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**ABSTRACT**

In this presentation, the authors attempt to approach the field of curriculum theory, development, innovation, and planning from the perspective of the basic principles of pedagogics. The authors use Sweden's development of a comprehensive school system as a case study of curriculum planning and development. This case study serves as an illustration of the basic issues discussed, but not as a normative model of curriculum planning and development. Through the use of this example, the relations between demands in the society, educational research, and curriculum on a concrete level are demonstrated. The first section deals with the development of the new school system and a new curriculum in Sweden, the second with pedagogical research and the Swedish curriculum reform, and the third with the foundations for curriculum theory and research.  
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LESSONS FROM A COMPREHENSIVE SCHOOL SYSTEM FOR THEORY  
AND RESEARCH ON CURRICULUM,

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## INTRODUCTION.

It is more or less impossible to define what to include under the general label of curriculum. Consequently, one might find utterly divergent ideas, meanings, and examples all classified under the general label. Thinkers in the field of curriculum theory, development, innovation, and planning have thus indiscriminately borrowed ideas and concepts from such sources as psychology, general educational theory, philosophy of education and various political and cultural texts. We have attempted to approach the field from quite another perspective than the traditional ones, namely from the basic principles of pedagogics.

In our discussion we will make use of a case study of curriculum planning and development - the case of Sweden's comprehensive school system. This case study will serve as an illustration of the basic issues discussed, but not as a normative model of curriculum planning and development. Through the use of this example it is possible to illustrate relations between demands in the society, educational research, and curriculum on a concrete level.

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## CHAPTER ONE.

### ~~THE~~ DEVELOPMENT OF A NEW SCHOOL SYSTEM AND A NEW CURRICULUM: SWEDEN AS A CASE STUDY.

After the second world war most of the countries of the Western World changed and reconstructed their educational systems. In general, a trend towards a comprehensive school system is clearly visible. Ideologically another concept of education emerged, firmly anchored in the idea that education as such is beneficial, and that educational systems play an important role in economic and social development. This ideology is mirrored in various political statements concerning education. The post-war economic and industrial development required new skills and qualifications among workers. Education was conceived as an important means not only towards the implementation of these new qualifications, but also as a means towards social and political justice in terms of social mobility and economic equality.

The reforms in this period were primarily aimed at the secondary school level and in principle meant a move from a highly selective system towards an "open" system to which "all" should have access. The economical aspect has to be considered in terms of the political goal of increased economical growth. Simon (1970, p. 1-2) describes the general idea in the following way:

*"There have been many comments on this close association between an open school system at the secondary stage and success in industrial development and growth. Generally speaking, the more backward a nation is economically, the more heavily committed it is to a highly segregated secondary system - as might be expected, since opportunities for employment of the educated are few. Within Western Europe Spain and Greece, for instance, have the lowest standard of living and the most elitist systems of schooling; the same may be said for almost all Latin American countries where educational systems have followed the traditional European model. In sum, systems of secondary schooling range from the completely 'open', or non-selective, on the one hand, to the highly competitive, or segregated, on the other. The former type of system has only one secondary school, designed to provide education for all the youth of a locality, and so usually including a wide variety of courses and facilities. The second type of system has differentiated schools providing alternative forms of education at the secondary stage. Selective systems vary a great deal, but perhaps the one constant factor is a school providing only for academic studies, geared towards the interests of the small section of pupils who look to enter the universities and professions."*

During the fifties a number of economists tried to establish and document empirically relationships between educational investments, research and economic growth. The increased demand for education which thus had support not only in ideology, but perhaps more importantly also in economical and political terms, required increased governmental investment. In its turn this creates a situation which calls for increased efforts in the areas of planning and control over how money is spent and used. The growing allocation of public resources to education created a demand on knowledge of economic factors related to education (cf. Correa 1963, Denison 1967, Blaug 1966, Harbison & Meyers 1964, Tinbergen & Bos 1965, Vaizey 1962).

The educational reforms in Europe thus mirror economical and political change during the last century. The differentiated school system prevalent in most of the European countries during the first part of this century was appropriate under the conditions prevailing. New schools were created to meet specific demands on the labour force. In theory this could be interpreted in terms of an increased number of options for all citizens. In practice, however, the system was highly selective, since - as noted above - most of the "options" were created above the level of secondary education, and the secondary system was itself highly selective. A highly differentiated school system will ultimately lead to problems when cross-overs between the various lines or schools are complicated or when the actual number of students eligible for various post-secondary courses is insufficient in comparison with the demands of the labour market as a result of economical and technological development. Political demands for access to secondary and post-secondary education for a larger portion of the population will, of course, also influence the direction of change. Furthermore an organizational reform will have consequences for the curriculum and for recruitment and training of teachers.

The common trend in post-war Europe was towards reforms pointing to a comprehensive school system. Common or similar motives for a change are clearly visible, but many differences in the course of action taken may be observed. Such differences can be found both at the organizational and curricular level.

In the Scandinavian countries the renewal of curriculum was highly influenced by the American experiences (cf. Cremin, 1961). The school reforms in France, in the Federal Republic of Germany and in Italy were to a greater extent founded on an earlier didactical tradition (cf. Springer, 1967). In e.g. Britain it was, however, possible to state as late as 1970 that "... five years after the decision to reorganize on comprehensive lines, and almost twenty-five years after the first such school pioneered the way, there is little clarity about this policy and what it implies." (Simon, 1970, p. 15)

Common motives for reform are social and political. In Sweden it was clearly stated that the educational reform should contribute to social justice by making education available to all regardless of social background etc. It is important to underline this aspect, because it is quite clear that the first phase of the reform was founded upon this ideology and the actual reform meant that the organization was changed. It was within a certain organizational framework that eventual changes in the curriculum and subsequent changes of instructional practice should take place. Thus, the organizational frames already set the stage for what was to come (cf. Dahllöf, 1971).

If we turn more directly towards the school reforms in Sweden, it should be understood that planning is entirely centralized. The bureaucratic procedure in changing the Swedish school system followed the tradition of reforms in other areas of the society. The Parliament appointed various committees, the reports of which were officially published and sent for review to various groups, trade-unions and organizations. These reviews together with the committee-reports formed the basis for the preparation of a proposal, which then was presented to the Parliament. The coordination of this work was in the hands of the Minister of Education. The supervision of the implementation of the school reform as well as the responsibility for the development of the curriculum within the framework established by parliamentary decision was left to the National Board of Education, which is an administrative agency within the state apparatus that is also responsible for the funding of a substantial part of Swedish research and development in education.

It is important to note that the development of the nationally valid curriculum, within the framework of the political decisions taken, was left to an administrative agency. This development thus followed a rationalistic point of view (cf. Eggleston, 1975). Curriculum development is conceived as a technical issue, the solution of which is dependent on research and on advice from subject matter specialists. Such resources were given to the National Board of Education.

**FIGURE 1: The development of the Swedish Comprehensive School System: A historical overview.**

- 1940. Appointment of an expert committee to review the experiences within the Swedish school system in order to establish a basis for future planning.
- 1946. Parliament appoints a parliamentary commission which supersedes the above mentioned committee. Its task was to analyze the schools and lay foundation for the direction and character for reform.
- 1948. The School Commission delivers its main report.
- 1950. Government proposition to the Parliament concerning the schools. Parliament decision to introduce a comprehensive school system following a trial period. Experiments to be carried out under the supervision of the National Board of Education.
- 1957. Appointment of a parliamentary committee to review and summarize experiences of the trial period and to propose the future organization of the Swedish school system.
- 1959. The National Board of Education delivers its final report on the experiments within the school system.
- 1961. The 1957-Committee delivers its final report and suggests a 9-year compulsory comprehensive school system.
- 1962. Parliamentary decision on the implementation of the comprehensive school beginning fall 1962 in grades 1, 4 and 7. National Board of Education issues the 1962 Curriculum Guide.
- 1969. The National Board of Education introduces a curriculum revision to be implemented successively beginning fall 1969 in grades 1, 4 and 6.

1970. Appointment of a parliamentary committee on the "Inner Work of the School" to review the situation of pupils and teachers as it has developed since the introduction of the comprehensive school system. Special emphasis on suggestions for pupils that have difficulties of fail.

1974. The 1970-Committee delivers its final report with suggestions for organizational reform concerning the inner work of school. The proposal from the government to Parliament is presented in 1976.

The work of reforming the school system which led to the implementation of the 9-year compulsory comprehensive school, was started by the School Committee of 1940 (cf. figure 1). The wartime coalition government set up a committee of experts with fourteen educators and university men under the leadership of the Minister of Ecclesiastics (in Sweden, this Department had charge of education at that time). The compulsory school had already at that time undergone profound changes. The purpose of the 1940 School Committee was to get an over-all view as a basis for future school planning. The Committee's directives included not only a reform of the compulsory school, but also of the high-schools to come (SOU 1944:20). In 1946 the Committee was superseded by a parliamentary School Commission (SOU 1948:27).

The school commission proposed ten main objectives for the school system, i.e. that instruction should be renewed, that pupils were to be more strongly activated to participate in the school work and that teaching should be more individualized. The constant change in the society required not only factual knowledge but also activity and skill in assimilating and finding new knowledge. The pupils should accordingly be encouraged both to work independently and to critically evaluate their assimilated knowledge.

*"Instruction should not be authoritarian, as it would be if it served a particular political doctrine, even if this doctrine was democracy's own. Quite to the contrary, democratic instruction must be scientifically founded." (SOU 1948:27, p. 3)*

The commission proposed a fairly thorough change of the contents of the curriculum. The school should according to the commission be organized as a 9-year non-differentiated compulsory system.

The commission delivered its proposals in 1948 and a rather hea-



ted debate was triggered off, as the proposals were considered very radical and drastic. A school bill was introduced in Parliament in 1950 (Prop. 1950:70). Parliament voted in favour of an introduction of a comprehensive school system pending an extended period of experimentation. The task of supervising and conducting the trials and the experiments was given to the National Board of Education.

In 1957 Parliament appointed a new committee to work out in detail the plans for the implementation of a nine year compulsory school system on the basis of the results from the trial period. In 1959 the National Board of Education issued a report concerning this period, and the 1957-Committee delivered its final report to the Parliament in 1961 (SOU 1961:30). The Committee had issued several reports earlier dealing with various issues and reporting investigations that the Committee had commissioned. The Committee had the task to work out a detailed plan for the implementation and organization of the school system, including issues like the main objectives of the compulsory school system, its organization, costs, curriculum etc. The Committee should also discuss the possible transfer of students from the compulsory school system to various post-secondary alternatives, as well as propose necessary legislative changes. In 1962 a bill was passed in Parliament which established a 9-year comprehensive school system in Sweden.

One of the key issues was the differentiation within the comprehensive system. The Social Democratic Party wanted an undifferentiated compulsory school system, which would postpone any individual decision as to future education until the end of the compulsory school period, i.e. to the ninth year of schooling. The political compromise reached on this issue meant that the first six years of schooling were completely undifferentiated. In the seventh and eight grades certain options were introduced, and in the ninth grade the pupil could make his choice between nine different lines. The general structure is illustrated in figure 2.

