

DIDACTIC PEDAGOGICS*

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In studying the development of didactic pedagogical thought in the Faculty of Education, three main phases are distinguished.

First phase

This phase extends from the establishment of the Department of Education in 1912 until 1937 when the Faculty of Education was set up.

Initially the Department was in the Faculty of Letters and Sciences. In the beginning the teaching was done by Prof. MacFadyen and in 1916 J. C. Bosman was appointed as a lecturer in education. In 1923 he was promoted to "Professor of the History and Principles of Education"^(1: 215).

According to Cronje^(3: 83), the didactic views held during this time were, among others, the following:

Teaching was seen as the accumulation of knowledge without it really contributing to a child's education. The idea of material forming was thus very prominent. There was concentration on a horizontal mastery of learning material with a lack of real insight; i.e., there was an absence of a vertical deepening of understanding.

Further, the school was characterized by the fact that important principles of teaching had not been arrived at. Here one especially thinks of matters such as nearness to life [relevance] of the teaching and the principles of activity and individualization.

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In the Department of Education, knowledge was very encyclopedic and it was based mainly on the British and American literature and had a conspicuously natural science orientation. In this respect, reference is made to the research of J. F. E. Havinga (Teaching History in the Secondary School) in which he mentions that learning is the psychological process by which a pupil forms impressions, perceives, remembers, thinks and consciously applies what he has learned.

In addition, it seems that from the little research that was done, the didactic did not have an important place. The research was mainly of an empirical and historical nature. Where it did have a didactic purpose, the absence of any didactic structure is conspicuous. As J. N. Kruger explains in his study of teaching environmental geography, "the what and why of such teaching are at the moment more important than the how because most current teachers have gone through professional training".

In a study by I. M. Phipps on "Visual Education" he explains that "this thesis is an analytical and comparative extract and criticism of the research -- experiments already conducted with one visual aid -- the educational film including all such experiments from 1917 to 1932 in English speaking countries"^(14: 2). Thus, it seems that the didactic is hardly mentioned in this research.

In the research of J. F. E. Havinga already referred to, he states that he gradually would prescribe methods that simultaneously make teaching history interesting and successful. He mentions the following: the global, the concentric, the chronological, the biographical, the factual and the genetic methods. These methods are particularized--which he presents as a number of particular methods of teaching, namely, the note taking method, the narrative method, the framework method, the synthesizing method and others. Although in this research there is a greater emphasis on the didactic, still there is no indication of a didactic structure.

Second phase

This phase extends from 1937 with the establishment of the Faculty of Education until the early 1960's.

The first important milestone in this phase was that one of the seven departments established within the Faculty of Education was Didactics and the General History of Education.

A further factor that had decisive significance for the development of didactic thought was the appointment of B. F. Nel in 1939 as head of the Department of Educational Psychology and Sociology and in 1945 as Dean of the Faculty of Education. Nel himself explains^(12: 15) that his ideal was to extend to the faculty the Wurzburg School of the Psychology of Thought and its didactic application by the Amsterdam school of Kohnstamm.

The psychology of thought, established by Oswald Kulpe, had its origin mainly in the resistance that had arisen against the natural science flavor that psychology had at the beginning of the 20th century. This school of the psychology of thought viewed its main task as investigating a person's higher psychic processes. In their investigations use was made of the experimental and introspective methods and the following are some of their more important conclusions:

- (i) In contrast to the association psychology of Locke and the presentation theory of Herbart, according to which the contents of consciousness exist in sensory impressions and thinking is nothing more than a connected series of presentations or visible elements, there also are imageless elements. In thinking there are a number of functions that are imageless in nature--the essentials of thinking indeed are imageless;
- (ii) In thinking the activity of the "I" also plays a role. In a person's consciousness, functions occur that refer to a psychological driving power that is called conscious activity;
- (iii) Thought is actualized by a determining tendency that springs from the thinking task. Thinking is directed according to a task requested or assigned; that is, each request or assignment exercises a directing influence on the psychological event.

A further development in the psychology of thinking was the Cologne School with its theory of three levels of consciousness, namely, a concrete-visual (individual images), a schematic (ideas) and an abstract level (concepts) of thinking.

In addition, there was the Mannheim School under the direction of Otto Selz that emphasized that thinking is teleological and goal-directed and is propelled and directed by the task. According to Selz, thinking is an abstract event whose direction is determined by the nature of the problem to be solved. Thinking is using a number of solution methods. With this Selz adds that methods of solution can be learned, i.e., particular methods of solution can be conveyed to persons who have not by themselves succeeded in finding effective methods for solving particular tasks of thinking.

