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Reports from

THE INSTITUTE OF EDUCATION
UNIVERSITY OF GÖTEBORG

Educational Reforms and Educational Equality

Contribution to a Reader on Social Stratification
edited by R.Scase

Kjell Härnqvist and Jarl Bengtsson

**TILLHÖR REFERENSBIBLIOTEKET
UTLÅNAS EJ**

Tryckt i Scase R. and
Readings in the
"Swedish Class
Structure", 1976

No. 20
April 1972

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Abstract Equal educational opportunity for all members of the society irrespective of social and geographic origins has been a major objective of Swedish educational reforms. To what extent this has been attained is studied by means of data from recent Swedish investigations. Finally perspectives for education in the future are discussed, especially the approach to equality through recurrent education.

Aspects of educational equality

Social equality is a major political issue since long ago and in most countries. But the scope and meaning of this concept have shifted from time to time and from culture to culture. To begin with the main political goal was to attain equal formal rights for every member of the society to take part in the decision procedure and to employ the resources that society made publicly available. A second step has been to try to equalize the opportunities of everybody to make real use of these rights irrespective of obstacles caused by, for instance, race, sex, religion, social, economic and geographical background. When and where such attempts to remove obstacles have been evaluated, the results most often have not reflected any high degree of equalization achieved. Therefore a third and current political issue in some countries is to see to that social equality is really attained in terms of level of living and participation in the decision processes of society - a goal that goes beyond mere removal of obstacles to positive political measures of compensation and support aiming at equal social outcomes.

Social equality has many dimensions - political rights, standard of living, education etc. - and equalization may have come unequally far in different respects. The dimension that will be treated here - educational equality - in addition to be a value as such has a sort of key position in the general concept of social equality because of the influence of education on many of the other aspects. With a better education a person is more likely to have a possibility to influence political decisions, to earn a decent living, to make use of the cultural resources of society, just to mention some benefits for which education can be instrumental. Therefore

educational equality is given high priority in most political programs aiming at social equality.

Like the more general concept, educational equality has developed in stages. Formal right to education, in most developed countries, no longer is a political issue. But equality of educational opportunity and equality of educational outcomes still are problematic in most countries - maybe all.

When the term equality of educational opportunity is used, it seems in most cases to mean that such obstacles for participation in education are removed as mentioned before - obstacles related to race, sex, religion, social, economic and geographical background. The measures taken to achieve equal opportunities for all groups may include, for instance, changes in school organization and regulations, economic support schemes, and geographical distribution of education. On the other hand, outside compulsory education differences in predicted educational achievement among the individuals, and variations in attitudes to education between different social classes, are regarded as legitimate determinants of participation. No attempts to compensate for culturally determined differences in these respects are included in this concept of equal educational opportunity.

Equality of educational outcomes is a more demanding concept which includes fulfillment of the requirements for equal opportunity but in addition calls for compensatory measures of different kinds. Before a more precise definition is possible, it is necessary to discuss in what ways it is meaningful to speak of "equal educational outcomes".

Equality of outcomes in the literal sense - meaning exactly the same educational results for all individuals - is an unrealistic goal from both societal and individual points of view. From its educational system a modern society expects to receive individuals with different competencies for entering into a differentiated occupational system and not individuals with identical preparation. And moreover the system calls for differentiation both as to educational level and to orientation towards different fields. On the individuals' side existing differences both in abilities and inter-

rests also are incompatible with equal outcomes in the literal sense.

A more restricted interpretation of the concept is to require that the obstacles mentioned in connection with equal opportunity are efficiently removed and that in addition culturally determined differences that influence participation and achievement are compensated for as far as possible. Still, however, differences in predicted achievement that are in some meaning "basic" and cannot be compensated for, and remaining variations in interest for participation, are permissible within the framework. Equality of outcomes then takes the meaning of real freedom for the individual to choose and attain an education in line with his "basic" abilities and interests and irrespective of his sex or cultural origin. This in turn would give him access to a corresponding starting point in the occupational system. On the other hand, equal educational outcomes interpreted in this way are not likely to lead to equal life chances. Education remains a competitive system and the final rewards are determined outside it - by market forces or political decisions or a combination of both.

An alternative way to look upon equality of educational outcomes is to concentrate on the general part of education instead of the part which differs between levels and types of occupations. As one of its main goals general education has to create in the individual competencies and attitudes important for active participation in the decision processes of the society. In this perspective equal outcomes would mean equal preparation through the educational system for active participation in society, leading to equal opportunities to influence societal change and with that the construction of the reward system that distributes life chances in society. This again is a more demanding concept of equality which is meant to guarantee a considerable minimal and common amount of general education needed for efficient real participation in society.

Educational reforms in Sweden

Against this conceptual background we shall try to briefly describe some Swedish educational reforms during the last twenty years and their attempts to further educational equality.