**FIGURE 2: The compulsory comprehensive nine-year school according to the Committee of 1957. (Adopted from Husén and Boalt, 1968, p. 11.)**

		Academic Sector	Center for General Education	Technical-Mechanical Sector		Business Sector		Nursing and Home Economics Sector			
Further-Going Schools	Grade 12	Gymnasium									
	Grade 11			Vocational School		Vocational School		Vocational School			
	Grade 10			State High School		State High School		State High School			
Age											
	16	Grade 9	9g	9h	9p	9e	9Mech.	9b	9c	9a	9hc
Basic School	15	Grade 8	24+4+4 Per. Required Subjects				Math. 4 Per.	Lit. 7 Per.			
	14	Grade 7	22+4+4 Per. Required Subjects				Math. 4 Per.	Engl. 4 Per.	Lit. 5 Per.		
	13	Grade 6	35 Per. Required Subjects								
	12	Grade 5	35 Per. Required Subjects								
	11	Grade 4	36 Per. Required Subjects								
	10	Grade 3	30 Per. Required Subjects								
	9	Grade 2	24 Per. Required Subjects								
8	Grade 1	20 Per. Required Subjects									
	7	School Entrance									

**Abbreviations:**

Per = Periods  
 Mech = Mechanical  
 g = gymnasium  
 b = business

h = humanistic  
 e = commercial  
 p = practical

s = social  
 t = technical  
 ht = domestic science

In figure 2 above the three years of schooling following the compulsory school are also outlined. The revision of the organization of the school system above the level of the comprehensive school was necessary after the profound changes in the compulsory school system itself.

The post-war school debate had concerned itself mainly with the form of the new compulsory school. But the directives for the School Committee of 1940 included review of the higher level - the academic-lined high school (gymnasium). In 1953 the National Board of Education revised organization and curriculum for the "gymnasium". This revision was, however, provincial. A preparatory Committee for the "gymnasium" was set up in 1960. The 1957 Preparatory Committee had proposed a continuation school ("fackskola") and in 1962 a special preparatory committee for the continuation school ("fackskola") was set up. The entire system of secondary education was now under control. The proposals for the "gymnasium" (SOU 1963:42) and the continuation school (SOU 1963:50). The preparatory Committee for Vocational Schools presented its first report in 1966 (SOU 1966:3).

The need for coordination between the compulsory school and the levels above it led to the reform of the upper levels. In 1971 the new "High-school" ("gymnasieskolan") was implemented, comprising of the "Gymnasium", the "Continuation School" and the "Vocational School". These schools were brought together forming a "High-school" with all together 22 separate lines. 14 different lines were vocational and 3 lines belonged to the earlier "continuation school". These 17 lines have two years duration each. 4 lines - each of three years duration - together with a technical line of four years duration - are also included in the "High-school" ("Gymnasieskolan").

It was recognized that the organizational reforms of the compulsory school system and of the upper levels needed to be supplemented by an instrument allowing for revision of the curriculum. The National Board of Education was given the responsibility for curriculum revision. The instructions to the National Board of Education state that *"it shall see to it that education, as far as content and methods are concerned, continuously is renewed, developed and improved, keeping pace with the findings of research and with the developments within public and private administration, in the country's economic life and the labour market as well as in other*

areas of society." (His Royal Majesty's instruction for the National Board of Education: SFS 1965:737 § 37.)

The idea of a continuous revision of the curriculum means shorter intervals between each revision. This idea was not new. The Swedish School Rules of 1820 contained a directive that the "gymnasium" curriculum should be reviewed every third year (Marklund, 1970, p. 16). But the problem of a continuous revision becomes more complicated and intricate when it concerns an entire schoolsystem of a state and concerns not only the compulsory level but also the high-school level. It is also important to note that curriculum revision was to be carried out by a bureaucratic agency. This administrative bureau obtains its directives from the Secretary of Education and from Parliament, but in reality the setup means that the responsibility for both evaluation and revision rests not primarily with the political bodies but with the administrative ones. We will return to this issue in the following chapters.

The revisions of the curriculum are at least on paper steered by three sources of influence: The demands on the school of the labour market, the general objectives of the school laid down by the Parliament, and the results of evaluations of the "inner work" of the schools.

The curriculum of the new 9-year compulsory school has already been surveyed by the National Board of Education. In 1968 Parliament voted that the compulsory school of 1962 should be liquidated step by step and a new curriculum be used starting with the fall term in 1970, in grades 1, 4, and 7.

In relation to the decisions of 1962 (*cf.* figure 2) the most important changes were that the differentiation in lines in grade 9 was abolished, that the system of options in grades 7 and 8 was simplified, and that the choice of options does not influence future schooling. The revision furthermore meant that a foreign language (English) was introduced already in grade 3 and is made compulsory also in grades 8 and 9. Certain other subjects

were regrouped and changes in the number of hours devoted to various subjects were introduced.

The extensive organizational reform of the high school system was carried out beginning with the fall term in 1971. The three independent school systems - "gymnasium", "continuation school", and "vocational school"- were (as mentioned above) brought together in one school-form - the high school (gymnasieskola) - with 22 different study lines for which new curricular guides were issued by the National Board of Education.

In 1968 an investigating committee on academic education was created, consisting of the heads of the National Board of Education, the University Chancellors and the National Labour Market Board, It was headed by the Under Secretary of the Department of Education. Three groups were connected to this committee: one for the political parties, one for the schools, and one for the labour market organizations. The committee delivered its proposal in 1973 (SOU 1973:2), Parliament voted in 1974 for a new university organization. The educational system from grade one to the highest academic degree had thus been organizationally reformed from 1940 to 1973.

The comprehensive school was revised in 1967. The revision concerned the organization of study lines and the curricula. During the sixties and the seventies the remedial teaching resources had increased rapidly. A community reform had changed the basis for state financing of resources. In a comparison of the school reforms of Sweden with that of the Federal Republic of Germany, Heidenheimer (1974) points out that a reform at the local level perhaps was necessary in order to counter local resistance towards the reforms. It became obvious at the end of the sixties that the school system had to be revised in relation to responsibility and effectiveness. In the school debate in parliament 1970 the question about the financing of the school was mentioned in connection with the social problems within the school.



This parliamentary debate led to the establishment of a new committee. The directives for that committee reflect the kind of problems that surfaced after the organizational reforms. The earlier discussions about a comprehensive school had been rather openly ideological. The debate in 1970 concerned events in the every-day life in the school and touched upon the issues of order and discipline - or rather the supposed lack of law and order. It furthermore brought up the problems of the able student who had to wait for the less clever comrade etc. Another prominent feature of the debate was a manifest opposition towards the established school system from certain groups of teachers, who complained about their work situation, both in relation to discipline and to lack of curricular materials etc. which made it difficult if not impossible to deal adequately with the heterogenously composed classes. We will return to these issues in the following chapters.

In the directives to the committee it was pointed out that the main task of the committee concerned the problems in school for the less able and less motivated student and that it should focus on the situation within the schools.

In 1974 the committee on the "Inner work in Schools" delivered its main report (SOU, 1974:53). The proposals imply rather profound changes of the school system. The committee suggested e.g. that the school day should start and end at the same time each day and that free activities (not within the syllabus proper) should be linked to the common school subjects. The school should also provide the pupils with leisure activities before and after the school day. It was furthermore proposed

- that the transition from grade to grade should be more adjusted;
- that an administrative training was necessary for all kinds of supervisonal personnel and that all teachers should get a brief course in the methodology of remedial teaching;
- that the resources should be used more flexibly than earlier and allocated in relation to the specific needs of each school;
- that teaching should be planned and carried out by work-groups consisting of 3-4 teachers who then made plans for 70-90 pupils;

- that training and laborative instruction should be used more effectively and that students should be activated;
- that each school should be governed by a board consisting of teachers, parents, and students;
- that a continuous evaluation system should be implemented and carried out at the national level, within communities and within each school.

The proposals of the committee have not yet been discussed in the Parliament but a government proposition has been put to the Parliament in the beginning of this year (Prop. 1976:39).

The 952-page report of the committee was intensely debated in the press, at meetings etc. The debate and above all its intensity obviously came as somewhat of a surprise to all involved. The political parties were at that time not prepared to enter into a public debate regarding the schools and the earlier consensus within the parliamentary committee became somewhat strained, and dissenting voices from the members of the Social Democratic Party as well as from representatives for the Conservative Party were heard.

An interesting and illuminating feature about the proposals of the committee is that the report did not contain any suggestion regarding changes in the contents of the curriculum. Instead references were made to plans for curriculum changes which were discussed within the National Board of Education.

Another important aspect of the committee's work and the subsequent debate was that issues of equal educational opportunity again were brought into focus. This implies that such problems are still visible and manifest even within a nation-wide comprehensive school system were differences in quality of teaching and differences between schools are minimal compared with other countries (e.g. the United States). The discussion thus brought forward not only organizational issues, but also problems concerning social reproduction in terms of the contents of schooling, the remedial teaching system, and the instructional process.

Finally, it could be mentioned that the discussion about the work situation in schools coincided with proposed re-

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forms at the pre-school level. These reforms among other things implied a shift from a clearly visible pedagogy towards an invisible one (cf. Bernstein, 1975) emphasizing personal relationships, inner feelings etc. The proposed instructional technique was that of the dialogue between children and a facilitating and understanding agent (the teacher). The instructional principles of the pre-school also serve as a model for the compulsory school as is clearly indicated by the proposal from the Government concerning the committee's report: "... the comprehensive school should increasingly apply work forms and work methods that are related to the pedagogy of the preschool." (Prop. 1976:39, p. 1)

The full implications of the work of the 1970 committee and of the debate that it stirred up will be commented upon in the following chapters.

In connection with the educational reforms in Sweden a new demand for educational research was voiced. The same is true for most of the European countries. Education as a discipline in Sweden before the forties - as in other European countries - was a humanistic discipline and a part of philosophy or history. Didactic theories - which include curriculum theories - were mainly theories based on fundamental value statements. The process of deduction was used in the construction of such theories. Instructional theories were accordingly built on assumptions concerning the capacities and constraints of man's abilities. The apperception theory and its application within pedagogics as formulated by Herbart (1806) is a good illustrative example. But the research demanded in the period of the reforms was of another type. The reforms were politically initiated and the basis for them was formulated by parliamentary committees. The change in the popular conception of education demanded another kind of research. Empirically oriented research activities began to burgeon as an answer to the need of estimating the parameters of various planning models. In Sweden this type of research brought education closer to the social and behavioral sciences.

It is also important - in relation to the analyses to come - to separate between at least two types of research. On the one hand research at a macro-level aiming at estimating parameters in planning models. On the other hand research on the micro-level concerning construction of materials and evaluation of



methods and outcomes. The last type of research may, according to the terminology used here, be classified primarily as curriculum research. Parts of the research at the macro-level (cf. Dahllöf, 1960, 1963) concerning demand analysis must, however, also be included under the general heading of curriculum research. We will therefore separate between curriculum research at a macro- and a micro-level.

