

B. THE UNITY OF THE SCIENCE OF EDUCATING/THE PEDAGOGICAL*

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THE ACTUALITY OF THE THEME

** In practicing science today, there is a great danger of fragmentation to the extent that even colleagues sometimes find it difficult to communicate. This also holds for pedagogics.

** The nature and scope of this fragmentation in the pedagogical will be shown.

** The fragmentation of research leads to isolating and absolutizing aspects of educating.

* This leads to the one-sided judgment of knowledge.

* One-sided insights lead to malpractice when the possibilities of application are investigated: one-sided formulation of aims, extended choice of contents and fragmentary opportunities for educative experiences.

* One-sided educative intervention (actions, activities) sets distorted norms of identification and stimulates an attenuated becoming adult as self-becoming (acquiring an identity).

* This means an imbalanced adulthood with a deficient possibility for cultivating, mastering and inhabiting a meaningful world.

* As such, this implies unfaithfulness to the human task and a **violation of core norms** for a human way of existing, namely, to cultivate **vigilance**.

* A one-sided violation of intervention in becoming adult no longer qualifies as educating.

* Essentially, the task of educating is protecting, bonding together, direction-giving and creating in nature.

* It also is the responsibility of all inter-human institutions and interventions in an ordered societal structure as **structure-in-function**.

* If this is not the case, the intervention contributes to violation, self-violation and ultimately self-destruction.

* In light of the above, a fragmented, isolated investigation of aspects of educating that are absolutized is an unaccountable practice of science.

* *South African Journal of Pedagogy* (1979) Vol. 13, No. 1, 165-182.

- * As such, this is no practice of science and no longer qualifies as pedagogics. It is unaccountable and unscientific.
- * Then this no longer has possibilities of application for educating.

WHY IS THERE FRAGMENTATION?

*** The history of Education reveals how this occurred.

** Originally, thought about educating was **linked up with philosophical thought** having to do with the human being and especially with moral and religious matters. Various philosophical systems of thought founded in particular life- and world-views propagated various theories of educating and contributed to a proliferation of "isms".

** The origin of a **variety of subject sciences** with human being as their theme necessarily also gave rise to findings about matters of educating from particular subject-perspectives (e.g., psychology).

* From the **subject-scientific pronouncements** there were two that influenced thinking about educating and pedagogics both of which contributed to viewing the pedagogical as an applied science: the eclectic approach and "ism" thinking or absolutizing subject sciences.

* As an **eclectic science** it is viewed as a compilation of knowledge (a composite subject) that selects its contents from other core subjects such as philosophy, ethics and theology as areas of instruction about an image of being human, life aims and thus also an image of a child, of adulthood and educative aims. Auxiliary sciences such as psychology, sociology and biology provide empirical facts of knowledge regarding a child, his growing up and life. This knowledge is interpreted by the educator to be applied to practice in order to attain the aims deduced from the core subjects. Thus, a loose linkage among so-called part-disciplines and **part-theories of other sciences** arises: philosophy of education (really this is a philosophy **for** educating), educational psychology, educational sociology and practical education as the actual interpretation and prescriptions for the concrete situation (especially for teaching in school). Each part-discipline, then, has its own idiom, namely that of the core or auxiliary science. The variety of "isms" (**Mohamedanism**, **Pragmatism**, **Calvinism**, **Roman Catholicism**, **Evolutionism**, etc.) are founded in the particular life-view serving as the point of departure for a particular eclectic approach.

* **Absolutizing a particular subject science** essentially also is rooted in an absolutized **particular point of departure**. Trends of psychological, sociological and biological -isms allow the confusions to grow.

* Essentially this amounts to the fact that in the **proliferation of isms** each **absolutizes a particular theory of educating for the science** of education.

** In 1779, during the time of Prussia's Frederick the Great, Christian Trapp occupied the first **autonomous teaching chair** of Pedagogics at a German University. Herbart taught pedagogics as an **independent university subject** from 1809 in Konigsberg and from 1813-1841 in Gottingen. Since then many such teaching chairs have followed. However, most were connected with teaching chairs in philosophy and in theology.

* **Flitner** asserts very directly: "The often prevailing view of faculty is that it (pedagogics) is not truly a scientific field; pedagogics appears to have a purely practical character that is believed to be a collection of individual techniques and rules for teachers, parents and educational advisers to understand." [German]¹

* In America, educational research is coupled with psychology and sociology. Thus, to a large degree it is extended to educational psychology and educational sociology for the purpose of applying it to the practice of organized teaching. This was characteristic of the progressive approach.

