

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 lasts until 193, when the Faculty of Education is set up.

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

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

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

Further, the school is characterized by the fact that important principles of teaching have 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 is very encyclopedic, and it is based mainly on the British and American literature, and has 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/she has learned.

In addition, from the little research, which was done, it seems the didactic does not have an important place. The research is 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 would gradually prescribe methods which simultaneously make teaching history interesting and successful. He mentions the following: the global, the concentric, the chronological, the biographical, the factual, and the genetic [developmental] methods. These methods are particularized--which he presents as several methods of teaching, i.e., 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 is that one of the seven departments established within the Faculty of Education is Didactics and the General History of Education.

An additional factor, which has decisive significance for the development of didactic thought, is 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 is 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, has its origin mainly in the resistance which had arisen against the natural science flavor which psychology had at the beginning of the 20th century. This school of the psychology of thought views its main task as investigating a person's higher psychic processes. In their investigations, use is 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 functions which 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 which refer to a psychological driving power which is called conscious activity;
- (iii) Thought is actualized by a determining tendency which 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 is the Cologne School, with its theory of three levels of consciousness, i.e., a concrete-visual (individual images), a schematic (ideas), and an abstract level (concepts) of thinking.

In addition, there is the Mannheim School, under the direction of Otto Selz, which emphasizes 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 few solution methods. With this, Selz adds that methods of solution can be learned, i.e., methods of solution can be conveyed to persons who have not by themselves succeeded in finding effective methods for solving tasks of thinking.

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

A good understanding of the course of thinking and its possibilities would help a teacher design a situation in which pupils are able to participate and achieve optimally. Kohnstamm views the forming of thinking as a necessary means for attaining the aim of education. In agreement with Selz, he asserts that pupils could 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/her achievement scores.

Kohnstamm's didactics is 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 advocates 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 must provide a child with adequate materials for conceptualization.

Kohnstamm's findings also agree closely with Nel's ideal, referred to above, and which is applied in South Africa. There are specific attempts to verify and extend the psychology of thought findings of the overseas scholars to different subjects. This leads to a series of experiments where the first is one by Nel. It is a comparative study of the fantasies of white and black school children, and finds that the thinking of all undeveloped persons and races can be interpreted in the sense of the psychology of thinking. Additional research followed.

Groenewald, A. J.: The psychological foundation and practical application of object teaching with special reference to teaching nature studies. Here Groenewald shows 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 finds that the use of visual means elevates 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 is 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 concludes 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 shows that a

discussion lesson is 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 is that, in a discussion lesson, pupils acquire 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 is an attempt to realize what Kohnstamm had said, i.e., that the time of applying a method to most effectively impart ready knowledge has passed, and must be replaced by a didactics directed more to assimilating psychic content, i.e., which has thinking as its aim (9: 120).

The so-called "new" didactics which 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 independently make his/her own accountable choices.
2. The school strives for harmonious development. The didactic not only involves one facet of a child, i.e., the learning process and the theories about learning, but also the development of his/her 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 talks, and the child listens.
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 considers the developments in child psychology, pedagogics, didactics and more.

Jonges (8: 80) doubts that there is really an accountable didactics at this time, because the accountability is placed in psychology. Kohnstamm makes 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 does not view theoretical didactics (he has two meanings for the concept didactic, i.e., 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 is 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 identifies the immediate problem of didactics as being ensnared in the grip of traditionalism. His striving for its renewal is aimed at renewing its theoretical foundation, as well as by an original didactic accounting of teaching (19: 499). In addition, it is stressed that increasingly more didacticians are in search of closer philosophical ties in justifying their standpoints. The language of the time is that of a search for the primordial grounds of (original) forms of phenomena which 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, play 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 which occurs in a person

because of a power emanating from the learning content; thus, this refers to the course of his/her becoming. On the other hand, forming refers to an inner change in disposition, which becomes evident in the ways a person [now] participates in life and reality. Hence, the task of teaching is to bring about these changes, in terms of the formative contents, 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 are not sufficient because an additional question is 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 which are unique to didactic activities, i.e., an aim-directed presentation corresponding to the formative value of the contents, an anticipated learning activity, and a corresponding state of change, which indicates that the stated aim has been attained, in part, or entirely.