Sweden now has a compulsory education of nine years from age of 7 to age 16. This takes place in a comprehensive school common for all children and following a curriculum decided at national level. The school is divided in three stages: grades 1-3, 4-6 and 7-9. English as the first foreign language is introduced in grade 3 and is compulsory through grade 9. The second foreign language - French or German - is elective in grades 7-9 with art, economy or technology as alternative choices. In mathematics and the foreign languages there are two courses differing in difficulty level in grades 7-9. This is the only kind of formal differentiation that takes place within the comprehensive school. In all other respects the adjustment to individual differences within the normal range is done through individualization or remedial teaching.

The present version of the comprehensive school was introduced in 1969. The change of the system for compulsory education to a nine-year comprehensive school was first proposed in 1948. An experimental version was tried out in a large number of school districts between 1950 and 1962, and the change to a more final version was started in 1962.

Before the introduction of the comprehensive school compulsory education took place in an elementary school of seven or eight years which was left after grade 4 or grade 6 by those who, upon application and selection, were transferred to lower secondary schools with an academic type of curriculum. Through these schools they could reach the upper secondary school ("gymnasium") and post-secondary education, while the elementary school gave access to vocational schools. As the secondary schools were located only in bigger communities both geographical and economic conditions contributed to a very skewed socioeconomic composition of their pupil population. The comprehensive school had as one of its main goals to distribute the educational opportunities more equally. One, and perhaps the most important means was to supply lower secondary education within the framework of the comprehensive school in all local communities of the country. Another was to postpone the important educational choices to an age where the pupil's own interests and capacities were supposed to play a more decisive role than parent expectations and home background.

The major differences between the three consecutive versions of the comprehensive school have been in respect of grades 7 through 9 where the pupils have some elective subjects and courses. The changes have gone in the direction of a later differentiation and a greater generality of the competence gained in the comprehensive school. The main reason for this has been the difficulties to attain real equality in educational choices between different socioeconomic groups but also an increasing weight attached to the general goals of the comprehensive school to build up a common frame of reference and a platform for all members of the society to actively participate in democratic decisions.

In the upper, non-compulsory part of the secondary level a reform of the academic type of education in the three-year "gymnasium" was decided in 1964, and at the same time a two year continuation school, intermediate in its curriculum between the "gymnasium" and the vocational schools, was introduced. The reform of the "gymnasium" meant an adjustment to the comprehensive school curriculum but also an integration between more general and more occupationally oriented lines of the "gymnasium" - the latter having been chosen mainly in lower socioeconomic groups.

This integration has continued, and since 1971 the "gymnasium" concept includes also the continuation school and the vocational school. In this "comprehensive gymnasium" the former separate schools are regarded as lines, the general subjects are strengthened and the specific vocational preparation weakened. A commission on entrance requirements for post-secondary education has proposed that all lines, provided their students have some basic general subjects, shall give general competence for university admission. In addition various disciplines and professional schools can have specific entrance requirements, for example a certain number of years of mathematics, physics and chemistry for science and engineering.

The general trends in the secondary school reforms are the same as in the compulsory school reforms: trying to give different lines more equal status, to make early educational choices less definite, and to strengthen general education. All these trends are related to educational equality.

The reforms at university level so far mainly have been aimed at adjusting resources and organization to the increasing enrollment, which partly is a result of the reforms at lower levels. Two reforms are of particular interest in this context: a general system of stipends and loans, and experimental changes in admission requirements. In a number of disciplines, many in social sciences, persons without regular secondary preparation have been admitted provided they have been more than 25 years old and have had at least five years of occupational experience.

A government commission ("U 68") is now preparing a major reform at the post-secondary level which very likely will have important consequences for educational equality. Its discussion of recurrent education will be touched in the final section of the article.

Two sectors of the Swedish educational system which have so far seen comparatively little of educational reform are preschool education and adult education. The government has given priorities to developmental work in these sectors and the discussion is lively not least in relation to the equality perspective. These questions also will be taken up in the final section.

Empirical data on social background and educational choice in Sweden

The relation between education and social background has been the subject of a great number of empirical investigations in Sweden. Husén and Boalt (1968) presented some of the earlier ones against the background of educational reforms. In 1971 three major contributions to the research on educational choices have been published - Lena Johansson's for the Low Income Commission and Bengtsson's and Gesser's studies for the 1968 Education Commission (U 68). In addition Svensson (1971) published his study of relative achievement and social background. These and some of the earlier investigations form a basis for sizing up the present situation.

Johansson interviewed in 1968 a representative sample of about 6000 persons in ages 15-75 years. One indication of the relationship between social background and education is found in Table 1, which shows the percentage in different age groups with "Studentexamen" or more, i.e. having graduated from upper secondary education of the academic type ("gymnasium").