So far we have given a brief outline of the school reforms in Sweden during the last 35 years concentrating on the level of the comprehensive compulsory school. With this case study in mind we will now turn to the question of how curriculum research developed in relation to school reforms and various scientific perspectives. That analysis will hopefully bring us to a point where a meaningful discussion about the future development of such research may start.

## CHAPTER 2.

### PEDAGOGICAL RESEARCH AND THE SWEDISH CURRICULUM REFORM.

A scientific analysis of the field of curriculum also concerns the relations between research and various aspects of the curriculum. While it is obvious that pedagogical research might contribute to the description of various curricular phenomena and also to their explanation, the role of research in promoting or even initiating curricular change is far more controversial.

Against the background given in the previous chapter this chapter is devoted to an analysis of the role of research in relation to the Swedish school reforms.

From the point of view of research it could be stated that pedagogical research according to our view should aim at a description of existing pedagogical practices and at working out theories which enable us to explain the causal relationships that give birth to these practices. At the macro-level the immediate causes are linked to the political and economical structure of the society. Pedagogical research should furthermore aim at analyzing the space of options open to various social forces within the present structure and its possible dynamics. The logical next step of such an analysis is research which aims at describing a limited number of possible strategies and the consequences of their eventual implementation.

In our society research is taking place within the limits of the existing social distribution of work. This means that research is a profession carried out by an academically trained labour force with access to economical and intellectual resources and institutionally more or less clearly attached to the state apparatus and thereby to the ruling class. An immediate consequence of this is that the population studied by pedagogical researchers (students, teachers etc.) à de-  
finiori are the objects of research. Recently voiced proposals that there exists a subject-subject relationship between researcher and researched is according to our views only to

pay a gross negligence to the existing social distribution of work. A subject-subject relationship of this kind is, of course, impossible without a change in that distribution of work. Such a change has not taken place and it is impossible for one researcher or a group of researchers to change it. Even research based on a materialistic conceptualization can within our society not avoid these institutional conditions and this distribution of work.

Early research in pedagogics within the tradition of logical empiricism had the advantage of having a rather uncomplicated relation to the issue of whether pedagogics is a normative or a theoretically explanatory discipline. The issue was that of making predictions on the basis of empirical data. When and if the objectives for the pedagogical practice were established by e.g. politicians the products of research were usable because the researchers could tell something about the means to be used in order to reach these objectives. In that way the discipline could exist both normatively and theoretically-explanatory (cf. Callewaert and Kallós, 1976).

The Swedish School Commission of 1946 implemented an R & D program to be administered and supervised by the National Board of Education. The School Committee of 1957 as well as the other committees responsible for proposing the plans for school reforms commissioned various pedagogical studies and extensively used information from scientific research to back up or to justify their proposals (cf. Husén and Boalt, 1968; Paulston, 1968; Dahllöf, 1971).

The role of research can be discussed by using some examples from this work.

The 1957 School Committee carried out a number of research studies to illuminate various aspects of the problems with which it worked. One of these studies was performed by Kjell Härnqvist and was concerned with individual differences and school differentiation (Härnqvist, 1960). Härnqvist worked as an expert for the Committee and his study was presented as an official report by the Committee. According to the report

Härnqvist's task was to study the psychological pre-requisites on different age-levels for a differentiation of the teaching and in connection with this also try to construct tests that could be used in the schools for guidance and selection (Härnqvist, 1960, p. 3).

The task was thus not only defined in terms of the issue of differentiation, but this issue was in itself conceived partly as a question of psychological pre-requisites of students. This is an important limitation, and it also partly explains why Härnqvist was able to successfully complete the study. This limitation sets the framework for the study by not only defining the problem in terms of possible alternative differentiation strategies but states that the feasibility of any possible alternative must be judged against data on the psychological characteristics of the students. The problem is thus posed in terms of a traditional issue in educational psychology. The problem furthermore was entirely relevant to the Committee's practical work. It concerned an issue at hand in terms compatible with the debate over such issues in Sweden at that time. Härnqvist could thus aim his study and his interpretation of data against the background provided. His study is accordingly an example of what we above mentioned as an amalgamation between explanatory and normative research.

Härnqvist contrasted the notion of differences between students in general ability to the notion of differences between and within students in different intellectual abilities using a factorial intelligence test (e.g. verbal, inductive, spatial, and numerical intelligence factors). He also included an interest-inventory focussing on e.g. aesthetic, domestic, practical, social, and verbal interests. On the average 250 boys and 250 girls at each grade level from grades 4 to 9 were tested. Inter- and intraindividual differences were mapped out. He thus analyzed the profiles of intelligence and interest. From his study he made the following conclusions as to the relation between differences in intelligence and interests on the one hand and differentiation on the other:

"... we come to the conclusion that the variations within the profiles are sufficiently large to constitute at least a serious difficulty in an attempt to differentiate students on the grounds of average scholastic aptitude. It is probable that the students' pre-requisites for the single subjects in school are dealt with more reasonably by a differentiation within subjects or courses." (Härnqvist, 1960, p. 114. Our translation.)

The second general question asked by Härnqvist was concerned with the duration of eventual differentiation measures. Here he draws his conclusions on the basis of the stability of the measures as defined by re-tests after one year. He stated that

*"Even if stability is not remarkably low, so many changes occur already after one year that one must be sceptical towards such forms of differentiation that are of a more definitive character or in other ways are hard to change."* (ibid., p. 114. Our translation.)

These two conclusions hold true both for differences in intelligence and in interests. The third issue mentioned by Härnqvist in his conclusions concerns the question of when an eventual differentiation should take place. He states that if intellectual variables are taken into account data allows us to come to the conclusion that a subject or course based differentiation is equally possible at all age levels studied. If however, interests are also taken in to account this conclusion must be changed. Interests tend to become stabilized rather late. There is furthermore a rather weak but positive correlation between abilities and interests. Härnqvist concluded that

*"A differentiation according to interests should not take place until at a relatively late stage and then only concern broadly defined areas of interest."* (ibid., p. 115. Our translation.)

In our view Härnqvist's study may be regarded as exemplary. Its strength is that it could rely on two basic and sound pre-requisites. The first and most important pre-requisite was a precisely defined problem area which was linked to reality. This reality was the debate over differentiation in terms of alternative strategies based on certain assumptions about the choice between strategies. This choice was regar-

ded as dependent among other things upon psychological differences in intelligence and interests between and within students. The second pre-requisite was that the problem was soluble within an established paradigm. The problem could be attacked well within the limits of traditional educational psychology and with the use of an established methodology. Hårnqvist was thus able to describe reality in terms of inter- and intraindividual differences and thereby also capable of disclosing several myths which had influenced the reasoning in the earlier debate.

The School Committee to some extent used the arguments and results presented by Hårnqvist. Interestingly enough the results were mainly used in arguing against early general differentiation (cf. SOU, 1961:30, p. 251-293). Thus the Committee does not discuss in any detail the type of ability grouping on subject or course basis which Hårnqvist mentions. This is partly explainable if we take into account that the reasons against differentiation put forward by the School Committee are other than psychological. This in its turn emphasizes the function of Hårnqvist's study to disclose the psychological reality behind arguments used in the public debate over differentiation.

The study by Hårnqvist (1960) should also be viewed against the background that the School Committee of 1940 had asked for the views of the professors in psychology concerning the present standpoint of psychological research in respect to the mental growth of children and young people. The 1946 School Commission also asked for research in the area of mental development and school organization.

In connection with the discussion in the first chapter it should be noted that Hårnqvist (1960) in the particular case referred here, was able to use both a view of pedagogical phenomena and a meta-scientific paradigm, that we have criticized. Our criticism is, however, directed towards the use of e.g. psychology on the one hand and logical empiricism (or positivism) on the other, as a general framework for pedagogical research and theory. The study by Hårnqvist demonstrates that the criticized approach may be useful if

specific requirements are met. We have mentioned the prerequisites that according to our views are necessary in order to make the study useful and relevant. It should be pointed out that Hårnqvist himself clearly recognizes the limitations of his study, and explicitly states that it is not to be regarded as an inquiry into the issue of differentiation as such, but as an analysis of some aspects of the problem and the consequences of the chosen perspective (cf. Hårnqvist, 1960, e.g. p. 9, p. 112). His study is thus openly and strictly confined to a narrowly defined problem, which was utterly relevant at the time when the study was performed. In our view the study is a good exemplary model of a decision-oriented study (cf. Cronbach and Suppes, 1969).

As will be discussed later on the whole idea about an undifferentiated school common to all individuals for nine years was firmly rooted in the social democratic ideology. The school was regarded as an instrument in society working towards egalitarian goals. The organizational changes and the changes in overall objectives of the school are perhaps on the surface the visible main aspects of the school reform proposed by the 1957 School Committee. The Committee, however, was aware of necessary changes in the inner work of schools. These changes were partly regarded as necessary in order to adapt the work to the new organizational frames (heterogeneously composed classes) and to the new objectives of the school. At the same time it was also clearly understood that the curriculum of the school had to be changed both as a result of the proposed organizational changes and the change in the overall objectives and as a result of changes within the structure of the society which created new demands on the qualification of the labour force.

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A pertinent example in order to demonstrate the impact of pedagogical research is therefore the research carried out which was directly related to the curriculum, both in the comprehensive school and on levels above it. It should be kept in mind, however, that it is the National Board of Education, that has the responsibility for the curriculum and its evaluation, but that this responsibility is in principle governed by decisions at the parliamentary level and at the level of the Ministry of Education.

The story of curriculum research is a complicated one even if we start with the 1957 School Committee. Empirical curriculum studies had not been carried out earlier, except for some limited attempts (cf. e.g. Husén and Boalt, 1968, p. 45). In 1956, i.e. before the 1957 School Committee was appointed, the Industrial Council for Social and Economic Studies (SNS), an organization financed by Swedish industry and commerce, approached the Institute of Education at Teachers College in Stockholm, with a proposal for a curriculum research project. This proposed project, which was accepted, was to investigate the contents of the basic subjects of mathematics and Swedish within the three final years of the compulsory school. The aim was to establish the necessary qualifications that the pupils should possess after completion of the compulsory school in order to satisfy the demands of the labour market. It was furthermore explicitly stated that the project aimed at gathering data which would have an impact on curriculum revisions that were already anticipated. The scientific head of the project was professor Torsten Husén and the principal researcher Urban Dahllöf, both at Teachers College in Stockholm at that time. As administrative coordinator for SNS functioned Gunnar Helén a prominent member of the Liberal party, which at that time was the largest opposition party (cf. Dahllöf, 1960, pp. 31-33, p. 37 and Husén and Boalt, 1968, p. 46). Gunnar Helén was subsequently appointed as a member of the 1957 School Committee for the Liberal party and also functioned as vice-chairman of the Committee.