Kohnstamm made this psychology of thinking the cornerstone of a "new" didactics^(8: 89). He was greatly influenced by the experiments of Selz. The most prominent problem he identified for didactics was that of scientific accountability. He was convinced that he could construct a didactic structure from Gestalt psychology and the psychology of thinking. In agreement with the psychology of thinking, he viewed thinking as a central didactic problem. Ordering reality, solving problems, imprinting facts and acquiring language are all factors that not only include tasks for thinking but that thinking, as a human ability in a learning situation, has to be guided in order to achieve its highest level.

A good understanding of the course of thinking and its possibilities would help a teacher design situations in which pupils are able to participate and achieve optimally. Kohnstamm viewed the forming of thinking as a necessary means for attaining the aim of education. In agreement with Selz, he asserted that pupils can learn to achieve well in school. This increase in insight occurs by leaps when a pupil is provided with correct methods of solution. By presenting methods of solution a child can learn to elevate his achievement scores.

Kohnstamm's didactics was based on the idea that a child's level of achievement does not have a fixed or static structure--when the correct methods of solution are provided, the level of achievement

increases. He advocated a thorough furnishing of the concrete-visual level of thinking. In this way the possibility is created for a child to schematize which, in its turn, leads to clearer abstraction and a greater mobility in dealing with concepts. An important didactic consequence of the ideas of the psychology of thinking is that the school has to provide a child with adequate materials for conceptualization.

Kohnstamm's findings also agreed closely with Nel's ideal referred to above and that was applied in South Africa. There was especially an attempt to verify and extend the psychology of thought findings of the overseas scholars to different subjects. This led to a series of experiments where that by Nel was the first. He did a comparative study of the fantasies of white and black school children and found that the thinking of all undeveloped persons and races can be interpreted in the sense of the psychology of thinking. Further research followed.

Groenewald, A. J.: The psychological foundation and practical application of object teaching with special reference to teaching nature studies. Here Groenewald showed experimentally the necessity for adequately furnishing the visual level for critical thinking and the level of thinking can be elevated to the degree that this furnishing occurs adequately.

Sonnekus, M. C. H.: An investigation of the use of techniques of an educational film as visual material. He found that the use of visual means elevated the level of thinking achievements to a higher level.

Van Tonder, J. C.: The influence of improved teaching methods on the thought achievement of 10th grade (Standard VIII) pupils in mathematics. The finding was that such teaching methods led to good results.

Duminy, P. A.: Experimental-didactic research following the methods of the psychology of thought to improve teaching methods and achievement in 10th grade (Standard VIII) pupils in history. He concluded that teaching methods can be transferred.

Cronje, A. P.: Investigated the influence of improved work methods in 7th grade (Standard V) pupils in arithmetic. He showed that a discussion lesson was a very effective method to allow pupils

to arrive at insights about their own, less effective methods as well as into the effective methods of their classmates.

Van der Merwe, A. A.: The significance of the discussion lesson as a method for improving the learning achievement of 11th grade (Standard IX) pupils in physical science.

The most important result of these studies was that in a discussion lesson pupils acquired insights into better methods, that a definite transfer of insightful methods occurs which elevates the level of achievement and that there is a strong connection between a good method of teaching and good achievement.

In this research there was an attempt to realize what Kohnstamm had said, namely, that the time of applying a method to most effectively impart ready knowledge has passed and has to be replaced by a didactics that is directed more to assimilating psychic content, i.e., that has thinking as its aim^(9: 120).

The so-called "new" didactics that arose from these views is described by Cronje^(3: 83) as follows:

1. The school educates an independent, responsible personality. A child is guided to independence in order to make his own accountable choices.
2. The school strives for harmonious development. The didactic not only involve one facet of a child, namely, the learning process and the theories about learning but also the development of his personality in its totality.
3. The school educates to a community in the widest sense.
4. The school gives more freedom with the recognition of authority.
5. The school stimulates a child to self-activity.
6. The classical system is severed and modified. Traditionally, the teacher talked and the child listened.
7. The school and its activities are more linked up with life itself.
8. The learning material is more organically connected and more directed to insights than to ready knowledge.

9. Intellectual educability is recognized. Intelligence is no longer viewed as the maturation of an inborn ability but as the gradual construction of a system of specific ways of behaving.
10. The school takes into account the developments in child psychology, pedagogics, didactics and more.