* In the Netherlands, educationists such as Kohnstamm and Waterink tried hard to assert the scientific character of the study of educating. They had done admirable ground breaking work that today perhaps is too easily misunderstood. In reality they ensured neither the autonomous character nor the unity of this subject science. Waterink worked eclectically such that he constructed a theory of educating based on his Christian point of departure. Kohnstamm, with respect to his didactic contributions, applied the findings of particular schools of the psychology of thinking to the practice of teaching. In his fundamental view stemming from his particular religious point of departure he propagated a Christian personalism. The two facets did not form a unity.

* Th. Litt's (1921) convincing rejection of educating as an applied activity or device and his indication of the necessity of fathoming educating (an activity in its own right) as a core theme of

¹ Flitner, W.: Das Selbstverständnis der Erziehungswissenschaft in der Gegenwart, Quelle & Meyer, Heidelberg, 1966, p. 5.

pedagogics opened a new way of thinking about education as the practice of an autonomous subject science.

* M. J. Langeveld (1944) walked this path. He was supported by N. Perquin who invited all educationists to search together for the essentials of the phenomenon "educating" (1958).

* In South Africa J. Chr. Coetzee followed an eclectic approach along the lines of Netherlands thinking by which he constructed a Calvinistic-oriented theory of educating. His interpretation of psychological and sociological contributions (empirical education) and his evaluation of the past (historical education) for teaching practice (practical education) in order to attain a particular educative aim founded in his Christian (Calvanistic) and national (Afrikaans) philosophy of life never became a real unity. It remained part-theories because he evaluated particular points of departures from conflicting perspectives. Nevertheless, Coetzee's contribution remains unique. His approach remained eclectic and his interpretation perpetuated the idea of an applied science. Indeed he provided phenomenological descriptions of educating and related matters. The phenomenon of educating, however, was not his point of departure.

* Following the example of Langeveld, it was C. K. Oberholzer and C. F. G. Gunter who in their publications demonstrated the fundamental idea of the autonomous character of this subject science. By publications in psycho-pedagogics and by his tireless diligence in establishing and building up the **Work Community for Promoting Education as a Science**, the publication of **Educational Studies**, the establishment and development of **S.A.A.A.E.** [South African Association for the Advancement of Education] and the publication of the **South African Journal of Pedagogy**, B.F. Nel had worked on placing the scientific character and standard of pedagogics above suspicion.

* The traditional part-disciplines that from an eclectic approach had become a part of pedagogics as this was studied in South African universities created frustrations. Attempts at name changes to put the emphasis on the pedagogical rather than on the so-called boundary disciplines were inadequate to acquire unity. Combined into one Faculty of Education, the part-disciplines still were practiced under different department heads under a variety of names. **The idea of unity is there.**

* **The practice looks otherwise.** Sometimes one gets the impression that there are not part-disciplines but separate disciplines each with its own idiom and a few points of interface. In another case, e.g., there is mention of didactics as "an autonomous

discipline in the scientific structure of pedagogics."² Then does the scientific structure of pedagogics consist of separate disciplines that are viewed as autonomous subject sciences? Is this not an expression once again of the deep-rooted tradition of the old part theories from other subject sciences?

*** The fragmentation is rooted in more than the subject history. Subject history shows the **complexity** of the core themes and their relations with the moral, religious, social, psychological, bodily and other human aspects.

** Where educating is directed to self-becoming (becoming a person), from this characteristic human phenomenon it ought to seem clear how incomplete a human image would be based on a few subject sciences. There also is mention of the need for unity among the human sciences in order to arrive at real knowledge of persons. The complexity of being human and of human phenomena place high demands on practicing [a human] science.

** The complexity of educating, as such, deserves additional attention later in this discussion.

*** The search for specialized knowledge reinforces the tendency to fragment. It is a danger of the practice of contemporary science in all areas. No one can be highly informed about all aspects of a particular subject science. This holds also for pedagogics.

** Specialization in one subject, one aspect of a subject, one theme or even a sub-division of themes easily leads to an isolation of the lifeworld whole in which the practice of a science has its source and to which it has to translate back its results if possibilities of application are considered.

** Complexity and specialization have to be seen in relation to better understand the nature of the fragmentation and a search for unity.