When the School Committee had been formed it was proposed that the SNS-project should be co-sponsored by the Committee. This was also to be the case through decisions taken in October 1957. It could be remarked that the Committee was appointed in late April 1957. The 1957 School Committee thus entered as co-sponsor of the project. This meant that three new subjects were added to the list of subjects (civics, physics and chemistry) and that greater emphasis was put on the question how teaching in those subjects was carried out in the parallel school forms existing at that time (cf. e.g. Husén and Johansson, 1961, p. 8). It should be re-emphasized that the School Committee thus entered as co-sponsor at a time when the general design of the project was already decided



upon within the framework outlined by SNS in cooperation with the Institute of Education at Teachers College in Stockholm.

The question of the objectives of the school and of the contents of teaching were of course an important part of the Committee's work. In 1960 a delegation was appointed to propose the curriculum guide for the compulsory school. Within the general framework of the objectives for the compulsory school the task was to propose contents and guidelines for teaching in the different subjects. Several subject matter specialists were appointed to prepare and suggest the courses of study for the different subjects. The same persons that had worked on the SNS project now entered in this new capacity. Thus some of the experts in the group working on the subject of Swedish had taken an active part also in the SNS-sponsored study. Urban Dahllöf himself worked as an expert in mathematics, and Torsten Husén was also a member in one of the groups (cf. SOU, 1961:31, pp. 3-8).

The result from the curriculum project co-sponsored by SNS and the Committee were published as scientific reports. The first report that concerned the originally selected subjects (mathematics and Swedish) was thus presented as a doctoral dissertation, and published by the Committee in its official series (Dahllöf, 1960, published as SOU, 1960:15). At the same time a popularized version was printed by SNS (Husén and Dahllöf, 1961). The report on civics was published in mimeographed form in 1961 by the Committee (Bromsjö, 1961) and the report on physics and chemistry in 1961 (Johansson, 1961 and Husén and Johansson, 1961). In 1965, i.e. some years after the completion of the work of the School Committee, Bromsjö published a final report of his studies, also as a thesis (Bromsjö, 1965).

The studies mentioned here thus had four influential supporting groups. Swedish industry and commerce lent support via SNS. The scientific status was established via the Teachers College and by the fact that the reports were published as academic theses. The Liberal party through Gunnar Helén and finally the sanction of the parliamentary committee through its co-sponsorship and the fact that several of the project workers also were included in the above mentioned expert groups on the subject course plans (SOU, 1961:31), provided the "political" platform of the project.

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Dahllöf (1960, p. 37) describes the situation in the following way:

*"The initiative to the studies was taken by the Industrial Council for Social and Economic Studies (SNS), which in 1956 made an agreement with the Institute of Education and Psychology at Teachers College in Stockholm to conduct scientific educational studies under the supervision of professor Torsten Husén to illuminate questions pertaining to the contents of the courses within the final grades of the basic school with special emphasis on the basic skill subjects of mathematics and Swedish and the demands for skills in these subjects in future vocational life. It was understood that the results eventually would function as one basis for the School Committee's decisions on the curriculum issues. This general purpose was formulated in full agreement between the interested parties, and within this framework we have had full freedom in planning and choice of methods of data collection, data treatment and reporting." (Our translation.)*

The interested parties mentioned were SNS and Teachers College in Stockholm.

It is against this background that the research project should be understood.

The perspectives and views that governed the scientific effort within the given framework are described in the following way by Dahllöf (*ibid.*, pp. 37-38, our translation):

*"As a first point of departure for the entire project it has been assumed that pedagogical research in principle can contribute to the solution of those questions concerning objectives that are pertinent in revising the curriculum. It has, however, been equally self-evident that the syllabus cannot be decided solely upon the basis of empirical pedagogical research. The issues at stake here are decisions concerning objectives which do not fall within the domain of scientific work."*

Dahllöf also states that the plans of study at a given stage within the school-organization and within a given subject may be regarded as answers to demands that from various points of departure are put on the school:

*"When these demands are not unanimous as to contents, the ensuing plans are the results of a weighing or - if one wishes - a compromise. This weighing is in principle performed by taking into account the total general set of objectives for the entire school-system which in general are laid down by political instances. This does, however, not exclude that a closer educational philosophical analysis*

cannot discover greater or lesser inconsistencies or opposing ideas in comparing general principles and existing course directives." (ibid., pp. 38-39, our translation)

Dahllöf's (1960) study is, however, concerned with the demands on the school. He distinguishes between external and internal demands. More specifically he mainly wants to study the total content within the subjects chosen in relation to the external demands of the school formulated by the receiving school systems, later vocation, leisure time, etc. The main problems of the study are summarized in the following way by Dahllöf (1960, p. 500):

*"The main problems of the research work are to investigate the following aspects in the curriculum contents of Mathematics and Swedish language in the basic school. Furthermore the results of different partial investigations are to be compared.*

- 1. The need of knowledge in different elements of each subject, partly for further studies and vocational activities, partly for leisure time.*
- 2. The results of teaching in the basic school in relation to the requirements.*
- 3. The teaching of the basic school in different elements of the subjects."*

Dahllöf (1960) administered questionnaires to teachers of vocational schools and gymnasias as well as to supervisors of certain categories within trade and industry and to employees within certain occupations in order to answer the questions. The questionnaires were supplemented by achievement tests to measure the retention of knowledge after school (Dahllöf, 1960, pp. 500-508; cf. also Husén & Boalt, 1968, pp. 46-49).

The studies in civics by Bromsjö (1965) and in physics and chemistry by Johansson (1961) were parallel to the study by Dahllöf (1960).

The net results of the scientific studies on the curriculum of the comprehensive school are hard to assess even if we use the actually adopted curriculum as a criterion. The primary importance of the work lies perhaps in its effect on establishing a certain modus operandi in matters pertaining to the curriculum. The descriptions of a suitable content in various subjects etc. were to be made by experts (researchers and subject matter specialists) within the framework of the general objectives for the comprehensive school and its orga-

nization. As we regard the classification and framing of contents as very important for e.g. subsequent teaching (cf. chapter 3) we are forced to conclude that these issues were never discussed in political terms within the committee. Instead the question was considered as a "technical" problem that could be solved rationally by experts. As mentioned earlier the School Committee had appointed a special delegation that had to propose contents and guidelines for the teaching of the different subjects in the comprehensive school. The work of the delegation was, as noted earlier, certainly influenced by the SNS-project. When the 1957 School Committee published the results of the work of the delegation it stated in the preface how the Committee regarded work on curriculum contents in the form of a curriculum guide ("Läroplan"):

*It can be legitimate to ask the question whether a Committee composed according to the principles which have been used should devote such an intense interest to questions pertaining to the curriculum guide as the Committee actually has done. The detailed treatment of these issues presented here is foremost to be considered as a task for specialists. Apart from what the directives impose upon the Committee concerning the syllabus the proposals for the curriculum which are presented here aim at illustrating the meaning of the declarations of principle and the proposals of the Committee and an evaluation of those, as well as to facilitate the work for central, regional, and local authorities and publishing companies, teaching aid companies and others that each in their own way have the responsibility and interest to realize the decisions which will be the consequence of the proposals of the School Committee. The presentation of comparatively complete curriculum proposals already in connection with the main proposal of the Committee should furthermore make it easier for teachers and principals - who before all will become responsible for the realization of the decisions with the intended content - to gain a thorough knowledge at an early stage of the intended content of the comprehensive school and the continuation school." (SOU, 1961:31, p. 5, our translation)*

The report from which the preface is quoted above contained detailed plans for the contents of the various subjects and were the results of the work of the expert delegation working under the Committee. In 1962 these plans were issued with slight modifications by the National Board of Education as the official Curriculum for the comprehensive school (Lgr, 1962). To re-emphasize our point it can thus be stated that the whole issue of the curriculum was mainly considered as a matter for experts (scientists and subject matter specialists). At the same time the importance of the curriculum in terms of

its alleged steering effects was clearly recognized, as is clearly evident in the quotation above. It is furthermore evident that the relations between the organizational framework and the contents were only loosely elaborated upon. This means that the question of instruction within the comprehensive school was specified as to contents and organizational framework, but that the match between the organization and the contents was largely neglected. It should be noted that the studies of the effects of variously differentiated (or grouped) classes carried out as a result of the work of the 1946 School Commission had demonstrated allegedly small differences in the level of achievement between homogenously and heterogenously grouped classes. In short, it was thought possible to overcome the difficulties of heterogenously grouped classes by individualizing the teaching and remedial measures. The important issue if a curriculum for a comprehensive school is different from that for a differentiated school system was not discussed in any detail by the School Committee, that in matters on curriculum construction only differentiated between various technical solutions (cf. SOU 1961:30, chapter 12). It would have been understandable if the Committee at least had discussed a truly polytechnical curriculum from the point of departure that the whole idea of a comprehensive school system initially rested upon a democratic conceptualization of the school, when the ideas first were raised in the debate over a new school system.

It could be stated that the curriculums of the old "realskola" were transplanted into the organizational framework of the comprehensive school, and thus several of the "ideals" of the old school survived in the form of the curriculum. By this we mean primarily a curriculum characterized by a strong emphasis on knowledge in traditional subjects, despite of some statements that the school should give every child a right to develop according to its interests and abilities. In fact that view of the aims of the school is also a fundamentally liberal idea, which essentially disregards the question of how interests

are formed and upheld, and furthermore tacitly agrees to a psychometrically justified view of the human being. This view regards the human being as composed by innate abilities and sees the task of the school to enable the child to develop these abilities to the outmost limit, almost like a flower to be nourished and cultivated (cf. also Esland, 1971).

The model for curriculum construction applied by the 1957 School Committee was also used in connection with the reforms of the secondary school system (the "gymnasium"). Dahllöf was commissioned by the parliamentary committee to do a demand analysis concerning the contents of that school system (Dahllöf, 1963). In this study the methodology already developed was refined. The demands on the curriculum from potential "employers" (universities, industry, civil service) were analyzed. A study by Härngvist and Grahn (1963) of student attitudes towards education and choice of study may also be included in this category of macro-analyses.

During the phase of implementation of the schoolreforms both at the compulsory and at the secondary levels an increasing amount of money was allocated to educational research and development. The funds were entrusted to the National Board of Education and this means that after 1962 the National Board of Education became responsible for the continuous evaluation and change of the school as well as for research and development.

This in its turn logically led to an increasing bureaucratization (cf. Lundgren, 1973; 1976). During the implementation phase of the comprehensive school a large part of the funds for research were allocated to curriculum research on the micro-level, i.e. to development and evaluation of teaching aids and various material-methods systems.

The rapid expansion of the school system led to a complicated system of educational administration. The implementation and evaluation of the reform became the responsibility of an administrative body rather than that of a political one. During the sixties it became increasingly clear that the evaluation and adjustment of the curriculum was regarded as a technical and administrative problem. This rational model of curriculum

planning also meant that educational research became increasingly technologically oriented. To use the terms introduced by Larsson and Suppes (1973) it can be described as developmentally oriented and more or less developmental in character.

The models for educational planning developed during the sixties and established during the seventies are models in which curriculum change consists of a number of minor changes implemented through material aids and where the motive behind each small change expressed in terms of educational research and evaluation. The curriculum reform of 1969 did in principle not rest upon any research on the effects of the earlier curriculums. Instead it was founded upon studies of frequency of choices between different lines in grade 9 and between the options in grade 7 and 8 (cf. Dahllöf, 1971).