Jonges^(8: 80) doubts that there was really an accountable didactics at this time because the accountability was placed in psychology. Kohnstamm made the psychology of thinking the "cornerstone" of his new didactics and it seems as if he views didactic principles as the consequences of psychology. Thus, the impression arises that Kohnstamm did not view theoretical didactics (he had two meanings for the concept didactic, namely, the activity itself and thinking about the activity) as an autonomous science but as a "science" constructed from theories from another area of science (psychology); in other words, his didactics was an applied psychology.

Third phase

This phase in the development of didactic thought begins with the appointment of Prof. F. van der Stoep as head of the Department of Didactics and History of Education in the early 1960's.

He identified the immediate problem of didactics as being ensnared in the grip of traditionalism. His striving for its renewal was aimed at renewing its theoretical foundation as well as by an original didactic accounting of teaching^(19: 499). In addition, the fact is stressed that increasingly more didacticians were in search of closer philosophical ties in justifying particular standpoints. The language of the time was that of a search for the primordial grounds of particular (original) forms of phenomena that would provide a perspective on secondary phenomena, the grounds back to which the theoretical structures refer.

The German formative theory (Bildungslehre) of such persons as Nohl, Weniger, Spranger, Litt, Derbolav, Klafki and the Dutchman Perquin played a tremendous role in the development of Van der Stoep's thought. The concept "forming" has a two-fold meaning. On the one hand, it refers to an inner change that occurs in a person on

the basis of a power emanating from the learning content; thus, this refers to the course of his becoming. On the other hand, forming refers to an inner change in disposition that becomes evident in the ways a person participates in life and reality. Consequently, the task of teaching is to bring about these changes in terms of the formative contents in order to attain this state of inner disposition by which there can be a responsible participation in the world.

In his search for a theoretical foundation and didactic accountability these ideas on forming were not sufficient because an additional question was whether the entirety of the didactic event can be explained in terms of this notion of forming. Indeed, it is a fact that a person is involved with forming in three matters that are unique to didactic activities, namely, an aim-directed presentation corresponding to the formative value of particular contents, an anticipated learning activity and a corresponding state of change that indicates that the stated aim has been attained in part or entirely.

It has to be emphasized that the intention was not to doubt the validity of the thoughts on forming mentioned. However, what cannot be lost sight of is that when an essential aspect of teaching, such as the expected change that will arise in a child, is taken out of perspective and is placed so prominently in the foreground that the rest of the teaching event is totally or partly obscured, the danger of a one-sided perspective becomes real^(18: 28).

In his attempt to anchor the didactic, Van der Stoep first searched for the original fundamental structure of teaching that can be pointed to as a universal phenomenon. Because the school and the school-didactic situation are, on the one hand, derivative and, on the other hand, do not occur universally, this fundamental structure cannot be sought there. When a didactician directs his fundamental thinking to the school he is occupied with a derived occurrence of the original [teaching] that will lead to his pronouncements not necessarily grasping the essentials of that original phenomenon^(18: 57). To found a theoretical design on secondary structures is analogous to trying to isolate the basic elements from a finished manufactured product.

Initially Van der Stoep saw the only anchorage for a didactic theory in the unitary connection of educating and teaching as this is given in life reality^(19: 506). In a later publication he states that in order to disclose the original structure of teaching it is required that the thinker proceed from the fact that persons are always involved with structures of reality, to the fact that they take an active part in actualizing reality. Elsewhere he says that it is impossible to reduce *Didaskein* (teaching), as such, to any other fundamental structure (that is able to make its total structure evident) than to the category being-in-the-world^(18: 28). He occupied himself with particular ontological matters and tried eventually to also anchor the didactic in the ontological-anthropological background out of which the pedagogic emerges more clearly into the foreground.

Teaching is one of the earliest forms of human experience, i.e., it is one of the earliest ways in which a human being is involved in reality. Indeed, it remains an intrinsic human activity that a didactician continually has to bear in mind when making the theoretical constructions in his particular pronouncements about human beings. Thus, a didactician cannot take into consideration anything other than these pronouncements about human being-in-the-world, i.e., this anthropological category that has ontological status. These pronouncements illuminate a person's way of being involved in reality.

One particular way of involvement is educative involvement--something that is generally accepted as unique to humans and that occurs universally. A person's educative intervention cannot be reduced to anything else--it is a primordial given. However, this intervention has to occur regarding something such as, e.g., values, norms, skills, dispositions; briefly it occurs with respect to contents. These contents are derived from a person's life world and especially are connected with his views of life and of the world. With the help of these contents a child has to design an authentic human lifestyle. Here it is important to note that this lifestyle has to be designed and that there are no predisposing instincts that will automatically guarantee it. Consequently, a child has to be taught in terms of these contents.