Table 1. Persons with "Studentexamen" or more in per cent of different age levels and socioeconomic backgrounds.

Father's social and occupational group	Age		
	20-29	30-54	55-75
I. Upper middle class (Professional and managerial)	45	42	31
II. Lower middle class	12	7	3
III. Working class	7	2	1
All together	12	6	3

(From Johansson 1971, p. 92)

Social class differences are great at all three age levels but more so in the older ones where the frequency of graduates with "Studentexamen" is very low in general. A great increase in graduation has taken place within the age span of the youngest group and therefore the data do not show the situation in the present school system.

Bengtsson studied in 1969 a representative sample of about 2400 pupils in grade 9 of the comprehensive school and their plans after leaving the compulsory stage of education (Table 2).

Table 2. Plans of pupils in grade 9 with different social backgrounds. (In per cent).

Father's social and occupational group	Educational and occupational plans						Total
	"Gymnasium"	Contin. school	Voc. school	Work	Other		
I. Upper middle class	82	10	6	2	-	100	
II. Lower middle class	46	21	20	7	6	100	
III. Working class	25	21	34	13	7	100	
All together	37	20	26	8	9	100	

(From Bengtsson 1971, pp. 33 and 37)

Even if not all pupils who in 1969 planned different kinds of education will have gained admission - and a number of them fail to graduate - Table 2 is likely to show the size and type of differences between social classes that can be expected in the next few

years among graduates from different types of secondary schools. The "gymnasium" of academic type will still be heavily biased in middle-class direction and the vocational schools in working-class direction.

Between the "gymnasium" and the university a further selection - or self-selection - takes place which is correlated with social background. An estimate for 1969 of the cumulative effects of the different choice situations is made by Gesser and reported in Table 3.

Table 3. Estimated distribution of post-secondary education in relation to different social backgrounds (In per cent).

Father's social and occupational group	<u>University level</u> "Prestige"	Other post-secondary	No post-secondary	Total
I. Upper middle class	15	64	10	100
II. Lower middle class	3	17	4	76
III. Working class	1	8	2	89

(From Gesser et al. 1971, p. 159)

Gesser's estimates refer to students that are born about five years earlier than those in Table 2. For the former age group attendance at the "gymnasium" level was considerably lower than now, especially in the two lower strata. "Prestige" education mainly comprises professional schools and especially those giving certificates at graduate level. Proportionally the socioeconomic bias is stronger here than for the arts and science faculties included in the other university category.

Information on the social selection to university studies usually is reported as distributions of university students on different social classes, i.e. percentages are calculated the other way around compared to Tables 2 and 3. Therefore we include also such information from Gesser's investigation (Table 4).

Table 4. Social background of students entering university level education in the academic years 1956/57, 1962/63 and 1968/69 (in per cent).

Social background	1956/57	1962/63	1968/69
I. Upper middle class	42.5	42.5	39.3
II. Lower middle class	38.7	37.0	35.3
III. Working class	14.8	16.3	20.0
No information	3.9	4.3	5.3
Total	100	100	100
Number of entering students	5464	10797	31104

(From Gesser et al. 1971, pp. 148-149)

Only recently the working class percentage has reached the 20 per cent level, which is low compared to Eastern European countries and also the United Kingdom, but still high compared to non-socialist countries on the European continent (UNESCO, 1968).

The illustrations given in Tables 1-4 are difficult to compare insofar as they refer to different criteria of educational choice - respectively graduation at the "Studentexamen" level, plans in grade 9, and choice of post-secondary education. They also report gross differences between social classes without taking into consideration possible variations between social classes in achievement at the time of admission. In general achievement and social background are positively correlated.

It can be discussed whether such variations shall be controlled or not, but we have earlier taken the position that they might be when judging the degree of fulfillment of equal educational opportunities. When measuring equal outcomes the situation may be different, but since even a less demanding goal seems to be distant it might be well to start off from achievement. Moreover earlier achievement is an intentional selection criterion in the system investigated. Tables 1-4 have shown the combined results of this intentional mechanism and a social selection or self-selection that works against the goals of the system.

In the following tables we shall try to disentangle these two factors by means of data from three roughly comparable studies at various points of time during the reform period of the last twenty years.

The oldest of these data come from a representative sample of about 10 000 males who in 1945 belonged to grade 4 of the elementary school (a fourth of the male school population of this grade in Sweden). Most of them were born in 1934. The data were originally collected for an estimation of "reserves of ability" (Härnqvist 1958). In that connection the educational level of the students at the end of 1955 was recorded together with school marks and social background in 1945. Here the percentage starting in the "gymnasium" will be reported.