On the one hand educational research had a legitimizing function; on the other a new picture of what was to be considered as educational research emerged. Development studies - e.g. the creation and evaluation of prepackaged material systems - were accepted as scientific research, which in its turn meant that a theory had to be created as an afterthought in order to legitimize a design already decided upon by the administrators. Theory development has thus become more and more similar to model building. The basis for this consists of course of the epistemological perspective and the scientific ideals that dominate within the field of education.

The piecemeal adjustments and changes create an illusion of development steered by rational deliberation and careful control. But it should be pointed out that many - but not all - of the curriculum studies carried out during the sixties in reality were legitimizing already taken decisions. A good example is provided by Kilborn (1975) in his review of one of the more prominent curriculum studies from that time, which has been summarized by Larsson (1973). This study concerned individualized instruction in mathematics. The National Board of Education has maintained that the results of that project heavily influenced the curriculum reform of 1969 (cf. chapter 1).

The study concerned a material-methods system in mathematics and evaluated that system. The head of the department for research and development in education within the National Board of Education wrote about this project on individualized teaching in mathematics (IMU):

*"IMU without doubt had an importance for the curriculum development in mathematics. The proposal by the National Board of Education to His Majesty in 1967 for a curriculum revision of the comprehensive school which later became the Curriculum reform of 1969 was to a large extent based on experiences from IMU." (Marklund, 1973, our translation)*

The point is that the proposals for revision were delivered in 1967 while the experiments within the IMU-project started in 1968.

During the first years following the introduction of the new school no attempt was made to construct a comprehensive model for evaluation and implementation suited to the special problems of a continuous revision. This in fact means that the experiences gathered during the work of the committees and the existing body of trained researchers within the field of curriculum were not used by the National Board of Education. Since educational research in Sweden has been somewhat of a model on the international scene it is important to point out that the research referred to was carried out in connection with various committees and not by the National Board of Education. In fact, in a summary of the school reforms, Dahllöf (1971, p. 141) is forced to state:

*"Systematic studies that aim at evaluation and follow-up of the school reforms are still missing. It is impossible today to obtain a comprehensive picture of the situation regarding the achievements of the pupils and in other respects of work in school." (our translation)*

After the 1969 reform of the comprehensive school curriculum and in connection with the integrative reforms of the secondary school ("gymnasieskolan") two working groups were constituted within the National Board of Education in order to organize more firmly the evaluation and planning for continuous revision. One group was organized for the comprehensive school (LUG) and another for the secondary school (LAG). During the first years of the work in the LAG-group certain contacts with research were upheld. The group tried to apply a general model for goal oriented analyses in connection with reforms



of school systems that had been developed by Dahllöf (cf. Dahllöf and Wallin, 1970; Dahllöf, Lundgren and Siöö, 1971; Dahllöf, 1971).

A simplified way to describe this model is by pointing to the three separate kinds of analyses that Dahllöf proposed. Firstly certain demand analyses are to be made. These analyses form the base for decisions of a political nature concerning what should be included in the curriculum in relation to demands from various groups including higher deucational systems. The demand analyses furthermore in connection with planned reform (or change) are used as indicators for the eventual necessity of change in the curriculum. These analyses are in principle identical with those described earlier (cf. Dahllöf, 1960; 1963). Secondly, the demand analyses are to be supplemented with theoretical goal analyses which are logical in nature and serve the function of clarifying the relations between various types of goals and eventual inconsistencies in the curriculum. The third, and most important type of analyses, was labelled functional. These analyses are of empirical nature and concern the relations between curriculum, organizational frames, teaching process and outcomes. These functional analyses have to do with the possibilities of implementation at the level of actual teaching and with the outcomes of a more or less successfully implemented change. In connection with the work of the LAG-group the functional analyses must be regarded as an evaluation strategy. The LAG-group produced a number of reports more or less closely following the proposals by Dahllöf (e.g. Carlsund, 1970; Richardsson and Siöö, 1970). In contrast the LUG-group seemingly did not work according to a specified model and this group produced few, if any, research reports. The LUG- and the LAG-groups together with certain similar groups began to use an increasing part of the total amount of resources available for R & D. This meant that an increasing number of projects were carried out within the National Board of Education with or without expert consultation from research departments in education at the universities or at the Teachers Colleges. This meant that the bureaucratic control over research and development became even more pronounced. Research and development projects were not only commissioned or financed by the National Board of Education, but also to an increased degree carried out by its staff.

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The model developed by Dahllöf and referred to above had a certain but rather shortlived effect on the work of the LAG-group. It, however, executed a minimal influence on the total evaluation work carried out by the National Board of Education. However, it exerted an increasing influence on pedagogical research carried out independently of the National Board of Education.

The account given so far of the Swedish school reforms tried to illuminate some of the relations between the organisational framework of the comprehensive school and its curriculum. Furthermore we have tried to describe the role of research in the reform process and in the subsequent period of implementation and revision.

From a pedagogical point of view one of the key issues in the establishment of a school system concerns the realization of the curriculum within the organizational framework provided. We are then concerned with the problems of actual teaching. Pedagogically speaking this problem was supposed to be one of "individualized teaching within the class" by the 1957 Committee, i.e. to adopt a flexible teaching strategy whereby each student would get an instruction according to his ability and interests within the general framework created by the demands of the curriculum. As was pointed out earlier, one of the arguments against an undifferentiated school was that differences between students could not be adequately coped with within a heterogeneously composed class. It was furthermore argued that abler students would be held back by less able students in heterogenous classes. The famous study by Svensson (1962) on the relations between achievement and ability grouping, as well as the study by Marklund (1962) on the effects of class-size and homogeneity in ability within the class on achievement were interpreted as providing evidence against those arguments (cf. Huesn and Boalt, 1968, pp. 88-126 for summaries of these studies).

Later studies have cast some doubts as to the validity of such conclusions based on the works by Svensson(1962) and Marklund

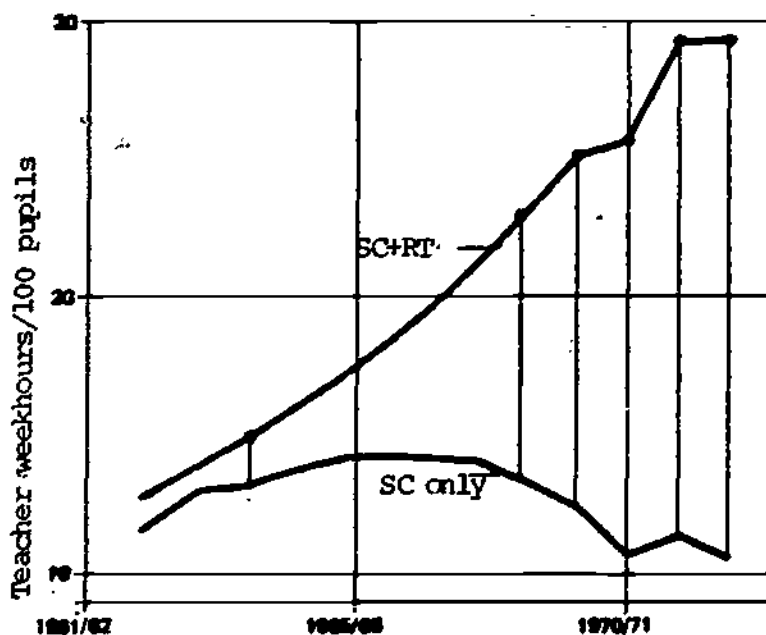
(1962). The report by Dahllöf (1967) demonstrated that differences in achievement between variously grouped classes were evident, although it is questionable whether these differences are a logical consequence of the ability grouping strategies used as such (cf. also p. 32 and Dahllöf, 1969). It was, however, noted above that the need to provide teachers with materials and methods in order to cope with the situation within the classes was recognized and partially governed the research and development effort by the National Board of Education. The study by Dahllöf (1967; 1971), however, clearly demonstrated the complexities of the efforts involved. Among other things Dahllöf noted that

*"Even if it is hard for me to accept the rationality of a strategy in educational matters, which means that changes in the methods of teaching are obtained only through the use of organizational changes, which place the teacher in a pedagogically restrained situation where the old teaching patterns are no longer suitable, it can hardly be denied that the comprehensive school reform played this role at the upper level (grades 7 - 9)."* (Dahllöf, 1967, p. 260, our translation.)

Thus, the organizational frames (cf. chapter 3) more or less forced the teachers to adapt their teaching methods to the new situation, i.e. the heterogenously composed classes, if the demands of the curriculum were to be met. The recitation patterns so common and stable (cf. Hoetker and Ahlbrand, 1969), however, still continued to a considerable extent (cf. Svensson, 1962; Dahllöf, 1967; 1969; Lundgren, 1972; 1974). The uses of this pattern forces the teacher to other adaptive strategies if the variations between the pupils are to be met. In order to adjust to the abilities of the students he has the choice of omitting certain parts of the curriculum, of leaving certain students behind, or to lower the goals (cf. Lundgren, 1972, p. 180). The 1970 Committee on the inner work in schools (cf. chapter 1, p. 12) documented yet another solution, which to a certain extent meant a bending of the rules for the comprehensive school, namely to solve the problems outside the regular classroom by the use of various forms of remedial teaching. Data on the development of remedial teaching from 1963 and up till today demonstrate that this

"solution" was applied increasingly (cf. SOU, 1974:53, pp. 136-143). The evaluation of the use of the possibility of re-allocating resources to remedial teaching, that the 1970 Committee allowed certain school districts as part of their program of experimentation, demonstrated quite clearly that the schools used their "liberty" in such a way which in effect meant differentiation of students, i.e. a breaking up of the concept of heterogenous grouping (cf. Kilborn and Lundgren, 1974). Furthermore, it could be noted that there was a high risk that the remedial measures became permanent. This means that instead of "reparation" of problems via remedial teaching the problems persisted and the remedial solution became more or less permanent. The quantitative development of the remedial measures is amply illustrated in the figure below, taken from the report of the 1970 Committee on the inner work in school.

FIGURE 3: The development of the use of special classes (SC) and remedial teaching (RT) between 1961/1962 and 1972/1973 in the Swedish comprehensive school system. (Source: SOU, 1974:53, p. 138)



In principle two main routes of action are possible "outside" the scope of "individualizing measures within the class". These are "special classes" and various forms of remedial teaching.

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The 1970 Committee notes that during the single year of 1972 approximately 40 percent of all students in the comprehensive school came in contact with "special" teaching in one form or another, for a shorter or longer time period. Following a parliamentary debate on the situation in the schools extra resources were given to them to be used to solve teaching problems mainly in grades 7-9 and primarily in "inner city schools". This programme was initiated in 1973 and was conceived as a provisory solution pending the suggestions from the 1970 Committee. For the School Year 1974/75 approximately 30 million Sw. Crowns were allocated for this programme. In comparison it can be mentioned that the total amount for all kinds of special education in all Sweden at the comprehensive school level is about 600 millions.

What is discussed here is a problem that may be defined as the implementation of the explicit objectives of the curriculum at the level of actual teaching within the space of options created by the organizational characteristics of the school.

