whole** because only then will there be an understanding and appreciation of the whole. Ordering continually occurs by means of language. According to Basson et al. (1983, p 34), the purposive implementation of teaching aids in conjunction with perceiving is particularly important. A meaningfully ordered chalkboard scheme, visual model, real example, etc. can be used so relationships and concepts are clearly perceived.

Thinking will most naturally arise when a child's perceptions confront him/her with a **problem**. This implies that a teacher must make the pupils aware of a problem or problems in the learning content if he/she aims to stimulate thinking. This can be done by asking purposeful and clearly formulated **questions**. These questions should be **real** for the pupils and they have to recognize

that answering them is **meaningful** to them. In answering a question, a teacher needs to guide a pupil in his/her thinking and take care that it does not stagnate on a concrete-perceptual level but that it proceeds to an **abstract** level of thinking. In this connection, language provides the **concepts** for **ordering** and **abstracting** the contents.

With respect to **imagining and fantasizing**, a teacher should provide the pupils with an opportunity for **creativity**. From what is known of a child, assignments can be formulated so a pupil can exceed reality and design or create "new" realities. Here one thinks of free assignments in art, essays and science projects.

Also, regarding **remembering**, a teacher has the task of helping the pupils. He/she cannot merely assume that the pupils can **remember** a particular matter, circumstance or content; therefore, he/she should stimulate and illustrate their existing possessed experience. He/she also must guide them to **integrate** the new content into their already existing possessed experience. Pupils are not always able to do this themselves and, therefore, a teacher should help them establish relationships and point out interconnections between the old and the new content. With respect to remembering, two important aims are distinguished. First there is **practice** of an earlier achievement, skill, technique, or mental representation by often **repeating** the subject content. Second, the subject content must be deepened by joining together loose and disconnected aspects into a meaningfully integrated whole (Basson et al., 1983, p 35).

For effective learning in a classroom, it is extremely important that a teacher continually supports the pupils' learning and that he/she does this by directing his/her teaching to the modes of learning and their modalities. Thus, a teacher should plan his/her lesson so that **learning activities** are in **harmony** with **teaching activities** and that they are both directed to achieving the lesson's **learning aims**. This matter is treated more comprehensively in chapter VI.