THE NATURE OF THE FRAGMENTATION

** From the above discussion it seems that a lack of unity is related to the history of the subject area, to the complexity of the terrain and to the contemporary tendency for specialization.

* From the past there is the tradition of viewing the scientific study of educating as related to philosophy, history, child psychology, sociology and psychological theories of learning for classroom practice by which there is a five-fold division of part-disciplines or subject areas that are more loosely or narrowly related than the

² Van der Stoep, F.: *Didaskein* McGraw-Hill, Johannesburg, 1972, foreword.

terrain of pedagogics that is demarcated. The less each of these part-disciplines takes its point of departure from the fundamental theme the less is it possible to draw relations among them. The lack of unity is expressed strongly by the subject language when the idiom of the mother science, as the so-called core or auxiliary science, of one part-discipline differs, even dramatically, from another.

* The complexity of the theme is already evident in the traditional eclectic, part-theory approach. The great deficiency in this connection is that the interrelated unity is lacking because of a deficient rational grasp of the whole structure. Also, when it is not understood that this does not have to do with an unchanging structure, the danger is great that there can be a straying into side-paths that lead thinking away from the core matter. This has to do with a structure-in-function of which change is one of its essential moments. Even when educating is chosen as the point of departure, some related essential moments such as its normative nature or fundamental religious attitude or inter human connectedness can be one-sidedly absolutized or lead to a structure of the subject science being divided into a variety of unrelated compartments. It is only in their interrelated unity that the distinguishable features express something of the essentials of educating.

* It is not only a contemporary fad that leads to specialization also in pedagogics. The need for specialization is based in contemporary education's need for specialized knowledge of educational matters. Now it is just the complexity of educating, as such, that allows the contemporary parent, teacher, catechist, youth leader to search for specialized knowledge. The traditional, intuitive ways of educating have become insufficient. When a matter becomes problematic there is a search for purified knowledge for providing more adequate practice. A few actual themes are expanded into an independent area of study without understanding their relations within the whole. Contemporary educative problems are related to life problems that have opened up specialized fields for the educationist such as orthodidactics, family pedagogics, gender pedagogics, adolescent pedagogics, vocational orientation pedagogics, comparative education, etc. and that easily can lead to a detached, narrow specialization so that the educand is viewed only as a learning problem or vocational student. The danger is still greater when the field of specialization is seen merely as a contemporary digression having no relation to the essence of educating or when the problem situation is elevated to the only real educative situation. Then the science is practiced as a search for

answers for practice and, e.g., sex education is substituted for educating as character forming through awakening conscience, or vocational training takes the place of educating a child as one being called to meaningfully fulfill a life task.

IN WHAT IS THE POSSIBILITY OF UNITY FOUNDED?

** The unity of pedagogics cannot be separated from the independent character of this subject science.

* Previously there was reference to Litt who had indicated that **educating** as a phenomenon in its own right is a core theme for pedagogics, also to Langeveld and Perquin's trail blazing work of a phenomenological analysis of the phenomenon of educating as a point of departure to choose for practicing education as a science.

* Attention was given to the pioneering role of Oberholzer, Nel and Gunter in South Africa in disclosing phenomenologically the terrain of educating as a research field for pedagogics. In this way, the point of departure is disclosed and the initial method demonstrated.

* In 1963 it was still necessary to try to found the independent character of pedagogics and this was advocated on the occasion of a S.A.A.A.E. congress in Johannesburg. In South Africa, perhaps more than elsewhere and with seriousness of purpose, attention was given to founding the independent character of this subject science.

* The research terrain is broad, the complexity of its themes set high demands regarding the choice of accountable research methods complemented by a phenomenological point of departure. The collection and interpretation of quantitative, empirical data require complicated techniques and although much can be learned in this respect from other subject sciences, educating places its own demands on one's cognitive abilities.

* Any research that does not have educating as its core theme and any quantitative data that are not interpreted pedagogically do not lead to the terrain of pedagogics.

* The unity of pedagogics essentially is founded in the unity of its core theme. Educating is not an isolated moment. Th. Litt had shown the error in thinking when educating is viewed as two isolated points that have to be bound together, namely, the child who **is** and who is educated **to what he ought to be**. He describes this as a unitary stream of becoming. What ought to be is already embedded as possibility in what is. Langeveld agrees with this. Thus, the reality of educating also shows the essence of the child as potentiality, as on the way to adulthood.