The suggested solution was one of individualization within the classroom with the aid of materials etc. This solution was not successful. What teachers also could do was to combine various remedial measures and/or omit certain units within the curriculum by adapting the teaching tempo (pacing) to a criterion- or steering group.

The solutions mentioned above must, however, be discussed not only as short term solutions by individual teachers during a school year. The long term effects, i.e. the effects considered in terms of the total educational and vocational life of the pupils, must also be taken into account. Within the comprehensive school system this means that we have to analyze the effects, of the various measures taken, on choices by pupils between various offered alternatives. We have, furthermore, to consider the choices between alternatives at the level immediately above the comprehensive school. Cognitively speaking this means that emphasis must be placed on an analysis of the interdependence between units of content, e.g. in terms of ne-

cessary pre-requisite knowledge for units to come later and/or in terms of certain basic (or minimal) skill that the school should guarantee all students. This is an old curriculum problem. It concerns the so called "core curriculum" or the "minimum essentials". The 1957 School Committee touched upon this problem in their discussions (cf. SOU, 1961:30, pp. 192ff). The adopted curriculum, however, never properly defined the basic units in each subject that were to be mastered by all students. In the beginning of the seventies this problem was finally perceived by the National Board of Education and a special project was designed in order to specify the core curriculum in different subjects. This project worked in cooperation with the LAG- and LUG-groups mentioned earlier (cf. p. 30). The launching of this new project was, however, not caused by an insight into the causes behind the increase in remedial teaching measures, but "simply" as a result of the demands for a new marking system in the school. This new marking system was to be of a criterion-referenced type, which of course, puts specific demands on the definition of contents to be mastered.

The problem we arrive at is thus a curriculum one which however may be discussed and defined in several different ways.

The parliamentary debate in 1970 which led to the establishment of the 1970 parliamentary Committee on the inner work in schools demonstrated that the issues were conceived primarily as technical ones. Teachers felt that the disciplinary problems within the school were increasing and that they were not equipped with sufficient means to cope with them. They furthermore noticed an increased boredom and disinterest among a large number of students (reflected in truancy rates and in disciplinary problems) and they felt that they could not give the talented students sufficient chances to develop. Are these problems technical in nature or are they logical consequences of the comprehensive model and thus not soluble within the framework? Were profound changes needed or was it sufficient to deal with the issues within a structural-functional or a system-analytic paradigm (cf. Paulston, 1975). In other

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words have the problems the character of imbalance, which would imply measures in order to restore equilibrium or are they a reflection of inescapable conflicts? Feinberg and Rosemont (1975) present the problem in another way in their introduction to a volume of dissenting essays on American education:

*"... most educational critics have assumed and/or argued that the schools have failed in carrying out their mission, and that therefore education was in need of radical change. The present volume, on the other hand, rests on the contrary assumption that the schools have succeeded well in their task, and that therefore it is society that is in need of radical change."*  
(Feinberg and Rosemont, 1975, p. 12)

To adopt this view means that another view of the functions of the school is accepted than that presented by official bodies.

At the level of appearance some of the problems of the Swedish comprehensive school may be described in the following way: The curriculum prescribes what should be going on in the schools and what the pupils should learn. The teachers' task is to bring about all these skills and knowledge in all students, according to their abilities. They should give all the children opportunities to develop in the areas prescribed by the curriculum. The teachers have problems in this respect. They feel that several children do not "want to develop" or are "unable to develop" when they are using the strategies of teaching that they know, and even the remedial measures are not sufficient. The teachers conceive the situation as one of failure. It may be their fault, it may be that of the curriculum, or of the "unwilling" student. Only in rare instances will an alternative explanation be considered by the teachers, namely that it is impossible to reach the objectives for all children within the present structure. In a positive sense schools are primarily adapted to the needs of certain children. For others the school functions differently. A common comprehensive school system in a society of advanced capitalism cannot in any meaningful manner be described and characterized as is being done in official texts. These are primarily to be regarded as ideological.

In this perspective the curricular problems have a different meaning, already noticed at a fundamental level by Marx in his critique of the Gotha-programme.

### 3.1. Introduction.

One of the frustrating aspects of pedagogical inquiry is the discovery and re-discovery of the fact that even key concepts within the field lack definitional rigour. One explanation of this can be derived from an analysis of the basic perspectives that dominate educational research in general (cf. Kallós, 1974; Kallós & Lundgren, 1975). Although it is questionable whether conceptual development is a necessary prerequisite for empirical and theoretical development within a field or one of the products of such development, it is still an awkward situation, when even basic terms have to be defined in order to avoid confusion. Komisar (1971) tries to explain this situation by pointing out that "educational language" is mainly borrowed from "natural language", and that it is part of the "common language of the culture". On the other hand it could be advocated that the lack of preciseness in educational concepts is due to the fact that researchers have substituted vague but intrinsically meaningful terms for psychological concepts defined e.g. operationally in order to meet the demands of a "narrow view of science", but even this strategy has proven itself unsuccessful, as discussion over fundamentals still continues. In comparing the social and natural sciences Kuhn (1970, p. viii) pointedly observes that the natural sciences fail "... to evoke the controversies over fundamentals that today often seem endemic among, say, psychologists or sociologists." He could well have added educationalists.

In the previous chapter we tried to define in general terms what, according to our views, is the task of research in pedagogy (cf. pp. 16-17). In this final chapter we will use the example presented in the earlier chapters as a basis for a more precise discussion about curriculum theory and research.

From our point of view it is quite clear that profound changes (or reforms) of educational systems are not initiated by researchers. It is, however, an important task for the se-

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rious researcher to analyze and explain changes that are taking place and also to explore the limits and possibilities of future change open to various social forces in the society.

### 3.2. Curriculum studies.

"Curriculum" must be regarded as one of the key concepts within the discipline of pedagogics (or education), and yet it has been used differently by different authors, and it is still in many instances quite obscure what is meant by that term. It is, however, rather obvious that the changing ideas of schooling over time and differences in the organization of school systems have influenced even the very definition of "curriculum". Furthermore, common definitions of the term reflects a drastically limited view of the functions of schooling. A conventional definition which regards curriculum as "... *all the experiences a learner has under the guidance of the school*" (Kearney & Cook, 1960) clearly implies that schooling is concerned primarily with providing experiences that result in learning. Definitions of this kind can be challenged for a number of different reasons. In one attempt to delineate the field of curriculum studies and to provide a basis for curriculum theory Johnson (1967, p. 130) defined curriculum as "... *a structured series of intended learning outcomes.*" According to this view curriculum is prescriptive or at least anticipatory to the results but has nothing to say about the means to accomplish them. Curriculum, according to this view, is thus concerned with ends but not with means. Johnson furthermore argues that curriculum only indicates what has to be learnt, and consequently does not deal with the issue of why certain ends are desirable. In this way curriculum becomes separated from what Johnson calls the "curriculum development system" of which it is regarded as an output and from the "instructional system" into which it is an input. Curriculum more or less "guides" instruction by stating more or less precisely what should be taught. The rather explicit assumption that schooling is concerned with desired learning in individuals is, however, according to our views not only an unnecessary constriction, but furthermore repre-

sents just one way of looking at things.

Dottrens (1962) notes that the term curriculum in early writings seems to have meant a document showing a rather detailed plan for the school year. Today the term "syllabus" seems to convey this meaning. If curriculum is defined according to Kearney and Cook (1960) then it can only be described concretely after teaching has taken place, i.e. when the experiences have occurred. This *post hoc* meaning of curriculum seems rather trivial and uninteresting as a startingpoint. The *ad hoc* notion inherent in the term "syllabus" and also in the definition provided by Johnson (1967) provides a more reasonable point of departure for the analysis. The definition by Johnson is, however, rather firmly anchored within a certain educational tradition and reflects a special state of affairs in matters of schooling. It is thus questionable if it can be used as a general definition of curriculum.

Curriculum according to Johnson serves to guide teachers on what to teach. In some countries (e.g. Sweden) this is done by providing teachers with a rather elaborate plan surrounded by rules and regulations. The plan not only contains a "structured series of learning outcomes" but also clear specifications as to subject divisions, number of hours per subject, and advice concerning methods of teaching. We would suggest that this "organized plan for teaching" surrounded by the laws and regulations provides a reasonable startingpoint in an attempt to delineate the curriculum. Such organized plans and the sanction systems that back them up can vary in a number of ways which reflect differences between the educational systems of which those plans are a part. Curriculum thus conceived may provide teachers and students with greater or lesser autonomy. The distinctions made by Dottrens (op.cit.) between syllabus (or "Plan d'études", or "Lehrplan") and curriculum thus seems to represent a confusion between the decision structure within the educational system on the one hand, and ideas regarding the "curriculum" put forward in different contexts on the other. This confusion is probably caused by the fact that different writings on curricular issues are insufficiently anchored in the actual structure of the educational system in question, and that the relations between that system and the political

and economical structure of which it is a part are only dimly perceived.

The curriculum is accordingly the overt expression of power and control relations as those pertain to the school system. Curriculum thus conceived regulates (strongly or less strongly) what should be going on in the schools. The Swedish public "Läroplan" is thus both an ideological document and a set of rules and suggestions. The rules and the suggestions are to a varying degree backed by laws and regulations.

In the previous chapter we noted that Swedish curricular research in connection with the school reforms of the sixties primarily fulfilled a legitimizing function and that the political aspects of the contents of the school were somewhat hidden behind a curtain of "expertise" and "consensus". In this context it is also important to note that Swedish research was dominated by influences from the United States at that time.

In order to cope with the complex phenomenon of the curriculum it is important to note that the teaching experience which takes place can be seen as regulated, directed and constrained via the decisions taken at various levels within the state. Different nations have different school systems and the decision structure as it pertains to the school system may also vary. In earlier papers we have chosen to discuss these constraints as frames, borrowing a concept originally introduced by Dahllöf (e.g. 1969). In a series of papers we have discussed that concept extensively and used it in empirical curriculum research (cf. Lundgren, 1972; Kallós, 1974, 1976; Kallós and Lundgren, 1975, 1976). Framing may be decided upon and instituted at various levels of the bureaucracy. In the typical case fiscal resources are decided upon at levels above the school and in many instances quite dependent on legislation. In the traditional literature on curriculum the important constraining and directive role of fiscal decisions is often overlooked, although such decisions have even a measurable impact on subsequent decisions and on the actual practice of teaching (cf. McKinney and Westbury, 1975).

It should also be added that the concept of frame as used by us in earlier writings is closely related to the conceptual framework outlined by Bernstein (1971, 1975). Bernstein uses the concepts of classification and framing to cope with power and control as this reflects itself at the level of curriculum and pedagogy. "Classification" refers to the degree of boundary maintenance; to the degree of insulation between categories. In education the "subject" is perhaps at the level of appearance the crucial variable (or in some instances the "course"). Classification, according to Bernstein, refers "... to the degree of boundary maintenance between contents. Classification focusses our attention upon boundary strength as the critical distinguishing feature of the division of labour of educational knowledge." (Bernstein, 1971, p. 49.) Classification refers to the message system of "curriculum" in Bernstein's terms, while framing refers to the pedagogical relationship between transmitter and acquirer. Framing refers to the "... degree of control teacher and pupil possess over the selection, organization, and pacing of knowledge transmitted and received in the pedagogical relationship." (ibid. p. 50). Various aspects of the relations between the concepts introduced by Bernstein and our terminology have been elaborated upon elsewhere (cf. e.g. Kallós, 1976; Kallós and Lundgren, 1976)<sup>1</sup>).