The two other sets of data come from the so called Individual Statistics Project (Härnqvist 1966, 1968, Svensson 1971). The project is based on representative ten per cent-samples of all pupils born in 1948 and 1953, studied firstly in 1961 and 1966 when the majority of the pupils belonged to grade 6 in the elementary school or in the comprehensive school. Males born in 1948 (about 4000) have been followed up by Reuterberg (1968) until the age of 18. A sub-sample of those born in 1953 have been investigated in grade 9 by Bengtsson (1971); in order to make comparisons more clearcut only his results for males (about 1200) will be used here. Reuterberg's information of the percentage starting in the "gymnasium" and Bengtsson's of the percentage planning the "gymnasium" will be compared with Härnqvist's data for the group born in 1934.

In all three cases achievement is recorded in terms of school marks. These, however, are given according to different scales in the three samples and therefore a transformation is necessary. By means of averages and standard deviations for the different age cohorts the marks are expressed in the presently used scale with 3 as mean and unit standard deviation. The comparisons thus will be done between pupils situated equally far above or below the average performance of their own cohorts. Possible changes in the average level cannot be measured.

Social background is indicated in the same way as in Tables 1-4, that is in classes I-III. The data presented here are taken from manuscript tables.

Firstly in Figure 1 the relation is shown between the intentional selection criterion school marks and the percentage starting the "gymnasium" (age cohorts 1934 and 1948) respectively planning the "gymnasium" (age cohort 1953). In all age cohorts the percentage increases in a regular way with increasing achievement level before transition. In age cohort 1953 it is, however, likely that the real transition frequency, due to selection at admission, became lower than shown here. | 101