It is emphasized that the intention is not to doubt the validity of the thoughts on forming mentioned. However, what cannot be lost sight of is that, when an essential aspect or moment of teaching, such as the expected change which will arise in a child, is taken out of perspective, and is placed so prominently in the foreground, 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 searches for the original fundamental structure of teaching, which can be pointed to as a universal phenomenon. Because the school and the school-didactic situation are derivative, on the one hand, and on the other hand, do not occur universally, this fundamental structure cannot be sought there. When a didactician directs his/her fundamental thinking to the school, he/she is occupied with a derived occurrence of the original [teaching], which leads to his/her pronouncements not necessarily grasping the essentials of that original phenomenon (18: 57). Founding a theoretical design on second order (derived) structures *e.g., schooling) is analogous to trying to isolate the basic elements from a finished manufactured product.

Initially, Van der Stoep sees 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, 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 (which can make its total structure evident) than to the category *being-in-the-world* (18: 28). He occupies himself with ontological matters and eventually also tries to anchor the didactic in the ontological-anthropological background out of which the pedagogical 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 the world. Indeed, it remains an intrinsic human activity which a didactician must continually keep in mind when making the theoretical constructions in his/her 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, which has ontological status. These pronouncements illuminate a person's way of being involved with reality.

One way of involvement is educative involvement--something which is generally accepted as unique to humans, and which occurs universally. A person's educative intervention cannot be reduced to anything else--it is a primordial given. However, this intervention must 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 lifeworld and, especially relate to his/her views of life and of the world. With the help of these contents, a child must design an authentic human lifestyle. Here, it is important to note that this lifestyle must be designed, and that there are no predisposing instincts which will automatically guarantee it. Thus, a child must be taught in terms of these contents.

With this, the close connection between educating and teaching arises. Van der Stoep explains that educating can only 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 which 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 form, as particular ways of participating. In teaching, this form is manifested specifically as didactic form.

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

The next task in this fundamental-didactic thinking is 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 which constitute teaching as a human phenomenon. He analyzes teaching as it appears in the primary (parent-child) educative situation to disclose these categories. This requires that the teaching phenomenon is penetrated radically so that the essentials of its practice can be discernible. This categorical viewing must 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/her 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 which are particular and change from time to time.

A categorical viewing of the teaching phenomenon also brings to the surface original life forms which have didactic possibilities. Further, this contributes to keeping the form of teaching near to life for a child. Contents must 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 must result in a lesson structure. This lesson structure must 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, which becomes of fundamental significance as soon as the teaching occurs. This lesson structure is 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 must be particularized for specific subjects and, in doing so, a systematic flavor is given to subject didactics. Under the leadership of Van Dyk, there is sustained research in subject didactics. In this respect, one thinks of the work of Basson, Oosthuizen, Swart, and others.

Another ramification which sets 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 of emphases, and nuances. In this connection, W. J. Louw does groundbreaking work, and now there are several students who are investigating this aspect under his leadership.

SUMMARY

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

Phase one:

This phase begins with the establishment of the Department of Education under the Faculty of Arts, in 1912, and continued until 1937, when the department becomes an independent Faculty of Education. During this period, ideas regarding didactics have a distinct natural science orientation, and no didactic structure has yet been conceptualized.

Phase two:

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

Phase three:

This phase begins in the early sixties when Prof. F. Van der Stoep becomes Head of the Department of Didactic Pedagogics and History of Education. He identifies the immediate problem of didactics as a struggle to escape from traditionalism, and he sets out to provide a sound theoretical foundation for his own didactic thought. To reach the fundamental structure of teaching, his point of departure is 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 proceeds to write a didactic theory in which he uses categories to describe the essential nature of teaching. It is his conviction that such a theory should not be seen as an end, but that it should be instrumental in establishing a practice, or improving an existing one. The information incorporated in the theory is used to construct a lesson structure, which is a framework for designing any specific lesson.

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