* At the request of B. F. Nel in 1968 on the occasion of a meeting of the Northern Area of S.A.A.A.E., I presented a paper on **The structure of pedagogics and its part-disciplines**. This was an attempt to indicate that the part-disciplines ought to form a unity. Each part-discipline has to make a contribution to the pure description of educative matters. Each part-discipline has a particular theme as its field of research. The themes are disclosed by a phenomenological analysis of the educative phenomena or event. Already in discussing the paper W. A. Landman suggested by his questions the possibility that preference has to be given to talking about perspectives rather than part-disciplines.

* Since then there has been increased use of "perspective". The overlapping meaning expressed by the term "perspective" brings the mutual relations among the themes that have been disclosed under closer attention while part-disciplines draw sharper lines of division.

* In a publication, **Education, Part 1** (1973) I advocate the use of perspective and allow the emphasis to fall on the themes rather than on part-disciplines because a theme seldom falls purely within the terrain of a particular part-discipline.

* In **Education, Part 2** (1975) I come to the conclusion that the persistent division into part-disciplines is a continuation of the old part-theories and their use of an eclectic approach. The increased specialization in narrow areas awakens the fear that subject fragmenting can result in the fragmentation of educating under the guidance of a variety of experts in narrowly divided areas.

* In 1977 in my "thank you publication", **Education, Part 3** once again I attend to the structure of educating. The conviction increased strongly that this has to do with structure-in-function. The unity of educating does not change with this. Change is essential to educating. Educating is directed to normed change as futurity. It is multiformed but unitarily directed by a grounded point of departure [such as a religious conviction].

* In more than one of his publications, Landman has attended to a structural analysis of educating. His distinctions among relationship, sequence and aim structures are familiar. To this Kilian adds the activity structures. They stress the interrelated unity of these structures. Still I find the use of plural endings to be lamentable. The changeableness is constituted precisely by the sequence [structure]. Thus, educating is a structure-in-function.

* The dissertation by M. E. J. van Zyl on **The significance of structural thinking for contemporary pedagogical thinking** pays close attention to the unacceptability of a closed model, system or structure. Educating shows an open structure.

* The above facts were brought to light by a phenomenological, qualitative analysis as well as by interpreting quantitative, empirical data. An analysis of the publications in pedagogics consistently shows that complete truth about educating is not yet evident. Something new always is disclosed. Certainly there still are many more secrets. All relations have not yet been understood and described. Human understanding has not yet fathomed wonder. Pedagogics, as thinking about educating as an empirical given (and thus as an onticity), still shows an openness. The practice of the subject science, the scientific conversation to which Perquin has invited us, continues.

** An additional aspect of importance for the unity of pedagogics is the consistent use of concepts. Subject language very quickly discloses a lack of unity.

THE COMPLEXITY OF THE THEME

* It is not the purpose here to analyze the structure-in-function of educating mentioned above.

* Landman's category- and essence-structure ought to convince his students, colleagues and interested advocates and adversaries that pedagogics is not a simple subject. Also, it does not amount to memorizing and enumerating a number of terms. It has to do with understanding indispensable relations.

* In connection with a few essential features, below only some particulars are presented to indicate the nature of the fragmentation of the unity of the subject science if the specialization and shortsightedness of the tendency to absolutize are not purposefully averted in order to lessen the danger of narrowness.

* The following is an attempt to express something of the essence of educating in terms of a few questions that are related to the components of the educative relationship after which there is an indication of its very superficial expansion:

"Educating implies a **temporal-spatial** relationship as a joint involvement of a needful educand (**becoming adult**) who **cannot meaningfully actualize his situation independently** and an educator (**adult** who is ready and able to accept responsibility for preserving the appeal of authority) by **activities** of providing support (by the educator) and accepting support (by the educand) as a **way of actualizing and appropriating selected content with the aim of easing the educand's need**".

Here there is mention of time, space, educand, reasons for educating, educator, activities, content and aim. If one of the above components is thought away from the whole situation, an educative situation cannot arise. Separately, each one cannot express something regarding educating. In relation there is mention of a relationship as a structure-in-function by which educating can be called into being, progress and be concluded.

Thus, the following questions regarding the phenomenon of educating can be stated and the answers in relation to each other can say something about educating (but as separate answers they cannot): When? (Time), Where (Space), Who is educated? (Educand), Why? (Reasons), By whom? (Educator), How? (Way, activity), What? (Content), To where? (Aim).

*** TABLE**

1. Component

Time (Historicity, temporality)

Question:

When does educating occur?