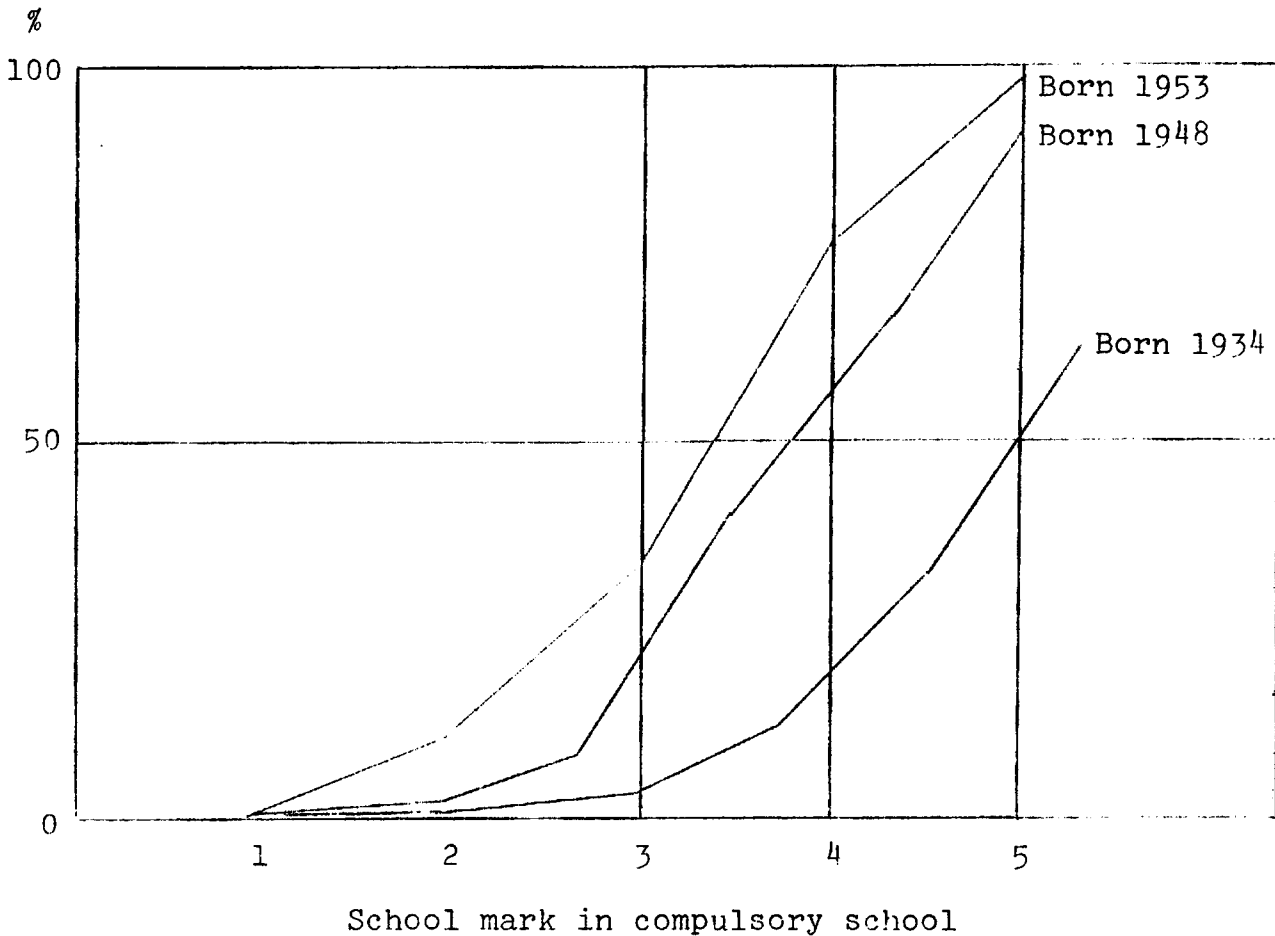


Figure 1. Transition to the "gymnasium" in per cent for different achievement levels (males).

The differences in transition frequencies between the age cohorts are summarized in Table 5. The percentages for different achievement levels are when necessary assessed by means of interpolation in Figure 1.

Table 5. Transition to the "gymnasium" in per cent for some achievement levels (males).

School mark in compulsory school ¹⁾	Age cohorts		
	1934	1948	1953
3	4	21	33
4	20	57	78
5	51	91	97

1) Below average marks excluded.

Another way to summarize Figure 1 is to estimate at which mark level, for instance, every second pupil in the age cohort starts in the "gymnasium". This "critical" choice level is shown in Table 6.

Table 6. School marks level with 50 per cent transition to the "gymnasium" (males).

	Age cohorts		
	1934	1948	1953
"Critical" marks level	5,0	3,8	3,4

Graphs comparable to Figure 1 have been made up for the different social classes. Here we report only summary estimates of the types demonstrated in Tables 5 and 6. But first the gross differences between social classes before controlling the intentional selection criterion school marks.

Table 7. Transition to the "gymnasium" in per cent of different social classes (males).

Social background	Age cohorts		
	1934	1948	1953
I. Upper middle class	61	77	85
II. Lower middle class	9	34	50
III. Working class	4	16	26

The gross differences between social classes are large in all age cohorts but have evidently decreased during the period observed. How the net differences appear when achievement is controlled is shown in Tables 8 and 9.

Table 8. Transition to the "gymnasium" in per cent of different social classes for some achievement levels (males).

	Age cohorts		
	1934	1948	1953
<u>School mark 3</u> ¹⁾			
Social class I	36	55	75
II	3	25	41
III	1	12	24
<u>School mark 4</u>			
Social class I	65	88	97
II	18	58	84
III	10	45	65
<u>School mark 5</u>			
Social class I	85	100	100
II	42	91	98
III	35	87	90

1) I.e. average in compulsory school. Below average marks excluded.

In age cohort 1934 the greatest differences in transition frequencies were between upper and lower middle class, while lower middle and working class did not differ very much. In age cohort 1948 the greatest differences still were between I and II but no longer as markedly so, and the differences then were mainly found at the lower mark levels. In age cohort 1953, now attending the "gymnasium", the distances are on an average rather equally distributed between social classes but have nearly disappeared at the highest mark level, the transition frequency almost reaching 100 per cent in all classes.

Thus net differences of considerable size between social classes still remain in the pupils' choice of "gymnasium" education. During a twenty-year period the differences, which to begin with mainly were between the upper middle class and the rest of the population, have become more evenly distributed between I and II, and II and III. Furthermore the differences have moved downwards on the achievement scale so that social class now has its greatest impact around or slightly above average level, where the transition frequency generally was very low in the earliest age cohort.

An alternative way to summarize the comparisons is to report the "critical" mark levels where half of the pupils in the different social classes chose the "gymnasium" (Table 9).

Table 9. School marks level with 50 per cent transition to the "gymnasium" in different social classes (males).

"Critical" mark level ¹⁾ for social class	Age cohorts		
	1934	1948	1953
I. Upper middle class	3,4	2,9	2,5
II. Lower middle class	} 50 % never reached	3,7	3,2
III. Working class		4,1	3,6

1) Mark 3 means average level in compulsory school.

More than one unit more on the marking scale (which is equal to one unit of the standard deviation) is required of a pupil with working class background to have the same 50 per cent chance of transition to the "gymnasium" as a pupil with an upper middle class background. Roughly the same average level which for males born in 1934 was "critical" in upper middle class (3,4) applied in age cohort 1948 to lower middle class (3,7) and in age cohort 1953 to working class (3,6).

Since the formal selection procedure in all age cohorts has been based exclusively upon school marks the remaining differences are by no means formal or intentional inequalities. They must be the effects of a number of non-intentional mechanisms correlated with social class, and it may be worthwhile to look upon empirical results for a couple of such factors.

In the 1934 age cohort geographical background had a considerable impact independent of both social class and achievement level which is shown in Table 10 (condensed from Hårnqvist and Grahm, 1963, p. 45).

