

**THE NETHERLANDS –  
The development of the interdisciplinary science of education  
and the place of the comparative education**

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I

**1. Introduction**

Onderwijskunde (= science of education) originated in the Netherlands after the second World War from two disciplines with a longstanding concern for educational problems, namely pedagogy (theory of education) and psychology. Since the fifties sociology also applied itself explicitly to education (sociology of education). Around 1970 the development of the interdisciplinary science of education started, a development of great importance for the future of educational science.

The goal of interdisciplinary co-operation is the development of a new discipline with its own characteristics. Interdisciplinary co-operation is a means, not a goal. The interdisciplinary approach is important in view of the complexity of educational phenomena.

The science of education is part of the faculty of Social Sciences and is in one case integrated in a Technical University. At some universities educational science has an interdisciplinary status, grown out of a co-operation between the disciplines (subfaculties) of Pedagogy and Psychology, sometimes also out of a co-operation with the discipline (subfaculty) of Sociology. Beside this, the science of education forms part of the curriculum of university and non-university teacher training-colleges, like the Colleges of Education.

Teachers of educational science at the teacher training-colleges have themselves studied science of education at an university or an institution of corresponding level.

## 2. Interdisciplinary science of education as an academic discipline

At the moment about 1200 students are studying interdisciplinary educational science at Dutch universities. Efforts are directed at creating a balanced combination of the two necessary elements in an educational science course.

These two elements are :

- a) The problem-directedness of the course. The content and the structure of course should focus on educational problems and reflect the social need for expertise.
- b) The course should express the theoretical knowledge as well as the methodical and technical skills to qualify the students.

Neither of these tasks should carry the main emphasis and therefore an integration of these two aspects must be offered during the whole course.

## II

### 1. The object of the science of education

Many descriptions of educational science are used. The common element in these definitions can be stated as follows :

“The science of education focuses on a scientifically based study and analysis of education in all its facets, in order to contribute to the solution of educational problems.”

“Education in all its facets” pertains to the following levels :

- a) *Micro level*. At this level the central topic of study is the learning process itself as it takes place within the pupil, within interaction between pupil and teacher and, sometimes, within interaction between classmates. Examples of problem areas belonging to the micro level : the course of learning processes, individual learning difficulties, study motivation, individualized instruction, instructional materials, evaluation of study achievements, etc. These current problem areas are part of the working ground of educational science and have historic roots in psychology (particularly learning psychology, developmental psychology, psychometrics) and in pedagogy (e.g. didactics and orthopedagogy).
- b) *Meso level*. At this level educational science concerns itself with topics whereby a connection is made between the learning process, and factors and processes within the context of this process. Examples of problem areas belonging to the meso level : the connection

between type of school/vocational choice and socio-cultural variables, co-operation between schools and supporting institutes (e.g. institute for curriculum development (S.L.O.) the foundation for Educational Science (S.V.O.), the national Pedagogic Centres (L.P.C.).

- c) *Macro level*. At this level central themes are those related to broad social problems or topics whereby a connection is made between problems at micro and meso level on the one hand and broad social problems on the other.

Examples of macro level problems areas : attunement of education to the labour market v.v., unequal chances for education, cultural differences and differences in educational system, education and ideology, economics of education, etc.

Besides contributions from abovementioned disciplines, contributions are made to the macro level by history, anthropology, philosophy, general and comparative educational science.

The science of education concerns itself with all levels. Contributions to the science of education from such disciplines as political science, organisation theory, system theory, economics, law, public administration science, planned change theory, are welcome, can even be expected.

The abovementioned shows that the object of educational science is both extensive and complex. Interdisciplinary co-operation is a must, and leading to "mutual integration of organising concepts, methodology, procedures, epistemology, data, and organisation of research and education in a fairly large field..." (O.E.C.D., 1972).

## **2. The realisation of the idea of interdisciplinarity**

This has turned out to be a difficult task, both in the scientific/methodologic respect as in the didactic and organisational/social psychological respect. After having fulfilled the minimal administrative conditions for interdisciplinary co-operation, "the mutual integration" could take a more definite shape in a gradual growing process. The final goal of interdisciplinary co-operation is *not* to create an interdiscipline but a new discipline with its own characteristics, as has been stated already.