3. LEARNING AND CURRICULUM PLANNING

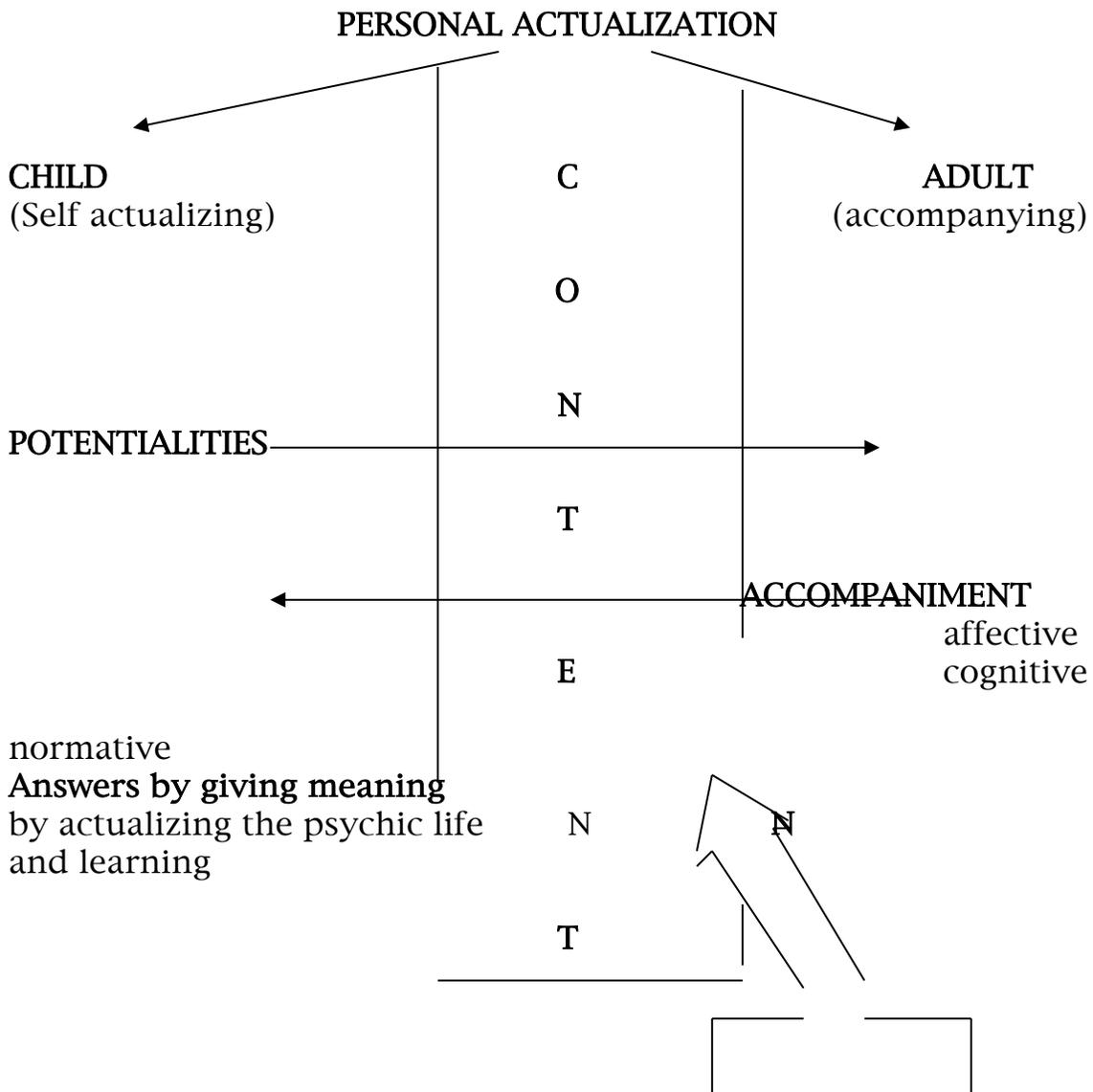
Curriculum planning involves **selecting, ordering and evaluating** learning content for a didactic-pedagogic situation in order to reach specific aims (See Hill, 1975, pp 17 and 22).

During curriculum planning, selecting and ordering content are closely related to the specific aims to be achieved. Within an educative perspective, the ultimate aim of curriculum planning is a child's **proper adulthood**. The content **representative** of adulthood must be selected and ordered by curriculum planning in such a way that a child can attain a better understanding of it. This ultimate aim usually is kept clearly in mind. However, a **child** for whom a curriculum is designed is not always kept in mind. Sometimes curriculum planning merely involves selecting and reducing existing subject matter content and then ordering it from "easy" to "difficult". Whether a child, as one who is becoming adult, can achieve a better grasp of **reality** from this and can learn to maintain him/herself adequately in this reality is totally irrelevant. Such curriculum planning where a child is not taken thoroughly into account is untenable. The fact is that proper adulthood can only be attained in terms of adequate **personal actualization** by a child **giving meaning** to the curriculum content. Thus, it is not the curriculum, per se, that leads a child to adulthood but the ways he/she gives **sense and meaning** to it.

Educative curriculum planning is a matter of a child attributing sense and meaning to content. In this connection, Sonnekus (Sonnekus and Crous, 1981, p 10) says that as far as a child is concerned, a curriculum planner must take into account the **preconditions** set by the nature of a learner him/herself regarding the **sense and meaning** the particular curriculum content can have for him/her. Because of the sense and meaning he/she has attributed to the learning content of a curriculum, a core question for curriculum design and development is how should this or that learner attribute sense and meaning to this particular piece of the curriculum, irrespective of the level on which or the situation in which he/she finds him/herself. More simply, the curriculum content must be of such a nature that a child is able to learn it in a **meaningful** way.