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The concept of frame as used by us and the concepts of framing and classification introduced by Bernstein do not merely provide tools for descriptions of educational structures, nor do they only serve as terms that can be used solely for the purpose of describing relations between curriculum and teaching. Framing and classification concern observable aspects of the educational system. The level at which they are instituted, and the nature of the decisions taken (strong or weak framing for example) may differ between nations. The decisions taken reflect the power structure at the political and economical level of the state. In the societies of advanced capitalism the objective function (or meaning) of a certain decision or a certain set of decisions concerning the system of schooling is often mystified or obscured e.g. in order to secure a certain mass-loyalty (cf. e.g. Nyssen & Rolff, 1974; Rolff, 1974). A syllabus, a "Läroplan" or any other official document must

1. To Bernstein "Curriculum defines what counts as valid knowledge, pedagogy what counts as a valid transmission of knowledge..." (ibid., p. 47) 55/55

therefore primarily be judged as the ideological expression of the meaning of schools. Bourdieu notes that

*"... unter all den Lösungen, die im Laufe der Geschichte für das Problem der Übermittlung der Macht und Privilegien gefunden worden sind, gibt es zweifellos keine einzige, die besser verschleiert ist und daher solchen Gesellschaften, die offenkundigsten Formen der traditionellen Übermittlung der Macht und der Privilegien zu verweigern, gerechter wird als diejenige, die das Unterrichtssystem garantiert, indem es dazu beiträgt, die Struktur des Klassenverhältnisse zu reproduzieren, und indem es hinter dem Mantel der Neutralität verbirgt, dass es diese Funktion erfüllt." (Bourdieu 1972, p. 93.)*

It should be recognized that Bourdieu thus defines the functions of educational system at the political and economical level, and regards the appearance of such systems as ideological. The apparent neutrality of schools is expressed through their manifest functions of transmitting knowledge, skills, and socially accepted values within an apparently neutral organizational framework. These manifest functions are observable in terms of the frame factors in operation. The hidden function may be described as "symbolic violence" (cf. also Bourdieu & Passeron 1970). The term "symbolic" is rather similar to what has been called "the ideological level of the super-structure" in classical Marxist writings. It refers to a dimension of social reality different from other dimensions. It has to do with "values", "meanings", "views" etc. By "symbolic violence" certain "values", "meanings", etc. are forced upon the recipients as legitimate and are accepted as such. This strongly implies that certain social groups can force their values etc. upon other groups due to the power relations at other levels than the symbolic one. Bourdieu and Passeron (op. cit.) state that the power to implement certain ideas, values etc, through symbolical communication - as in schools - adds its own symbolical power to the non-symbolical relations of strength upon which it rests. Applied to the educational system this would mean that Bourdieu and Passeron (op. cit.) describe the ideological effects of the manifest appearance of that system (at the level of various frame factors, and at the level of actual teaching), as symbolical communication where neither the symbolical violence, nor its non-symbolical foundations are overtly expressed. The views presented by Bourdieu and Passeron (op. cit.) provides us with one way of understanding the objective character of certain set of fra-

mes. Callewaert and Nilsson (1974) have noted that the analysis by Bourdieu and Passeron (op.cit.) allows us to refute the common mis-understanding that it is the formal educational system that bears the responsibility for the origin, shaping, and upholding of existing ideas and values in society. On the contrary it is the task of the schools to cultivate and diffuse these ideas and values (cf. also Althusser, 1971).

In this context it should be noted that a curriculum study must be based upon ideas about curriculum construction (planning) on the one hand and ideas about curriculum implementation on the other hand. These two aspects are in reality only analytically separable. In a discussion about curriculum Reid (1975) noted:

*"Without going into niceties of definition it can be agreed that the curriculum is a set of activities involving teachers, learners and materials, and that these activities are provided through permanent institutions. (Those who would maintain that the curriculum is a written schedule of these activities, and no more, hold a perfectly tenable position ... My own view would be that to confine curriculum to the drawing-board is eccentric if not irresponsible.) An interesting fact about curricula, and one often overlooked by theories, is that they are there anyway. Even without the intervention of theorists, planners, designers and evaluators students go to school and to college and what they experience there is a curriculum. So, before devising schemes to make things different we might pause to ask how they got to be the way they are. In other words, studies of stability might tell us a lot more than studies of change."*  
(Reid, 1975, p. 247)

As should be evident we do not share the basic view of what curriculum is and is not presented by Reid. We have stressed the importance of discussing curriculum in objective terms. A curriculum "is not there anyway". What is taking place in schools is the result of decisions, however vague they may seem. These decisions are in their turn visible aspects of the structure of power and control. What is happening is then a variant of what may happen within the boundaries set. That a curriculum can exist independent of what curriculum theorists have done is quite another thing. Reid (op.cit) discusses the apparent gulf between theories of curriculum construction (or planning) on the one hand and theories of curriculum implementation on the other. If curriculum theories are to be successful they must cover both aspects. We agree with this general statement. The view adopted by us implies that such theories must start from an analysis of the objec-

tive functions and determinants of the school (i.e. its relations to society in non-abstract terms).

The lack of compatibility between theories of planning and theories of implementation noted by Reid (op.cit.) is a rather logical consequence of the perspectives traditionally used in curriculum studies. In passing it should also be noted that the entire issue of implementation is treated very perfunctorily by curriculum writers, and paradoxically enough, perhaps especially by those advocating change. Educational technologists have, however, recognized curricular problems in relation to questions of implementation. In its relatively pure form educational technology presents one of the few reasonable and defensible ways of looking upon relations between curriculum and teaching (cf. Gagné, 1970). The problem is regarded as technological and the solutions rest on the power to strongly control the visible aspects of teaching. The logical solutions founded on controlled experiments cannot, however, be accepted within the framework of a social liberal ideology. In a situation where this ideology is strong problems arise when the technology calls for strong overt control over teachers and pupils. This fact has produced the paradoxical attempts to combine educational technology with e.g. humanistic psychology, thereby creating total mystification.

### 3.3. Curriculum theory and social theory.

The recognition of the fact that schooling exists within a social context has already been made explicit. This notion is - of course - neither new nor abstract. It allows us, however, to rethink the idea that schools and schooling are main forces in bringing about structural changes in the society.

The progressive literal reform movement during this century has clearly meant a break with a *laissez-faire* liberalism, and in Sweden this has meant an increased space for social reforms. Education together with state intervention in economic life have been major correctives in the capitalist societies as e.g. Gintis and Bowles (1975, p. 95ff) point out.

What we have stated may imply that we regard e.g. the comprehensive school reform as entirely negative to the interests of the working class, or as entirely without effects in the area called "equality of opportunity". This is not the case. We regard the comprehensive school reform as a logical step in the development of the political and economical system of which it is a part. We also recognize the reform as a democratic one which in principle means an improvement in comparison with the earlier divided or streamed school system. On the other hand the reform was not thoroughgoing enough to eliminate the effects of various differences between students, nor could it have been. We have thus tried to point out that the organizational reform was not coupled to a curricular reform that matched the explicitly stated intentions. Several signs have also been noted which imply a move backwards. The increased use of various forms of remedial teaching documented e.g. by the Committee on the inner work in schools (SOU, 1974: 53) leading to a new kind of more or less permanent ability grouping (cf. Kilborn and Lundgren, 1974) is one such sign. The current trend towards abolishing of marks within the comprehensive school coupled with a move towards more unstructured forms of instruction can be regarded as steps in the direction of making the curriculum more invisible, which in its turn probably will affect e.g. working class children in a negative way (cf. Bernstein, 1975). The introduction of a so called "dialogue pedagogy" in the Swedish pre-school (cf. e.g. SOU, 1972:26 and SOU, 1972:27) is a pertinent example which is now also discussed in relation to the comprehensive school system. These solutions to perceived problems of order in the schools and to problems concerning the interest of pupils in theoretical studies imply a step backwards in our opinion.

The perceived problems of the Swedish comprehensive school are quite similar to those mentioned by Evers (1974, p. 9) in regard to the Federal Republic of Germany:

*"Kein Zweifel - die Gesamtschulbewegung befindet sich in einer schwierigen Phase ihrer Entwicklung. Manche sprechen von einer Krise. Wir können viele Symptome solcher Schwierigkeiten registrieren: Bei Schülern häufen sich Erscheinungen der Schulunlust, des Wegbleibens und Kaputtmachens, der Disziplinlosigkeit und Aggressivität. Wenn diese Erscheinungen auch in allen Schularten zu beobachten ist, so treffen sie die Identität der Gesamtschule härter als die herkömmlicher Schulen; denn die Gesamtschule wollte eine Schule sein, in der Schüler sich wohl fühlen - die Schüler gerne besuchen."*



At the same time it should be explicitly stated - as already indicated above - that the comprehensive school reform meant that important steps forward were taken.

The relations between society and its educational system in the present stage of capitalism may be expressed in different ways. If the functions of the school are taken as a startingpoint it is quite clear that school reforms must demonstrate several structural contradictions (cf. e.g. Nyssen and Rolff, 1974, pp. 39ff.).

The Swedish educational reforms of the sixties were presented as "social reforms" and were based on certain assumptions about the possibility of bringing about social change towards equality via changes in the school system. The explicit ideology was one of equal opportunity. At the same time it was argued that changes in industry etc. required a "new school" which could provide a larger quantity of the population with adequate qualifications for the labour market. It should, however, be noted that the whole idea of "equality of opportunity" was founded on the idea of "un-equal resources" of students on the one hand, and on a selection of contents adapted to the experiences of middle and upper class students on the other. E.g. Esland (1971) has analyzed some of the pedagogical implications of an acceptance of a "psychometric epistemology". What is actually achieved by the schools is the acceptance of an illusion of equal opportunity, which, of course, is strengthened e.g. by the inclusion of various compensatory measures. The notion by Bourdieu and Passeron (1970) about symbolic violence is, of course, appropriate here as an explanatory concept.

If we try to point out some of the consequences of the perspective on the relations between schooling and society that we have referred to for curriculum research and development on the macro level it becomes obvious that such work cannot be primarily normative in character. Curriculum studies cannot primarily be focussed on how a curriculum should be constructed or developed, but must primarily explain the determinants of the curriculum. The first issue thus concerns the question of why a certain type of curriculum becomes necessary under a certain set of circumstances. This does not imply that curriculum research has completely neglected this issue. But it implies that the traditional answers have been very limited in scope, where curriculum is e.g. regarded as an answer to cer-

tain demands in the society. Why these demands dominate or why certain groups in society are in the position of exerting an influence on the curriculum is never questioned in these approaches as was evident from our examples in chapter 2. What is implied here is the task of not only registering various influences and seek technological solutions to meet them, but rather an analysis of the various pressures and their political and economical implications and background. In our views this would mean a break with equilibrium theories as a basis for attempted reforms of changes (cf. Paulston, 1975). The problem is thus why certain particular demands are important at a certain stage in history and what mechanisms that allow these demands to become influential in the educational sector, and finally how that influence is exerted and legitimized. In yet other words this points to quite another type of demand-analyses, than those referred to earlier, and based upon theories generated by the necessary research alluded to in this chapter.