This interdisciplinary co-operation – beginning around 1970 – should therefore be seen as a means of stimulating the development of the science of education in the described direction. Moreover, one should strive towards an increasing contribution by the other already mentioned disciplines, preferably on as short a term as possible.

Some topics in educational science are research, advice and support, policy, technology, teacher training, curriculum theory, methodology, didactics, educational systems, etc.

### 1. Models of educational science training

These models of training are possible (besides the monodisciplines) :

Model A : an interdisciplinary educational science study, four years course, leading to a masters degree in educational science.

Model B : an interdisciplinary doctoral specialisation in educational science, on the basis of previous training in psychology, sociology and pedagogy, leading to a masters degree in one of these three fields of study with an annotation "science of education". In this situation there is an interdisciplinary (interfaculty) department. Two years course on a basis of about three years course in psychology, sociology and pedagogy.

Model C : a doctoral training in educational science, leading to a masters degree in educational science. Two years course, also based on about three years course in psychology, sociology and pedagogy.

### 2. Current situation and future expectations at several universities

Interdisciplinary science of education is in progress. The idea of interdisciplinarity in the courses at the universities of Groningen, Leiden and Nijmegen within the social sciences faculties has been realised in the direction as described in models B and C.

The universities of Amsterdam, Utrecht and Tilburg are also moving in this direction. Regarding the development of educational science within the frame work of the technical sciences, the Technical University Twente starts an experimental course in educational science (according to model A).

### 3. Research policy

In the Netherlands there are several (para-)university institutes for educational research. These institutes and the university interdisciplinary departments must be institutionally closely linked together in such a way that an integrated research policy for both institute and department is guaranteed and an allocation of tasks with regard to research and education is made possible. Many institutions primarily concerned with promoting scientific and socially relevant research. By dividing tasks between universities a process of concentration of research on one or some educational aspects has been started. Over the past few years, striving towards multi-year programming of research constitutes a vital element in the research policy of several research institutions.

## IV

### 1. The place of comparative education

Several descriptions of comparative education exist. In this paper, comparative education is conceived as a discipline focused on the international comparison of educational systems of different countries/cultures. An educational system is an organizational framework within which education must be able to function optimally, both for the individual and for society. In this view, comparative education studies the similarities and differences between educational system and seeks to explain them. Problems being faced and attempted solutions are also studied.

One example is the relationship between general secondary education and preparatory vocational training. Comparative education is not only important for a wider scope, but also for educational policy. It is also important for the forming of theory on educational systems with regard to the connections between the functions of education, the build-up of the educational system, the function and build-up of teacher training, and educational policy.

Attention is also given of course to the methodological aspects of comparative education.

Comparative education is not very often an aspect of teacher education. It is an aspect of the university course and of the part-time night courses in pedagogy. It forms part of the interdisciplinary science of education, in other words, it is a part-discipline or specialisation.

Increasing attention is being paid to international developments, both by government educational authorities and educational centres. But unfulfilled wishes concerning possibilities for research and the reporting on international developments still remain.

### 2. Conclusion

On August 31, 1982 the "Wet twee-fasenstructuur wetenschappelijk onderwijs" (an Act concerning a two-phase structure) will come into effect. Through this act, current university education will be restructured into a first and a second phase.

The principal characteristics of this new structure are :

- a first phase (i.e. fields of study) having a four year course;
- a limited number of years during which a student may be registered;
- a selectively accessible second phase (i.e. post-doctoral courses) with a maximum course duration of two years for functions as teacher secondary/tertiary education, researcher, dentist, physician;
- a legal regulation of part-time education.

Each university is obliged to reorganise its courses.

In view of the, at this moment, uncertain situation within and between the different universities as regards the claim they are willing and able to lay to the second phase, each university is studying its possibilities concerning a main point policy for education and research.

The choice for a course model (A, B or C or combinations) and national co-ordination are also subjects of discussion at the moment. This restructuring can contribute positively to a thorough consideration of the possibilities and desirabilities concerning further developments in the field of interdisciplinary educational science, comparative education included.

Preparations have also been started for post-academic courses in the field of educational science. These are meant particularly for practicing educational scientists.

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