Possible answers:

Past, present, future.

Possible perspectives or part-disciplines:

Historical, Contemporary and Futurological pedagogics. Comparative education. Temporality pedagogics (J. J. Pienaar).

2. Component

Space (World, educative milieu)

Question:

Where does educating occur?

Possible answers:

In a person's lifeworld, child world, residential area ((home), field of work (school), leisure space, place of worship (church), fatherland.

Possible perspectives:

Milieu pedagogics, family pedagogics, vocational Pedagogics, school pedagogics, leisure pedagogics.

church pedagogics,
American, German, etc.
pedagogics.

3. Component

Educand (becoming adult)

Question:

Who is educated?

Possible answers:

Son, daughter, baby, toddler,
preschooler, school child,
teenager, youth.

Possible perspectives:

Developmental or becoming
pedagogics, child studies, child
anthropology, toddler pedagogics,
puberty pedagogics, adolescence
pedagogics.

4. Component

Reasons

Question:

Why is one educated?

Possible answers:

Neediness of the child. Need for
skillfulness, knowledge, norms,
convictions (life contents) in a
variety of areas.

Possible perspectives:

Specialization and absolutizing of
particular terrains, e.g., gender
pedagogics, physical education,
specialization in areas of
restraints, e.g., orthopedagogics,
orthodidactics, pedagogics for the
blind, deaf, physically
handicapped.

5. Component

Educator (Adult: man/woman)

Question:

Educated by whom?

Possible answers:

Primary educator: parents (father,
mother)

Secondary educator: teacher,
athletic coach, youth leader,
catechist (man or woman).

Possible perspectives: Family pedagogics, school pedagogics, sport pedagogics, youth pedagogics, church pedagogics.

6. Component

Ways (activities, intervention, treatment)

Question:

Educated how?

Possible answers:

Functional and intentional:
Mutual creative participation by persons involved in the educative relationship:
providing support,
teaching--learning, awaken—
become aware,
guidance--co-actualization, allow to act--self-activity, directed activity--attuning, evaluating--self-evaluating, exemplifying--imitating, etc.

Possible perspectives:

Didactic pedagogics, teaching methods, guidance pedagogics.

7. Component

Contents (Selected and graded)

Question :

What is taught, unlocked, assimilated?

Possible answers:

Reality: nature, culture,
Transcendent Particular skills, knowledge, norms, values, convictions, life philosophy.
Multi-formed world: bodiliness, sexuality, intellectuality, science and technology, individuality, sociability, nationality, political order, economic order, vocational order, vocational life, home defense, leisure activities, esthetics, moral and religious matters.

Possible perspectives: Nature pedagogics, culture pedagogics, transcendental pedagogics, value pedagogics, physical pedagogics, gender pedagogics, socio-pedagogics, national, political and economic pedagogics, vocational pedagogics, work pedagogics, leisure time pedagogics, character pedagogics, preparedness pedagogics, technological pedagogics, military pedagogics.

8. Component Aim (part-aim, interim aim, immediate aim, ultimate aim)

Question: To where is one educated?

Possible answers: Adjusting to time, world habitation, becoming adult, acquiring identity, self-becoming, adulthood, establishing identity, accepting responsibility, accepting freedom, accepting bodiliness and sexuality, acquiring an intellectual grasp, national bonding, political and economic responsibility, military readiness and preparedness, entering vocational life, inclination and ability to work, esthetic lived experiencing, opening moral awareness (conscience forming), fundamental religious disposition, life philosophy, character forming, self-acceptance, acceptance of fellow persons, acceptance of marriage, acceptance of life tasks, acceptance of the meaning of life.

Possible perspectives: Philosophy of education, theoretical pedagogics, theoretical education,

fundamental pedagogics.
Diversity is possible because of the absolutizing of particular theories of educating from a religious and/or national fundamental attunement: Christian, Calvinistic, Lutheran, Roman Catholic, Judaic, Communist, Mohammedan, American, German, Indian, Italian pedagogics.

* Note well: the multiplicity is not endorsed and the terminology also is not advocated. There merely is a plea for an emphasis on **unity in practicing pedagogics** and then putting each theme in perspective within the whole context.

UNITY AND SPECIALIZATION

* From the complexity of the area of research of pedagogics it seems to be impossible for one person to be an expert authority of the entire field.

* There has to be a choice between a superficial, whole overview and a penetrating specialization with the danger of one-sidedness and fragmentation.