Table 10. Percentage graduated with "Studentexamen" in different types of communities. Age cohort 1934 (males).

Social class:	School marks above average		School marks below average	
	I	II+III	I	II+III
Big cities and university towns	73	24	23	1
Other towns with "gymna- sium"	65	19	17	1
Other communities:				
dense population	52	12	0	<1
sparse population	52	7	3	<1

Type of community is important for all groups except where low school marks interacting with low social background result in quite negligible graduation frequencies. The changes between this and more recent age cohorts are likely to have resulted in higher frequencies in all cells, a larger proportion of the population belonging to the higher density groups and living in a community with direct access to a "gymnasium". In Bengtsson's study of the 1953 cohort the percentage planning "gymnasium" education varies from 49 per cent in Stockholm to 35 per cent in regions where the "gymnasium" has less than six parallel forms. The percentage working class pupils varies inversely from 33 to 53 per cent. In the group with less than six parallels it is likely that some variations still exist between a community where a "gymnasium" is located and rural areas around it, but no recent estimate of this is available.

Another variable which is correlated with social class is the parents' education. In a study of the plans in 1961 for "gymnasium" education among the students of the lower secondary school of academic type (Hårnqvist and Grahm 1963) it was possible to categorize the students simultaneously according to school marks, social

class, and education of both parents. The results are summarized in Table 11. (from op.cit. p. 98).

Table 11. Plans in 1961 for transition to the "gymnasium" of lower secondary school leavers in relation to parents' education.

Social class:		School marks above average		School marks below average	
		I	II+III	I	II+III
Lower secondary education or more for:					
<u>Boys</u>	both parents	} 97	} 92	75	47
	father or mother			66	40
	none			47	27
<u>Girls</u>	both parents	} 90	} 77	52	37
	father or mother			33	26
	none			21	14

The percentages here generally are higher than in earlier tables which has to do with the fact that they are no longer calculated in relation to the general population but to a preselected group in lower secondary schools. The differences within social classes between the parents' educational backgrounds are particularly striking at the lower school marks level but they exist also for above average marks in lower classes. In the most favourable combination of factors there is not much variation left to analyse. The sex differences found in this investigation from 1961, and which to some extent could be explained by a more frequent participation by girls at lower secondary level, now seem to have nearly disappeared. Bengtsson reports that in 1969 39 per cent of the boys and 35 per cent of the girls planned a "gymnasium" education.

Parents' education is a complex variable too, which contains many different components such as information about education, value attached to education, vocational aspirations, capacity to help children in school tasks, general linguistic and cultural level of the home. Of these not least the linguistic environment has been shown to be of great importance. Also other components in

home background that are less directly associated with education are likely to be efficient. Unfortunately recent data on such factors as income when education is controlled seem to be missing.

Some of these home factors influence not only choice of education but also educational achievement and with that among other things the school marks used for prediction and selection. Keeping school marks constant means underestimating some of the background influences on educational choice and therefore the existing inequalities between social classes. As an illustration we might quote Svensson's study (1971) of relative achievement in grade 6. He compared school marks and achievement scores in different socioeconomic groups at constant intelligence level. Pupils from higher socioeconomic and educational groups obtained higher school marks than expected from their intelligence test scores and pupils from lower strata lower school marks. This is one indication of the differences between home environments in their capacity to support their children's school performance.

In a similar way it is possible to continue the analysis and study to what extent intelligence measured at 13 years of age is influenced by home background and thus too a biased measure of the potential abilities of the pupil. But this leads into the whole discussion of heredity and environment which would take us too far in this context. For actual practical purposes it is enough to state that great social differences in participation still exist even when pupils are compared who have reached equal attainments in compulsory school. One goal is to reduce these differences, another is to make the environment more stimulating to intellectual growth for children who now do not achieve in relation to their "basic" resources.

So far no direct conclusions have been drawn about the relations between the school reforms and the trends in social influences on participation. In data comparing different age groups is found an increasing frequency of participation in secondary and post-secondary education from lower social classes. To what extent is this a result of school reforms or just a part of a general increase in noncompulsory education to which the educational system has had to adjust itself by means of reforms?

In trying to answer this question it is necessary first to point out that some of the reforms are so recent that their effect would not be possible to record statistically just for chronological reasons. In addition the effects of big social changes - implemented simultaneously in a whole country - are very difficult to discriminate from general trends except when they result in a marked discontinuity in a time series of comparable data recorded for a considerable period before and after the change (cf. Campbell and Stanley 1963). Even if statistical series exist for a number of educational variables social background has not been systematically recorded in these contexts but mainly in research projects like the ones reported here.