The fact that traditional curriculum studies at the macro level have lacked proper theoretical foundation does, however, not imply that they have been unimportant or trivial. Instead such research has served the function of legitimizing certain political solutions and it has furthermore participated in upholding the illusions about the functions and meanings of schooling. It has thus fulfilled important ideological as well as technological functions and thereby established the theory of curriculum as a theory of rational and technological deliberations (cf. Eggleston, 1975).

The rather recent attempts in several capitalist countries to establish a theoretical basis for empirical analyses of relations between school and society are important but this work is still in its infancy. There is an apparent lack of research into how mechanisms operate at various levels of appearance of the school system. What is needed here is, according to our views, research that focusses on those structural aspects and power mechanisms that regulate and uphold the relations between levels in a macro to micro perspective and how those mechanisms operate. If the view is accepted that schools are agencies of reproduction we should also try to analyze how schools operate in order to fulfil their tasks.

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Such analyses must also, however difficult it is, take into account the level of teaching. The concepts of framing (and of classification) may be used as mediating links in this context, which then allow us to direct our attention also to the level of teaching.

#### 3.4. Curriculum and teaching.

On a general level we have discussed the issue of curriculum against the background of two main questions. The first question concerned the basis for the establishment of a particular curriculum. This issue concerned the curriculum as an expression of the system of schooling within the society at a given time. The second question had to do with the relations between curriculum and instruction (or teaching).

Teaching in its turn was regarded as a series of activities constrained and directed by various frames imposed at different levels within the educational system.

As we have noted earlier in this chapter the very concept of curriculum has been used in earlier writings in a very confusing way. If we want to discuss the relations between curriculum and teaching, it is therefore perhaps more clarifying to use the decisions at the level immediately above the teacher as the basis for the presentation. As already indicated in this chapter, we see it rather unimportant to delineate a general concept of curriculum applicable internationally. Instead, it is more important to pin-point actual areas of decision and to describe and analyze the decisions actually taken in a special set of circumstances, and then try to explain why these decisions were taken and what kind of influence they are exerting on teacher and teaching.

Broadly expressed such decisions concern contents, methods and organization of teaching within the educational system. Earlier in this chapter we discussed e.g. how the issue of contents may be discussed by using the concepts of framing and classification according to Bernstein (1971). The actual decisions taken concerning the classification and framing of educational knowledge vary between countries. The level where

decisions are taken within the "decision hierarchy" concerning a specific aspect of the school may also vary between countries. Furthermore, the ways and means whereby decisions are made public may vary. In Sweden decisions about content are presented chiefly in the form of the "Läroplan", an official document issued by the National Board of Education.

In theory the "Läroplan" may be regarded as defining the space of options open for teachers and students at the level of actual teaching. This space of options is further limited by other rules and ordinances not printed in the "Läroplan". The "Läroplan" presents a strongly classified curriculum, hand in hand with a rather weak framing. In practice, however, the similarities between classrooms at the level of teaching are striking, which would imply that the space of options is not used differently by teachers to any large degree. The uniformity is upheld by various influences as textbooks, teacher recruitment and training etc.

We have noted earlier that several problems are perceived by teachers and students in the comprehensive school and that remedial teaching was one solution that has been increasingly used to cope with problems. The signs of "crisis" mentioned by Evers (1974) and referred to earlier may in many respects be defined as curricular problems. If actual decisions taken concerning teaching are used as a startingpoint we may note that the suggestions and rules contained in the "Läroplan" together with other proximal frames create a situation which more or less is bound to lead to problems. Contents and working patterns are primarily adapted to experiences and interests of middle- and upperclass children.

The Committee on inner work in schools - SIA - recognized this problem to a certain extent in a discussion concerning what is to be conceived as a handicap for the pupil:

*"A certain trait becomes a handicap when the individual is put into a situation with demands which he cannot meet because of his functional disability. This is of course also true in schools. What appears as a handicap is different in a musical school, in a vocational school and in an athletic school etc. Somewhat exaggerated it could accor-*

dingly be stated that the objectives of the school, its contents and its methods of work to a certain degree will determine which weaknesses of the pupils that will become handicaps that will lead to difficulties. Decisions about the school therefore consciously and unconsciously become determinants of which functional weaknesses that will turn into difficulties and problems within the school." (SOU, 1974:53, p. 215, our translation)

This statement should be regarded in relation to the explicitly stated objective of the school system where the pupil should be able to develop maximally according to his abilities and interests. The Committee notes that this would require a far reaching individualization within the schools. Thus the problem mentioned in the quotation above becomes controversial. The school has a second task - to prepare the pupils for future work in society. Which task that is primary to the school is clearly stated by the Committee:

*"From the point of view of society and with regard to the needs of the pupils in the long run it is, however, important that the knowledge and skills reach a minimum level. If this is not the case the difficulties of the pupil in the school will become a handicap in work outside the school. The society outside of the school is not adjusted to each single person but requires certain qualifications of the individual if he is supposed to be able to function adequately as a citizen."* (SOU, 1974:53, p. 215, our translation)

The Committee thus notes that the task of the school is not primarily to adjust itself to the various conditions, interests etc. of pupils, but that the structure of the school is determined by the social, economical and political structure of the society. In this perspective the working class child should at least be socialized and intellectualized so as to be able to function at "the minimal level" within society.

The ideology of the school and the view of society presented by various Swedish Committees referred to earlier obviously seem to regard necessary qualifications for being able to "function adequately as a citizen" to be the same for all citizens, which in principle means an acceptance of an equilibrium theory of society, which we have rejected. 67

Teaching within the frames existing today does not permit the teachers to take into account the different needs of different students if those needs are based on conflicting interests.

Contents and work-forms in schools are strongly adjusted to those students who do well in today's schools and the remedial measures or the compensatory programs are destined to give the other pupils at least a minimal dose of knowledge in exactly the same areas and in more or less the same way.

The relations between curriculum and teaching in the perspective developed in this paper are primarily based on power and control. The nationally adopted curriculum for the Swedish comprehensive school is to be conceived as a primarily ideological document that presumably should govern the teaching process. The actual steering influence of this document is, however, indirect. The curriculum does not only exist as a printed document exerting its influence via the information contained in that document. An intricate web of influences is constraining and directing the activities of teaching. We have labelled those constraints "frames" and the framing may be conceived as the concrete manifestation of the curriculum in terms of decisions concerning the space of options available to teachers (and students). The curriculum as a "Läroplan" mirrors the decision structure and the decisions in the form of prescriptions on the one hand and suggestions on the other hand. It furthermore contains statements designed to legitimize existing practices, i.e. attempts to present the ideology of the comprehensive school system.

At the level of the "Läroplan" and at the level of actual teaching a rather strange picture of what schooling is all about emerges. When schooling is discussed at this level it suddenly becomes concerned with the individual pupil and his unique abilities and interests. Instead of a discussion starting with a macro level description of what schooling is all about matters seem to concern single students and single teachers. Thus the means of schooling become confused with its ends.

We have suggested that any analysis of the educational system must start at a high level in terms of the functions of schooling. Educational researchers have to a large degree taken an almost opposite route. Teaching is linked

to learning and the analysis of teaching and what it is about is accordingly carried out in terms of the behavior of teachers and students. It is virtually impossible to derive the objective functions of schooling from an analysis that uses the level of actual teaching as a startingpoint.

To approach the problems of schooling using actual teaching as a startingpoint is, however, consonant with statements about schools and schooling presented in various official documents and reports. The problem is that these documents etc. represent the ideological expression of schooling rather than the objective functions of it.

On the other hand there is a risk of regarding curricula and teaching as merely mechanically derivable from an analysis at the political and economical level. It is of no use whatsoever to substitute meaningless correlations between teacher behavior and student achievement for equally meaningless correlations between teacher behavior and class (e.g. middle class, working class).

The relations between curriculum and teaching may, however, also be discussed from another viewpoint. Advocates for changes have given the teacher a central role. It has been argued that teachers should change their patterns of instruction and their ways of dealing with children. When the organizational reforms apparently failed focus was shifted to the individual teacher and his situation. In reading this literature one is practically forced into believing that the teacher has almost endless resources and possibilities within the existing framework (cf. e.g. Postman & Weingartner, 1971). It is quite clear that a single teacher for at least a period of time may carry out his teaching in a way that differs from what is "normal". It is equally clear that a certain space of options exist for teachers at least in theory. It is finally also quite clear that the functions of schooling can be met by a number of at least seemingly different strategies.

We have stated that profound changes in the school system cannot be initiated by researchers. We could also state that such changes cannot be brought about by teachers. The space of options for their work is in the last instance determined

structurally. We furthermore strongly suspect that eventual changes that are taking place at the level of teaching today do not fundamentally alter the functions of schooling. The recent moves towards an invisible pedagogical practice (cf. Bernstein, 1975) thus has nothing to do with altering the power relations in society. It is perhaps at the surface interpreted as progressive by some, but the changes are still in the interests of the ruling class.

This, however, does not imply that an analysis of how the space of options could be used in the interests of the working class is meaningless. It is on the other hand quite obvious that the limits of such attempts within the school system are narrow.

We should also recognize that our knowledge is still far from perfect concerning the level of teaching. We still need to analyze empirically and theoretically the relations between curriculum and teaching in order to understand how the ideological state apparatus of the school actually operates.

### 3.5. Concluding remarks.

Our discussion used the Swedish school reform as a concrete example and as a point of departure.

Curriculum theory and curriculum research in connection to the school reforms has been highly subservient to the interests of e.g. the National Board of Education. Critical research has been scarce. Research has been firmly anchored within a traditional framework mainly borrowed from the United States. This has meant that researchers have not fulfilled the tasks outlined in a general way in earlier chapters (cf. pp. 16-17).

In this final chapter we have tried to point out some of the problems confronting pedagogical research concerned with curricular issues. Implicitly and explicitly it has thus been advocated that it is possible to establish a curriculum theory on a general level. In order to become meaningful such a theory must generate research adapted to the concrete situation within a given school system.

The problematic that we have tried to illuminate is by no means a simple one. Whether or not research within a materialistic frame of reference will increase or not in Sweden (and in other countries) is perhaps not primarily a matter of fun-



ding. The space open for research that represents a challenge to the dominant ideology of the school has never been large. Such research, however, exists in Sweden as well as in the other Nordic countries. As our discussion of Sweden has demonstrated this tendency is still not very pronounced. Instead several potentially progressive researchers have associated themselves with the interests of the new middle class, i.e. a tendency similar to that observed in the United States by Gintis & Bowles (1975).

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