* The unity need not be violated. A fundamental thinking through of each specialized investigation is necessary in order to describe it as an educative matter.

* This demands that each expert first has to be thoroughly grounded regarding what is essential to educating, as such.

* As an intensive study is undertaken of some aspects, a broader background knowledge of the whole field is necessary in order to interpret the particular moments in terms of the whole perspective.

* Most research projects fit within the boundaries of the traditional part-disciplines of pedagogics. No problem can be experienced, understood and described as an educative problem in isolation. It acquires sense in a whole relationship. Thus, an interpretation requires expert knowledge of a wide field that seldom if ever can be expected of an individual.

* To avoid superficiality and one-sidedness, team-research is recommended. Such research projects currently are underway at the Rand Afrikaans University. This places high demands on each collaborator. It necessitates a critically accountable attunement to

one's own standpoints. It broadens one's own insights because conversing with others always opens new perspectives. It is in such team-research that the complexity of the core themes and the danger of a narrow interpretation are brought sharply to the fore.

- * Problem research also shows the limitedness of a particular subject area and this holds especially when one is involved in the research as part of the theme.

- * Overstepping the boundaries of a subject in researching a problem such as large city education, etc. is imperative. Coordinated research of educative matters on an inter-disciplinary, inter-departmental, inter-faculty and inter-university level possibly will show greater unity and more intelligent possibilities of solution than the currently fragmented one person investigation.

PEDAGOGICS AND OTHER SUBJECT SCIENCES

- * When there is mention of the independent character of pedagogics, this does not refer to an isolated subject without any connection to other subject areas.

- * An isolated subject science cannot provide a grasp of reality, and practicing a science is an attempt to unlock reality. Reality consists not of separate unities but of interrelated multiformity or diversity.

- * Because of the nature of educating as a characteristic human experiential phenomenon, it shows necessary interconnected relationships among the core themes of the diversity of human sciences such as sociology, psychology, criminology, history, ethnology, medicine, economics and all the others.

- * Otto Friedrich Bollnow contends that any matter that has meaning for human being-in-the-world has educative implications and, as such, presents a task of educating that is relevant to pedagogics.

- * This statement by Bollnow can be expanded. Any matter that is person-degrading is a threat to and in violation of human being in the world immediately gives rise to the educative task of defending against this inhuman threat and maintaining the human by awakening an evaluative attunement and a fundamental attitude of loving devotion to the valuable as human dignity.

- * The practitioner of a subject science has to overstep the boundaries of his subject and profess the necessity for this. Otherwise there is the danger that he will proceed to narrowly absolutize his own subject area or to make unscientific claims about the field of the other subject sciences.

* Each new possibility that is opened, in whatever area of life, or the renewal of a creative outlook, or something that includes violating and threatening possibilities has educative implications.

* The educationist, as responsible practitioner of his subject science, must not only indicate the educative implications. As a privileged earthling with scientific knowledge and insight, he is called upon to work at preserving, mastering and inhabiting the world that has distinguishable creative and desecrating possibilities. This is a matter of conscience that he cannot push aside. In accordance with his insights, he can give guidance or he can shirk this. He stands accountable before a choice that he has to make. As a Christian he is addressed and has to give an answer regarding the matters in which the self-becoming of dependent fellow persons (children) are involved.

* As a subject scientist one can answer troublesome questions that he does not understand. As an educator he has to choose and act. Therefore, the educationist is addressed to practice his science with responsibility.

* Knowledge from other areas that can allow better insights to break through cannot be shoved aside just because it comes from another subject science.

* No less so, data from other subject areas must not be accepted without an accountable evaluative consideration of them in order to interpret them educatively.

* The recognition and interpretation of knowledge from other subject sciences does not disturb the unity of pedagogics provided it is evaluated with scientific accountability.

* However, if such knowledge is summarily accepted and used without evaluation, this is unaccountable and unscientific. Usually the unjustified adoption from another subject science is revealed by the language of the other science that provides a disconnected result. Accountable consideration and interpretation also require a translation into one's own subject idiom by which the unity of thinking and expressiveness are strengthened.

CHAIRMAN: The following matters deserve special emphasis:

1. Unitary research during which absolutizing perspectives is avoided builds unity;
2. sharpening terminology promotes unity;

3. conquering the idea of "applied", i.e., recognizing that pedagogics is not at all an applied science, leads to unity; and

4. the idea of perspective (in contrast to the idea of part-disciplines and part-sciences) promotes unity.