For example Hårnqvist (1966) tried to use a quasi-experimental situation arisen during the implementation of the experimental version of the comprehensive school. When the Individual Statistics Project collected its first sample in 1961 for pupils born in 1948 the traditional system with elementary plus lower secondary school existed side-by-side with the comprehensive school. About two-thirds of the age group belonged to grade 6 in elementary school and had to decide if going to an "academic" secondary school or not. One third belonged to grade 6 in comprehensive school and had to decide if choosing "academic" courses in grades 7 through 9. It would take too long to describe the rather technical analysis so we quote the following from the abstract of the paper (op.cit. p. 87).

The main analysis uses a set of indices of over- and under-representation of academic plans in various sub-groups of the sample. These are based upon the pupils' aptitude measured by ability and achievement tests, and by school marks.

The likelihood of academic plans is much higher in the experimental than in the traditional school system. Important differences exist between social strata even when aptitude is controlled, but in respect to choices at grade 7 level this variation is less marked in the experimental than in the traditional system. This difference, in its turn, seems to be due mainly to the very high academic choice frequency in all strata at the high aptitude levels in the experimental system.

This result seems to hold also for comparisons over time: social differences have decreased but mainly because of a great increase in attendance at higher achievement levels. At lower achievement

levels upper middle class children, if not hindered by a formal selection procedure, tend to make academic choices almost irrespective of predicted achievement while working class children are more influenced by their earlier attainment and make, in relation to their chances to succeed in school, in a sense more realistic choices. This is a somewhat paradoxical but not sensational result of school reform: when formal selection mechanisms are taken away in order to make transition easier for pupils without educational traditions in their home environments, this freedom of access is used rather more extensively by groups already well represented in the selective system.

We started the presentation of empirical results by comparing age levels in Table 1. With the ongoing expansion the gap between generations in length and type of education is becoming wider and wider and will perhaps for the next future become more of a problem than the remaining inequalities within a single age cohort. As an illustration of this we shall use some predictions for 1980 of the educational composition of different age groups in the Swedish population (Figure 2, from Proposition 1971, p. 3).

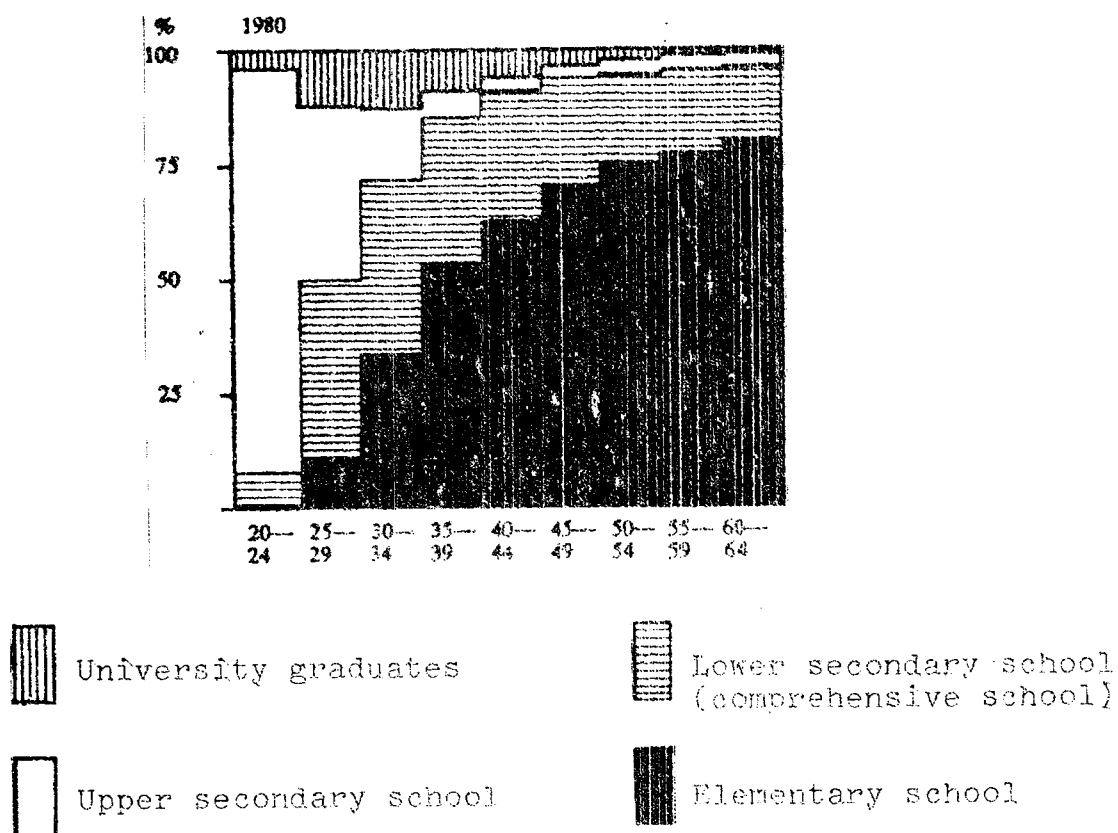


Figure 2. Predicted educational composition of the Swedish population in 1980.