With this, the close connection between educating and teaching arises. Van der Stoep explains that educating only can be actualized by teaching and that the meaning of teaching is in educating. Thus, now it can be explained that teaching is a specific human activity and that a person's original (earliest) involvement with reality and teaching announces itself here as a matter that is implicit in this experience. In other words, teaching is a categorical (i.e., essential) matter of involvement with reality.

Although content is a prominent aspect of this participation, there also is mention of form as particular ways of participating. In teaching, this form manifests itself specifically as didactic form.

From the above, the line along which Van der Stoep's thinking developed is typified as an ontological-anthropological-pedagogical-didactic one.

The next task in this fundamental-didactic thinking was to disclose the meaning of this original (early) experience. To be able to do this, use is made of categories, i.e., basic, essential matters regarding teaching--those structures or preconditions that constitute teaching as a human phenomenon. He analyzed teaching as it appears in the primary (parent-child) educative situation to disclose these categories. This required that the teaching reality be penetrated radically so that the essentials of its practice can be discernible. This categorical viewing has to make the essentials of the practice known after which answers can be sought to the question of how and what teaching must be.

Because a person's attribution of meaning in his involvement with reality is a matter of universal validity and which in a teaching situation refers to the form of teaching, this form has precedence over the contents that are particular and change from time to time.

A categorical viewing of the teaching phenomenon also brings to the surface original life forms that have didactic possibilities. Further, this contributes to keeping the form of teaching near to life for a child. Particular contents have to be presented in these forms.

Because this theory building is not done for the sake of the theory but with the aim of establishing or improving practice, it has to result in a lesson structure. This lesson structure has to be construed in accordance with the essentials of the original experience of the educative reality as this acquires form and is described in the didactic theory. Such a structure is possible to the extent that there is a harmony between form and content in the lesson constructed. Thus, a harmonious lesson structure refers to a balanced insight regarding form and content that becomes of fundamental significance as soon as the teaching occurs. This lesson structure is, as it were, the bridge between theory and practice. Various aspects of this structure have been extended by Gous, Van Dyk, Kruger, Hill and Hannah.

To the extent that a didactic theory has acquired a sense of substance and a lesson structure is constructed from its insights, its pronouncements have to be particularized for particular subjects and in doing so a systematic flavor is given to subject didactics. Under the leadership of Van Dyk there has been sustained research in subject didactics. In this respect one thinks of the work of Basson, Oosthuizen, Swart and others.

Another ramification that set in at this time is tertiary didactics in which didactic theory is particularized for a tertiary teaching situation. This does not mean that there is a separate structure for tertiary teaching but that this didactic structure, as disclosed by didactic theory, shows a different relief on the basis of particular emphases and nuances. In this connection, W. J. Louw has done ground-breaking work and now there are a number of students who are investigating this aspect under his leadership.

SUMMARY

When studying the didactic pedagogic thought of the Faculty of Education, one can distinguish three main phases.

Phase one:

This phase began with the establishment of the Department of Education under the Faculty of Arts in 1912 and continued until

1937 when the department became an independent Faculty of Education. During this period, ideas regarding didactics had a distinct natural science orientation and no didactic structure had yet been conceptualized.

Phase two:

During this phase, thinking within the faculty was strongly influenced by the ideas of the Wurzburg School of the Psychology of Thinking and Ph. Kohnstamm's advocacy regarding their didactic implementation. This influence was largely due to B. F. Nel's enthusiasm for these ideas and the ideal he held of implementing them when he became dean of the Faculty in 1945.

Phase three:

This phase began in the early sixties when Prof. F. Van der Stoep became head of the Department of Didactic Pedagogics and History of Education. He identified the immediate problem of didactics as a struggle to escape from traditionalism, and he set out to provide a sound theoretical foundation for his own didactic thought. In order to reach the fundamental structure of teaching, his point of departure was the ontological category of a person's being-in-the-world (Dasein). His line of thought is ontological, anthropological, pedagogical and didactical.

After clarifying this matter he proceeded to write a didactic theory in which he made use of categories to describe the essential nature of teaching. It was his conviction that such a theory should not be seen as an end in itself but that it should be instrumental in establishing a practice or improving an existing one. The information incorporated in the theory was used to construct a lesson structure that is a framework for designing any specific lesson.

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