THREE GENERATIONS IN EDUCATION

My family has already been involved in Dutch education for at least three generations. My father started his professional career in 1937 as a teacher in primary education in a small town in the southern part of the Netherlands. There he met my mother, who was also a teacher. My father had made his career in the educational system in the Netherlands and finally became director of a Teacher Training College. I myself am involved in education in the Netherlands, and my son also contributes to the solid base of education in the Netherlands.

The theses my father, my son, and I wrote more or less reflect the changes in education and the growing knowledge base of teaching. My father wrote a thesis about the personality of the teacher as instructor and educator. At that time in the Netherlands, the teacher was seen as merely an educator, who was responsible for a continuous development of students in all areas: cognitive, social, and moral. But the teacher was more than an instructor, and thus my father looked for the personality characteristics that made a person a good teacher and educator. He came to the conclusions that it was not possible to find specific characteristics for good teachers and that in the end the primary task of a teacher was to provide good instruction to students. But he contradicted this conclusion in his own professional life, because he was more than an instructor.

Studies on the inequality between students pointed at the importance of education to compensate for initial differences, especially in the academic cognitive domain. This stresses the importance of the teacher as an instructor and especially the importance of the activities of the teacher in order to promote cognitive growth of students. My own thesis was about the way
teachers used a specific textbook for initial reading and the effects of teacher behavior on student outcomes. I concluded that teachers could make a difference in student outcomes by providing better instruction, and that good instruction was determined by teacher activities which were related to the instructional process itself. In that sense, the study was, among other studies, an example of research into the characteristics of effective education and teaching: In my whole professional career, I have been involved in this kind of research: to find out what kind of textbooks, grouping procedures, teacher activities, and organization of school can make a difference between more and less effective education. The point of departure in this research always was that the quality and the effectiveness of education have to be proven by student outcomes especially in the academic cognitive domain.

In his study finished five years ago, my son investigated the opinions of students in teacher training colleges about teaching. He found that elder students stressed the importance of pedagogical skills, rather than structural skills and knowledge. It reflects the change in students' opinions about the profession in the course of their studies. Novice students at the end of their study put less emphasis on the instructional and more on the pedagogical component of education and schooling.

My family members' careers in education show that, within society and also in the educational profession, the ideas about what the aims and objectives of education are do change over time. Sometimes the cognitive aims and academic and cognitive objectives are emphasized; sometimes other educational domains like social behavior and moral development are also thought to be important. Especially in times when the reduction of inequality and the contributions of education to societal and economical development and growth are emphasized, cognitive goals and skills are judged to be more important than pedagogical ones. But in a changing society where families cannot fulfill their pedagogical tasks anymore, education as an institution is expected to replace other pedagogical actors and to take care of a broad spectrum of goals and objectives.

Not only ideas about the objectives of education have changed over time, but also the opinions about the educational process. Sometimes the teacher is more of an educator, instruction just being a part of his activities; sometimes he is viewed as a professional whose primary task is to provide effective instruction.
The expected output of education and the process of education are objectives that have remained more or less the same over time. Even when the objectives of education change, the stable component in it is that at least schools and education have to contribute to the cognitive development of students. The same holds for teaching. Even when we expect that schools can contribute to more than academic outcomes and teaching is more than instruction, effective instruction remains an important component of it.

The objectives of education and the quality of education are closely connected. This means that the criteria for effective education, and more precisely for effective teaching, and the characteristics of effective teaching are related to each other. It is only possible to determine what effective characteristics are related to the objectives of education and teaching of which can serve as criteria for effectiveness. This implies that research on effective teaching deals with the objectives and criteria of effective teaching. When it is determined what these objectives and criteria are, it is then possible to investigate the characteristics of effective teaching. This is determined by those factors, characteristics, or variables that contribute to the explanation of the variance in student outcomes with regard to those specific objectives.

In the next section, these two topics will be dealt with separately, in particular with the changes that have been taking place with respect to objectives of education and teaching and what this means for effective teaching.

