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 is shown below.

****** 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, i.e., 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 interhuman institutions and interventions in an ordered societal structure, as **structure-in-function**.

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* If this is not the case, the intervention contributes to violation, self-violation and, ultimately, self-destruction.
* Considering the above, a fragmented, isolated investigation aspects of educating, which are absolutized, is unaccountable.
* 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 with philosophical thought** having to do with the human being and, especially with moral and religious matters. Various philosophical systems of thought founded in specific life and worldviews, 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, also gave rise to findings about matters of educating from these subject-perspectives (e.g., psychology).

 * From the subject-scientific pronouncements, there were two which 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), which 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, 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/her growing up, and life. This knowledge is

interpreted by an educator to be applied to practice 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 educating, as the actual interpretation and prescriptions for the concrete situation (especially for teaching in school). Each part-discipline, then, has its own idiom, i.e., that of a core or auxiliary science. The variety of "isms" (Mohammedism, Pragmat**ism**,

Calvinism, Roman Catholicism, Evolutionism, etc.) are

founded in a life-view serving as the point of departure for an eclectic approach.

* Absolutizing a subject science also is rooted essentially in an absolutized **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 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 related to teaching chairs in philosophy and 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 which

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 is characteristic of the progressive approach.

Waterink tried hard to assert the scientific character of the study of educating. He had done admirable ground-breaking work, which today perhaps is too easily misunderstood. In fact, he ensured neither the autonomous character, nor subject science. Waterink worked eclectically constructed a theory of educating based on his of departure. Kohnstamm, with respect to his contributions, applied the findings of the [German] schools of the

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

psychology of thinking to the practice of teaching. In his fundamental view stemming from his 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 pedagogics, opened a new way of thinking about it 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) to attain an educative aim founded in his Christian
(Calvinistic) and national (Afrikaans) philosophy of life, never became a real unity. It remained part-theories because he evaluated his points of departure 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 publication, demonstrated

- the fundamental idea of the autonomous character of this subject science. By publications in psychological 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, which formed 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 which 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 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 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

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

to which it must translate back its results, if possibilities of application are considered.

****** Complexity and specialization must 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, 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 which are more loosely or narrowly related than the terrain of pedagogics, which 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 which 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 interhuman 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 which leads to specialization also in pedagogics. The need for specialization is

based in contemporary education's need for specialized knowledge of educative matters. Now it is just the complexity of

educating, as such, which allows a 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 which have opened specialized fields for educationist, such as orthodidactics, family pedagogics, gender pedagogics, adolescent pedagogics, vocational orientation pedagogics, comparative education,

etc., and which easily can lead to a detached, narrow specialization so that an educand [i.e., child] 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 is reference to Litt, who had indicated that educating, as a phenomenon is a core theme for pedagogics, also to Langeveld, and Perquin's trailblazing work of a phenomenological analysis of the phenomenon of educating, as a point of departure to choose for practicing educating as a science.

* Attention is 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 ground the independent character of pedagogics, and this was advocated during 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 which does not have educating as its core theme, and any quantitative data which, if 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 pointed out the error in thinking when educating is

viewed as two isolated points which must be bound together,

i.e., a child who **is**, and who is educated **to what he/she 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 a child as potentiality, as on the way to adulthood.

* At the request of B. F. Nel, in 1968, during 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 must contribute to the pure description of educative matters. Each part-discipline has a theme as it area

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 must 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, which 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 part-discipline.

* In **Education, Part 2** (1975), I conclude 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 multi-formed, 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 show that complete truth about educating is not yet evident. Something new always is disclosed. Certainly, there are still 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-infunction 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 several 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 to lessen the danger of narrowness.

* The following expresses something of the essen educating in terms of a few questions which are components of the educative relationship, after which indication of its very superficial expansion:

essence of related to the which there is an

"Educating implies a **temporal-spatial** relationship as a joint involvement of a needful educand (**becoming adult**) who cannot meaningfully actualize his/her 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 an educator), and accepting support (by an educand) as a way of actualizing and appropriating selected content with the aim of easing an educand's need".

Here there is time, space, educand, reasons for educating, educator, activities, content, and aim. If one of these 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 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 are stated, and the answers in relation to each other 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. Co	omponent	Time (Historicity, temporality)
Quest Po Po pa	ion: ssible answers: ssible perspectives or rt-disciplines:	 When does educating occur? Past, present, future. Historical, Contemporary, and Futurological pedagogics. Comparative education. Temporality pedagogics (J. J. Pienaar).
2. Co	omponent	Space (World, educative milieu)
Quest Po	ion: ssible answers:	Where does educating occur? In a person's lifeworld, child world, residential area ((home), field of work (school), leisure space, place of worship (church), fatherland
Pos	ssible perspectives:	Milieu pedagogics, family pedagogics, vocational Pedagogics, school pedagogics, leisure pedagogics. church pedagogics, American, German, etc. pedagogics.
3. Co	omponent	Educand (becoming adult)
Ques	tion:	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: peda speci restra ortho blind hand	Specialization and absolutizing of terrains, e.g., gender gogics, physical education, alization in areas of aints, e.g., orthopedagogics, odidactics, pedagogics for the l, deaf, physically icapped.
5. Component	Educator (Adult: man/woman)
Question: Possible answers:	Educated by whom? 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: Possible perspectives: 7. Component	Functional and intentional: Mutual creative participation by persons involved in the educative relationship: providing support, teachinglearning, awaken— become aware, guidanceco-actualization, allow to actself-activity, directed activityattuning, evaluating self-evaluating, exemplifying imitating, etc. Didactic pedagogics, teaching methods, guidance pedagogics. Contents (Selected and gradated)
Question:	What is taught, unlocked,
Possible answers:	assimilated? 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

8. Component	pedagogics, technological pedagogics, military pedagogics. 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 life tasks, acceptance of life tasks,
Possible perspectives:	Acceptance of the meaning of life. 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: this 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 must 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 to describe it as an educative matter.

* This demands that each expert first must 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 to interpret the 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, which 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 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, interdepartmental, 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 which is relevant to pedagogics.

* This statement by Bollnow can be expanded. Any matter which 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 must 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/her subject science, must not only indicate the educative implications. As a privileged earthling with scientific knowledge and insight, he/she 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 which he/she cannot push aside. In accordance with his/her insights, he/she can give guidance, or he/she can shirk this. He/she stands accountable before a choice which he/she must make. As a Christian, he/she is addressed and must give an answer regarding the matters in which the selfbecoming of dependent fellow persons (children) are involved. * As a subject scientist, one can answer troublesome questions which he/she does not understand. As an educator he/she must choose and act. Therefore, the educationist is addressed to practice his/her science with responsibility.

* Knowledge from other areas which 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 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 which 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.