Actualizing a child's learning is a comprehensive matter and has far-reaching implications for curriculum

planning. The curriculum is not a goal in itself, but is aimed at a child's eventual proper adulthood. Thus, one must guard against a curriculum that merely makes subject matter content available that has been arranged from "easy" to "difficult". In fact, a curriculum aims at a child having subject knowledge at his/her disposal without which he/she would not be able to enter the lifeworld of an adult. The systematic subject content is a **means** for unlocking reality for a child in ordered ways. Subject or **learning content** is **content of life** for a child if he/she experiences it as **meaningful**. Thus, curriculum planning is viewed as falling within the scope of learning and personal actualization. Schematically, this matter is represented as follows:



CURRICULUM PLANNING

From these brief remarks, curriculum planning is a **matter of a child giving sense and meaning** to content (Sonnekus and Crous, 1981, p 10). Hence, the ways a child gives meaning as well as the ways he/she learns and actualizes his/her psychic life in each stage of life (see chapter VII) continually must be kept in view. Therefore, a curriculum must be planned so that it promotes **effective learning** and the **adequate actualization of his/her psychic life** in each period of his/her life. In addition, some of the conclusions drawn by Hill (1975, p 232) with respect to influencing a child in a teaching situation are indicated:

- * For optimal learning in the curriculum, an opportunity must be offered for a differentiated encounter with the content, i.e., an encounter within which different psychic moments, modes of learning and becoming can be optimally actualized;
- * meaningful curriculum planning can only occur if the pupils' level of development (becoming) is taken into account;
- * the acquisition and command of language must be emphasized across the entire spectrum of the curriculum.

Hill (1975, p 203) also indicates that **curriculum planning** provides the **content** for **teaching** and together they lead to **learning**. Thus, teaching and curriculum planning jointly lead to a child's effective learning.

Van der Stoep (1972, p 116) indicates that the only appropriate **point of departure** for formulating a theory of teaching is the original experience of teaching as it is embodied in the reality of educating (upbringing), the aim of which is a child's adulthood. Thus, curriculum planning also must take a child in his/her original educative situation as its point of departure. In this original situation, there are educating and teaching; obviously, neither can occur without content. This implies that a parent, as educator in this primary [i.e., home] situation, must **select** and **order** content, i.e., he/she must **plan a "curriculum"**. The question is what criteria does he/she use to do this? Indeed, his/her curriculum planning is on a different level than that of a school teacher or curriculum

expert. The fact is, he/she does not plan a curriculum or use specific criteria. His/her planning occurs more intuitively and, therefore, he/she is not guided by scientifically established criteria but rather more by the **needs** and **characteristics** his/her child shows at a given age. In this regard, Hill (1977, p 142) indicates that it is a parent or educator who notices a child's needs and then selects and orders content to meet them. An example is how a parent guides his/her child when he/she learns to walk or talk. He/she doesn't harass his/her child with norms about an outlook on life when he/she is learning to walk but takes him/her by the hand and helps him/her step by step. Also, he/she doesn't present an eighth grade mathematics curriculum to his/her child when he/she learns to say "mama" and "papa" but helps him/her word by word. Although mainly intuitive, a parent selects content that is appropriate for his/her child's **needs for becoming**. Within the primary educative situation (at home), the nature of the content and the ways it is presented are extremely important for personal actualization.

These original ways of planning a curriculum also hold for a secondary educative situation (at school) in the sense that there must be an attempt to select content in keeping with a child's **level of becoming** within a particular **phase of life**.

In the pre-primary school, the levels of becoming and characteristics of a toddler are thoroughly taken into account in "curriculum planning". Special attention is given to physical and creative activities as well as to play and language development--all matters that are characteristic of toddlers and that, therefore, will be **meaningful** to him/her. This matter is closely related to a child becoming ready for school.

Curriculum planning for the primary and secondary levels of schooling also must consider the needs and characteristics of each age group of children. A child's desire to learn to read and write, his/her attunement to reality, sexual development, religious preferences, forming gangs, involvement with the opposite gender, vocational interests, etc. (see chapter VII) are a few of the topics that must be addressed during curriculum planning.

4. SUMMARY

Adult accompaniment and personal actualization in a classroom occur in terms of content made available by means of curriculum planning. However, the preconditions are that this content is such that an adult (teacher) can order it effectively and that a child can learn it as something meaningful to him/herself. This is possible only if a child's level of becoming (development), with all that this includes and as this appears in each of the phases of life, is thoroughly considered during curriculum planning.

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