International Conference

THE CHANGING ROLES OF TEACHERS
AS REQUIRED BY EDUCATIONAL INNOVATIONS

Prof. Dr. Gilbert DE LANDSHEERE, University of Liège, Belgium
Institute of Psychology and Educational Sciences
Assistant : Mr. E. BAYER

Statement 10 : Research on Teaching

The cultural mutation taking place in our time makes a radical change of education necessary.

Impositive, convergent teaching of a fixed body of knowledge belongs to a static civilization where the learnings have not to vary during one or several generations. In this case, the school transmits accepted patterns of intellectual and social behaviors covering perennial values.

The emerging culture makes democratic, divergent teaching necessary; it will help the pupils to adjust to a continually changing world and to participate actively in the dynamic way of life and philosophy that will be his.

While the objective of traditional school was to transmit ready made solutions, the process of problem solving is now considered as more important (in an educational perspec-
tive) than the solution itself. Transfer potentialities and meaningfulness for the learners are thus main criterions.

It must be clearly and repeatedly emphasized that the most important reason for changing the roles of teachers is not the technical innovations in the class-room, but the changing nature of the learnings wanted.

The new teachers' roles call for a radically change of the teachers' attitudes and training.

I think that the or at least one of the basic ideas of our conference must be that the new techniques and aids are not primary factors of the changing roles of teachers. I repeat it: the primary factor is the change of objectives.

This appears clearly when one observes that the use of new aids - say school T.V. - does not necessarily imply a change of method. For instance, the Herbartian impositive method can be applied by the teacher with or without TV.

Another example: Observation in the class-room with close-circuit T.V. shows that the old "leçon de choses" à la Pestalozzi is still perfectly alive. If one imposes a detailed - much too detailed - description of a flower, piling up new technical words... without real motivation in the pupils, the fact that TV flashes illustrate each detail does not make of a basically weak teaching a good one.

If I insist heavily on that point, it is because it explains - in many cases - the lack of significant differences observed in a lot of comparative researches on the results of teaching with or without TV-aid, teaching machines, etc.
Before looking for results, the researchers should have verified whether the patterns of teacher behavior changed to a significant extend synchronically with the introduction of new techniques or devices.

Conclusion: objective description of teacher behavior in the classroom remains necessary. And since we have not yet a really satisfying instrument for that description, research also remains necessary.

To convey a correct picture of teaching processes, it seems that research has still to solve some problems of observational procedures and to refine the analysis techniques, but it mainly must:

1. extract the teaching variables from the various conceptual systems used and empirically described and introduce them into a theoretical framework;

2. define experimentally the conditions of a valid measurement of these variables;

3. test the currently hypothesized relationships between these variables and the teachers' personalities and properties, methods and systems of teaching, the pupils' activities and personalities and their learnings.
The recent papers of Biddle\textsuperscript{1}, Gage and Unruh\textsuperscript{2} seem to present a promising base to discuss these problems and to build a useful framework for research.

When we have an efficient, easy to handle instrument at our disposal, we shall then be able to investigate whether the teaching methods observed are really in the line of the objectives chosen or not.

Of course, another kind of research is also needed, but though important, it is of secondary rank in our perspective.

When the general method best suited for reaching the objections imposed by our modern culture have been defined, we must then also define the best way to use the different aids, techniques, processes in that context, to train teachers, etc. It is evident, for instance, that there is an optimum duration of exposure of a definite class of individuals, learning definite subjects, to TV teaching, audio-lab training...

This will be the job of groups 1 - 9.


\textsuperscript{2} N. L. GAGE and W. R. UNRUH, Theoretical Formulations for Research on Teaching, id, 358-370.