New approaches to educational equality

The correlation between education and social background has proved very resistant to change not only in Sweden but in most western countries where equality of opportunity has been an important goal. It seems that educational equality is very difficult to bring about through changes within the educational system only. In a report from CERI (1971) three theories for reaching educational equality are presented. The one characteristic for most political measures so far is called the "educational" or "optimistic" theory and includes changes in the supply, content, and organization of education. An alternative to this is the "cultural" theory where the attention is concentrated on the early environment of the children and the needs for stimulation and other compensatory measures. The present interest in preschool education and in projects of the type represented by the American Head Start program can be taken as illustrations of the "cultural" theory. Finally the "structural" theory stresses changes in the social system outside education, for instance changes in the wages and prestige of different occupations which in their turn are supposed to influence the attractiveness of different paths through the educational system.

It is not likely that educational equality can be reached without a combination of different approaches, possibly leading to a rather radical redesign of the entire educational system. One such approach that takes an important place in the present discussion, both in Sweden and in other countries, is recurrent education where the individual's education is stretched out over time and interspersed with vocational activities. One expectation is that such a system would help increasing equality in society. Olof Palme, then Minister of Education, in 1969 expressed this hope in the following way (CERI 1971, p. 26):

Recurrent education should help us on the way towards equality in society. The interplay between different human activities would result in their being regarded in various respects as on an equal footing. The understanding between different social groups would increase as people had more similar experiences. The relations between the generations would improve.

But recurrent education also can become very problematic in the equality perspective. There is a solid experience in adult educa-

tion that those who already have a certain educational background are the first to use new educational opportunities and those in most urgent need for further education are also the ones most difficult to reach and recruit. The reasons may be manifold: negative experiences in school, low awareness of the utility of education, and insecurity of own capacity to achieve. Such factors contribute to make it so difficult to fill the gap in education between younger and older generations. If left to the individual's own initiative and responsibility education in a recurrent system might lead to a further widening of gaps. This is likely to be true even if economic and other obstacles are removed - the experiences of the difficulty to reach equality of participation in the present system support this prediction.

A further step would be to introduce a selectively directed system of contacting and stimulating persons with low motivation for further education. Such methods are presently tried out in adult education in cooperation between trade unions, industries, and adult education organizations. The experiment is organized by a Swedish government commission (FÖVUX). Courses in Swedish, English, mathematics and social studies are offered to workers in big industries through local representatives who contact the workers on the job. Different arrangements concerning scheduling and economic support are being tried. The campaign has made it possible to recruit a large number of persons who otherwise would have had very low probability to start an adult education.

A third step would be to make a certain amount of participation in recurrent education compulsory - that is stretching out and dividing up compulsory education, which is now concentrated to the child and youth periods. But here we meet controversial political questions that have to do with the liberty of the adult individual. For the realization of recurrent education it is necessary to seriously penetrate such value questions.

If we look upon education in a somewhat longer temporal perspective the developments on the international level are likely to bring forth changes in the national systems and perhaps a division of roles between different agents. Galtung (1968) predicts a wide international integration both on governmental and non-govern-

mental level, the latter for instance through multi-national enterprises. In discussing education in a future integrated Europe Janne (1970) distinguishes between three different educational systems. One is a formal educational system designed according to the principles of recurrent education - whether national or international is not quite clear. Another is an international non-governmental system for professional and vocational training, and a third an international system for information and cultural education. The expansion of the two latter systems - which already have their predecessors within multi-national enterprises and radio/television - will have important consequences for the formal educational system.

A possible role for the formal system would then be to prepare the individual for active participation in the society and utilization of the two other systems. Such a role would contribute to the realization of the type of equality of educational outcomes that we described in the first section as one, and a fairly strong, interpretation of this concept.

If we may speculate one step further, the formal system could be built up in three stages with different goals. The first stage - approximately between ages 5 and 15 - could be similar in goals to the present pre-school and comprehensive school. A second stage - between 15 and 20 - could combine a problem-focussed education with vocational orientation in the main sectors of society and some possibilities to concentrate in a field. The third stage - all through adult life - could be used for facilitating occupational changes but also for strengthening the individual's preparation for active participation in society through improving his communication skills and his ability to analyse problems in society. All three stages would have as a common goal to give all individuals equal chances to utilize education through the non-formal systems as well as professional and vocational education in the formal system if given there. But this is only one of the possibilities for the future - what is important is to be aware of that the educational reform period may only be in its beginning and educational equality is likely to remain an important problem.

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