**THE GOALS OF EDUCATION AND ESPECIALLY THE GOALS FOR EFFECTIVE TEACHING**

The criterion for effective teaching, schools, and education is the extent to which they are finally able to reach goals, the amount of variance of student outcomes in those goals explained by teachers, schools, and education in general. The educational practitioners and researchers always have to deal with these criteria, but they do not determine educational goals on their own. The ultimate decisions about the aims of education are made at the national level. This is what we can see in almost all countries and is especially clear in countries with directive educational policies. There, the policy of education is made at the nation or the state level. Based on this responsibility for the quality of education, more or less precise outlines for education can be formulated, like the guidelines provided by the national curriculum and the Numeracy and Literary Task Forces in the United Kingdom (1997/1998) and the inclusion
policies for the British children with special needs (Reynolds, 1993).

Even in the Netherlands where the responsibility for education is up to the schools and where everybody is afraid of state prescription, the government provides guidelines in order to protect the quality of education for all children.

Scheerens (1992) and Creemers (1994) argue that teachers, schools, and education in general can have different aims, for example, the well-being of students and other participants like teachers in school, but in the end the student outcomes are essential criteria for assessing effectiveness of education. The question that remains is what kind of outcomes, objectives, and goals can be achieved by schools.

Especially in a time when other organizations in society cannot fulfill their functions, there is a possibility that the school may be overstretched by formulating and emphasizing more and more objectives. For example, when families are no longer able to provide their children with agreed moral standards, schools are supposed to take over these responsibilities, even when it is clear that schools on their own cannot alter the life chances of children (Commissie Heroverweging Kerndoele Basisonderwijs [CHKB], 1994; Karweil, 1994).

Probably nobody disagrees with the statement that schools are concerned with the learning of students, especially their cognitive learning, which means that it can be expected from education that students learn, for example, reading, mathematics, and languages.

The first question connected to this is “how much knowledge and what kind of knowledge is important?” Especially in times of economic recession, there is always a tendency to go back to a concern with “the basics” - to ask for basic knowledge and skills (US Department of Education, 1987). Basic skills initially stood as key outcomes within effectiveness research, especially because disadvantaged students did not succeed well enough in these skills (Brookover, Beady, Flood, & Schweitzer, 1979). But when schools are actually pursuing these kinds of objectives, there are often the criticisms that concern the very teaching methods of basic skills, such as the methods of learning by rote facts and figures. There are often ideas that children should learn more than these things, which lead to objectives in the areas of higher order learning, such as transfer, evaluation, metacognition, and the learning of “how to learn”
(Bereiter & Scardamalia, 1989). As long as we do not deny the importance of basic knowledge and skills, more than basic knowledge should certainly be added to the objectives and the goals of education in schools. But based on research on metacognition (Prawat, 1989), and also according to Bloom’s taxonomy of educational objectives (Bloom, Engehart, Furst, Hill, & Kratswohl, 1956), it is evident that, for higher order learning, basic learning and basic knowledge are required in the first place. Therefore, schools must ensure that a basic knowledge for all students is available so that students can subsequently acquire and develop other knowledge and skills (Creemers, 1994).

The problem we face is that it is quite easy to add numerous objectives and goals for education in schools, but it is more problematic to make choices between them. In the past, the most important task in curriculum development was the legitimization and the formulation of educational objectives. It turns out, and it is a traditional problem in education, that most of the time there are many more objectives than can be reached within the constraints of the available time. There is a tendency that as the goals and objectives of education and schools increase, the available time for actual learning decreases at the same time. We clearly cannot go on endlessly adding more objectives and more content for schools and still expect schools to succeed (Fullan, 1991). Schools have to restrict themselves to certain objectives.

This also happens to be one of the conclusions of school effectiveness research. In the past, it was found that schools which restricted themselves to a certain set of objectives and spent time on these objectives or even stole time from other subjects to secure the achievement of the objectives did better than other schools (Levine & Lezotte, 1990; Tedlic & Stringfeld, 1993). An emphasis on certain objectives requires time and opportunity for students to learn, so schools have to find that time to secure student results. Fragmentation into all kind of subjects and into concentrating upon too many different kinds of objectives may affect the achievements of students. Going from one subject to another requires time. Schools have to make distinctions between subjects, so “hopping” from one subject to another subject and “hopping” within subjects from one topic to another need more time even than is required for achieving the objective itself. It also takes time to make divisions between the subject areas and between the various sets of objectives.

With respect to cognitive development and cognitive goals, we should
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